October 29, 2018

Melissa Gurka
Williamson County
901 South Austin Avenue
Georgetown, Texas 78626

Re: Bid 1808-255 Patient Cardiac Care Monitor

Dear Ms. Gurka,

Thank you for this opportunity to respond to the emergency medical equipment needs of Williamson County. Physio-Control, Inc. presents the following proposal for your consideration.

It has been our intent to provide Williamson County with all requested information in the proper format. Please visit our website at www.physio-control.com for additional information about our LIFEPAK product lines, ADAPTIV™ biphasic technology and the Physio-Control industry leading Field Service Network.

Physio-Control pioneered external defibrillation over 63 years ago and today continues to be the world market leader. We are passionate about the life saving tools we offer and would appreciate the opportunity to continue to share with you the unique features, technology and service benefits of Physio-Control.

If you have any questions regarding our response please contact our office directly at bidsinbox@stryker.com, or at 800-442-1142.

Sincerely,

_____

Tim Fernandez
Sr. Strategic Pricing Analyst
Stryker Corporation
Physio-Control, Inc.
11811 Willows Road NE
Redmond, WA 98052-2003
Fax: 425-867-4970
bidsinbox@stryker.com

Sections

Section 1

Response to Request for Proposals

Williamson County

Physio-Control presents the following proposal in response to the needs and requirements outlined by Williamson County in the Request for Proposal for Bid 1808-255 Patient Cardiac Care Monitor.

Executive Summary

The right technology in the right hands can help improve clinical efficiencies, impact outcomes and ultimately – save lives.

Physio-Control products are designed to work together to give emergency caregivers, whether in the hospital or on the street, more control of a critical medical event. The toughest kinds of medical emergencies require response tools of the highest quality, latest innovation, and most durable materials – this is where Physio-Control medical solutions can make a lifesaving difference.

The company's products include LIFEPAK® monitor/defibrillators, LIFEPAK® and HeartSine® automated external defibrillators (AEDs), the LIFENET® System, LIFELINKcentral™ AED Program Manager, HealthEMS® electronic patient care reporting (ePCR) software, LUCAS® Chest Compression System, TrueCPR™ coaching device, McGrath® MAC EMS video laryngoscope and more.

Physio-Control, now part of Stryker, was founded in 1955 and is headquartered in Redmond, Washington.

Value Proposition

Physio-Control solutions and strategic resources will support Williamson County in improving the quality of emergency responses through the latest technology, while emphasizing evidence-based innovation, ease of use, and alignment with your cost strategy.

Together, We Can Save Lives.

Williamson County and the Physio-Control missions are intertwined – our products will further your vision of connecting your partners and neighbors in need with health care, mental health services, housing, food, and other community resources.

A long-term decision requires long-term solutions. Physio-Control adopts a multi-disciplinary, multi-agency, and multi-geographic approach with a focus on a system-based solution. The Physio-Control System of Care is the best choice to help improve your cardiac care, individually and system-wide.

We are confident our evidence-based solutions and market-leading portfolio will meet the current and future needs of Williamson County.

Our mission is to make Lifesaving Tools for Lifesaving Teams – unique medical products of the highest quality that predict or intervene in life-threatening medical emergencies.

Exceptions and Clarifications to Request for Offer

Physio-Control, Inc. is taking the following exceptions and clarifications to Williamson County, Texas Bid 1808-255 Patient Cardiac Care Monitor:

4.35 PAYMENT

~~The County's payment for goods and services shall be governed by the Texas Government Code, Chapter 2251. An invoice shall be deemed overdue the thirty-first (31st) day after the later of the following:~~

~~A. The date the County receives the goods under the Contract;~~
~~B. The date the performance of the service under the Contract is completed; or~~
~~C. The date the Williamson County Auditor receives an invoice for the goods or services.~~

Payment due 30 days from receipt of invoice in the Williamson County Auditor's Office.

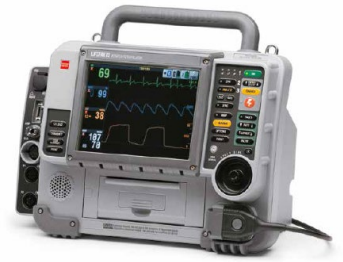
Proposal Summary
Bid # 1808-255
Patient Cardiac Care Monitor
Prepared for
Williamson County

Physio-Control, now part of Stryker, has been involved in emergency medical care for 63 years and leads the industry in developing products that monitor or treat patients in emergency medical situations. Physio-Control develops technologies and designs devices according to the unique needs of our customers and our goal is to provide complete solutions for cardiorespiratory emergencies. The entire Physio-Control product portfolio is designed to assist customers in their lifesaving work — whether it is accessories, disposables, flexible energy dosing, or data management solutions that help them capture patient data and learn from it to improve patient care.

It is our intent to work with the Williamson County to design a strategic relationship model. Under this partnership, Physio-Control will provide the necessary resources to work specifically with Williamson County and fulfill the medical equipment needs for Bid # 1808-255 for a Patient Cardiac Care Monitor.

LIFEPAK® 15 Monitor/Defibrillator

Physio-Control defibrillators have set the standard for six decades, and the latest version of the LIFEPAK® 15 monitor/defibrillator raises the bar. As our most advanced emergency response monitor/defibrillator, the LIFEPAK 15 device balances sophisticated clinical technologies and supreme ease of use in a device that's tough enough to stand up to your most challenging environments. The LIFEPAK 15 features temperature monitoring and external power to complement 360J of energy and 12-lead ECG transmission capability. And that means your team can be even more effective.



- Extremely rugged and durable design – great for transport
- Clear user interface
- Compact, lightweight, with 2 batteries & AC power
- Oridion Capnography, Massimo SpO2, SpCO, SpMET, 12 Lead ECG & Pacemaker, NIBP, Temp.
- Metronome for CPR guidance – the only solution for adult & peds!

Catalog #	Description	List Price (ea.)	Sales Price for Williamson County (ea.)
99577-001958	**LIFEPAK 15 V4 Monitor/Defibrillator** Adaptive Biphasic, Manual & AED, Color LCD, 100mm Printer, Noninvasive Pacing, Metronome, Trending, SpO2, NIBP, 12-Lead ECG, EtCO2, Carbon Monoxide, Bluetooth, Temp	$ 37,000.00	$ 27,750.00
INCLUDED AT NO CHARGE: 2 PAIR QUIK-COMBO ELECTRODES PER UNIT - 11996-000091, TEST LOAD -21330-001365, IN-SERVICE DVD - 21330-001486, SERVICE MANUAL CD- 26500-003612 (one per order) and ShipKit- (RC Cable) 41577-000284. HARD PADDLES, BATTERIES AND CARRYING CASE NOT INCLUDED.			

SERVICE

The Most Extensive Field Service Team in the Industry Stands Behind You

With a variety of available **Physio-Control Service Plans** -- and the most extensive field service team in the industry -- we'll help make sure your lifesaving devices are ready when you need them.

- Physio-Control service plans go beyond keeping your devices running at peak performance. Your designated **Service Representative and Clinical Specialist work together** to know your team, your system and to help **you** realize improvements such as time-saving techniques and features, assist with training, or answering questions specific to your devices and configurations.

- With an average of 14 years of experience, nobody knows your devices better and how to use, care for and maintain them. Your Field Service Representative carry a large inventory of spare and repair parts being equipped to often repair your device directly onsite – **without the need to ship to an offsite depot or arrange for replacement devices in the interim.**

- Physio-Control service representatives consistently receive the highest marks in customer satisfaction — averaging greater than **97% customer satisfaction rating** in our onsite service survey. In effect, your service representative is part of your community, so they are dedicated to helping you achieve your goals.

- Physio-Control is the sole-source provider for service, technical support and post-event support for Physio-Control products– **no Third parties**.

WARRANTY

- **LIFEPAK® 15 Monitor/Defibrillator:** In mobile and out-of-hospital settings, the LIFEPAK 15 monitor/defibrillator is covered with a one (1) year limited warranty against defects in material or workmanship under normal service conditions and when used in accordance with its Operating Instructions.

Copy of the Physio-Control Limited Warranty is enclosed in Section 2 of this Response.

VENDOR INFORMATION

Legal Name:	Physio-Control, Inc.
Headquarter:	11811 Willows Rd NE Redmond, WA 98052
Phone:	800-442-1142
Fax:	425-867-4970
Federal Tax ID Number:	91-0697691
Federal Tax Classification:	C-Corporation
DUNS Number:	009251992
Company's Point of Contact:	Tim Fernandez, Sr. Strategic Pricing Analyst
Email:	bidsinbox@stryker.com
Purchase Orders:	Chad Lewis, Sales Representative
Phone Number:	210-884-0891
Email:	chad.lewisl@Stryker.com
Delivery Lead Time:	Delivery shall be 30 days after receipt of correct purchase order, subject to product availability.

REFERENCES

- **3 References needed**

CODE-STAT Data Review Software

Post-event review insights to improve performance and patient outcomes

Better data means better CPR

Turn your passion for saving lives into targeted improvements when you can easily understand team performance immediately after response. CODE-STAT software makes it easy to see and correlate key CPR performance metrics while the incident is still fresh. Spot at a glance where you need to improve — c gain confidence in your team's operations and skills. Measure, review, report, and repeat.

Why does post-event review matter?

Accelerate your QA/QI efforts with insights revealed through comprehensive CODE-STAT analysis. AHA Consensus Statement recommendations on CPR quality suggest maintaining "continuous quality improvement on provider, team, and system levels." CODE-STAT software gives you quick access to relevant high-quality data — including compression hands-on time, rate, longest pauses, and time elapsec before first shock.

- **Deliver better care.**
  Respond more effectively for better outcomes with easier access to complete event data.

- **Make improvement faster and easier.**
  Simplify the collection, analysis, and sharing of data that can power performance reviews and enhancement.

- **Train more efficiently.**
  Focus training and performance management where it's needed most.

- **Save time on data collection and reporting.**
  Collect information automatically and customize required reports and documentation.

CODE-STAT in action

See resuscitation performance at a glance

- Display CPR metrics visually, according to your targets, for intuitive insight. Dive into moment-by-moment details of an entire event on a graphic, continuous time scale.
- Review interval statistics for the entire resuscitation, broken down by time interval

Create custom analytics and reporting according to your needs

- Customize display of the statistics and details you need most, including CPR performance, ECG and EtCO2 waveforms, and CO2 trend data.
- Annotate the stories of each resuscitation event to add context or focus attention on achievements or areas needing improvement.
- Create individual or summary reports.

Supplier Diversity Statement

At Stryker, we believe that we have a responsibility to proactively engage with the businesses in the communities in which we live and work. As part of that belief, Stryker is committed to partnering with and providing opportunities for Small and Diverse Suppliers. Stryker understands that Small and Diverse Suppliers add value through their innovative and fresh ideas. By identifying and promoting Small and Diverse Suppliers, Stryker is able to deliver world-class products and services that enable healthcare providers to better treat their patients, ultimately aiding those patients in leading more active and satisfying lives.

Stryker is committed to maximizing opportunities for all qualified Small and Diverse Suppliers, maintaining a Global Supplier Diversity Team to develop strategic program initiatives, implement requirements, and interface with internal and external stakeholders. The following overview represents Stryker's continuing efforts toward furthering our partnership with Small and Diverse Suppliers. Additional questions about Stryker's Global Supplier Diversity Program can be directed to the Global Supplier Diversity Team at supplierdiversity@stryker.com.

Solicitation 1808-255

Patient Cardiac Care Monitor

Bid Designation: Public

Williamson County, Texas

Bid 1808-255
Patient Cardiac Care Monitor

Bid Number	1808-255
Bid Title	Patient Cardiac Care Monitor
Bid Start Date	Oct 2, 2018 2:54:53 PM CDT
Bid End Date	Oct 31, 2018 10:00:00 AM CDT
Question & Answer End Date	Oct 24, 2018 4:00:00 PM CDT
Bid Contact	Melissa Gurka Purchasing Specialist II 512-**943**-3860 melissa.gurka@wilco.org
Contract Duration	**One Time Purchase**
Contract Renewal	Not Applicable
Prices Good for	**365 days**
Pre-Bid Conference	**Oct 12, 2018 9:00:00 AM CDT** **Attendance is optional** **Location: 3189 Southeast Interloop** **Georgetown, TX**
Bid Comments	**Williamson County is seeking sealed proposals from a company to provide patient cardiac care monitors as listed in the specifications of this RFP.**

Addendum # 1

New Documents	**Updated RFP Trial Requirements.pdf** **Addendum 1.pdf**
Removed Documents	**RFP Trial Requirements 8-23-18.docx**

Addendum # 2

New Documents	**Additional Stipulations.pdf**

Item Response Form

Item	**1808-255--01-01 -** Total Bid Price
Quantity	**1 each**
Unit Price	

Delivery Location **Williamson County, Texas**

No Location Specified

Qty 1

Description
Total bid price.

Item **1808-255--01-02 -** Attach all items to this line.

Quantity **1 each**

Prices are not requested for this item.

Delivery Location **Williamson County, Texas**

No Location Specified

Qty 1

Description
Attach all items to this line.

5

PUBLIC ANNOUNCEMENT AND GENERAL INFORMATION

WILLIAMSON COUNTY PURCHASING DEPARTMENT
SOLICITATION 1808-255
Patient Cardiac Care Monitor

PROPOSALS MUST BE RECEIVED ON OR BEFORE:
Oct 31, 2018 10:00:00 AM CDT

PROPOSAL WILL BE PUBLICLY OPENED:
Oct 31, 2018 10:00:00 AM CDT

Notice is hereby given that sealed Proposals for the above-mentioned goods and/or services will be accepted by the Williamson County Purchasing Department. Williamson County uses BidSync to distribute and receive proposals. Specifications for this RFP may be obtained by registering at www.bidsync.com.

Williamson County prefers and requests electronic submittal of this Proposal.

All electronic proposal must be submitted via: www.bidsync.com

Electronic proposals are requested, however paper proposals will currently still be received, until further notice and may be mailed or delivered to the address listed below.

Respondents are strongly encouraged to carefully read this entire RFP.

All interested Respondents are invited to submit a Proposal in accordance with the Instructions and General Requirements, Proposal Format, Proposal Specifications, and Definitions, Terms and Conditions stated in this RFP.

Please note that a complete package must be submitted choosing one of the above two methods. Split packages submitted will be considered "unresponsive" and will not be accepted or evaluated.

Williamson County will not accept any Proposals received after the submittal deadline, and shall return such Proposals unopened to the Respondent.

General Information:

- If mailed or delivered in person, Proposal and Proposal addenda are to be delivered in sealed envelope on or before the submittal deadline, as noted in the Public Announcement and General Information listed above for this RFP, to:

  Williamson County Purchasing Department
  Attn: **PROPOSAL NAME AND NUMBER**
  901 South Austin Avenue
  Georgetown, Texas 78626

  - Respondents should list the Proposal Number, Proposal Name, Name and Address of Respondent, and the Date of the Proposal opening on the outside of the box or envelope and note "Sealed Proposal Enclosed."
  - Respondent should submit one (1) original.
  - Williamson County will NOT be responsible for unmarked or improperly marked envelopes.
  - Williamson County will not accept any responsibility for Proposals being delivered by third party carriers.
  - Facsimile transmittals will NOT be accepted.

- Proposals will be opened publicly in a manner; however, to avoid public disclosure of contents, only the names of Respondents will be read aloud.

- All submitted questions with their answers will be posted and updated on www.bidsync.com.

- It is the Respondent's responsibility to review all documents in BidSync, including any Addenda that may have been added after the document packet was originally released and posted.

  - Any Addenda and/or other information relevant to the RFP will be posted on www.bidsync.com.

  - The Williamson County Purchasing Department takes no responsibility to ensure any interested Respondent has obtained any outstanding addenda or additional information.

Proposal References

List the last three (3) companies or governmental agencies, where the same or similar goods and/or services as contained in this RFP package, were recently provided by Respondent.

Reference 1

Client Name:

Location:

Contact Name:

Title:

Phone:

E-mail

Contract Date To:

Contract Date From:

Contract Value: $

Scope of Work:

Reference 2

Client Name:

Location:

Contact Name:

Title:

Phone:

E-mail

Contract Date To:

Contract Date From:

Contract Value: $

Scope of Work:

Reference 3

Client Name:

Location:

Contact Name:

Title:

Phone:

E-mail

Contract Date To:

Contract Date From:

Contract Value: $

Scope of Work:

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

N/A

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

N/A

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income,other than investment income, from the vendor?

☐ Yes ☒ No

B.Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the directionof the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☒ No

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

N/A

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7 Signature is not required if completing in BIDSYNC electronically;

Signature of vendor doing business with the governmental entity

Date

Form provided by Texas Ethics Commission www.ethics.state.tx.us Revised 11/30/2015

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or anagency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or

(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency andthat is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

***

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or afamily member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed;or

(ii) the local governmental entity is considering entering into a contract with thevendor;

(B) has given to the local government officer or a family member of the officer one or more giftsthat have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed;

or (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that localgovernmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity. (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(2) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmentalentity; or

(B) submits to the local governmental entity an application, response to a request for proposalsor bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(3) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or(C) of a family relationship with a local government officer.

Form provided by Texas Ethics Commission www.ethics.state.tx.us Revised 11/30/2015

PROPOSAL AFFIDAVIT

This form must be completed, signed, notarized and returned with Proposal package

The undersigned attests that the company named below, under the provisions of Subtitle F, Title 10, Texas Government Code Chapter 2270:

1. Does not boycott Israel currently; and
2. Will not boycott Israel during the term of the contract.

Pursuant to Section 2270.001, Texas Government Code:

1. "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and
2. "Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit

The undersigned certifies that the RFP and the Respondent's Proposal have been carefully reviewed and are submitted as correct and final. Respondent further certifies and agrees to furnish any and/or all goods and/or services upon which prices are extended at the price Proposal, and upon the conditions contained in the RFP.

I hereby certify that the foregoing Proposal has not been prepared in collusion with any other Respondent or other person or persons engaged in the same line of business prior to the official opening of this Proposal. Further, I certify that the Respondent is not now, nor has been for the past six (6) months, directly or indirectly concerned in any pool or agreement or combination, to control the price of services/commodities Proposal on, or to influence any person or persons to submit a Proposal or not to submit a Proposal thereon."

Name of Respondent:	Tim Fernandez
Address of Respondent:	11811 Willows Rd NE Redmond, WA 98052
Email:	bidsinbox@stryker.com
Telephone:	800-442-1142
Printed Name of Person Submitting Affidavit:	Tim Fernandez
Signature of Person Submitting Affidavit:	

Cooperative Purchasing Program

Check one of the following options below. A non-affirmative Proposal will in no way have a negative impact on the County's evaluation of the Proposal.

☒	I will offer the quoted prices to all authorized entities during the term of the County's Contract.
☐	I will not offer the quoted prices to all authorized entities.

If no box is checked, the Respondent agrees to make best efforts in good faith to offer the quoted prices to all authorized entities.

BEFORE ME, the undersigned authority, a Notary Public, personally appeared Tim Fernandez (*Name of Signer*), who after being by me duly sworn, did depose and say: "I, Tim Fernandez, (*Name of Signer*) am a duly authorized officer of/agent for Physio-Control (*Name of Respondent*) and have been duly authorized to execute the foregoing on behalf of the said Physio-Control (*Name of Respondent*).

SUBSCRIBED AND SWORN to before me by the above-named _____

on this the _____ day of _____, 20_____.

_____

Notary Public in and for

The State of _____

The County of _____

SIGNATURE AND NOTARY NOT REQUIRED IF COMPLETING IN BIDSYNC ELECTRONICALLY.

6

Williamson County – Request for Proposal (RFP)

SECTION 1 - DEFINITIONS

Addendum/Addenda – means any written or graphic instruments issued by the County prior to the consideration of Proposals which modify or interpret the Proposal Documents by additions, deletions, clarifications, or corrections.

Agreement/Ensuing Agreement(s) – means the Successful Respondent may be required by the County to sign an additional Agreement containing terms necessary to ensure compliance with the RFP and the Respondent's Proposal. Such Ensuing Agreement(s) shall contain the Proposal specifications, terms and conditions that are derived from the RFP.

Contract – means this RFP and the Proposal of the Successful Respondent shall become a Contract between the Successful Respondent and the County once the Successful Respondent's Proposal is properly accepted by the Williamson County Commissioners Court (sometimes referred to herein as the Commissioner's Court").

Commissioner's Court – means the Williamson County Commissioners Court.

County – means Williamson County, a political subdivision of the State of Texas.

Executive Summary – means the document submitted by Respondent that represents a concise summary of the contents of the Proposal. It does not include any information concerning costs.

Proposal Documents – means the Legal Notice, RFP including attachments, and any Addenda issued by the County prior to the consideration of any Proposals.

Proposal – means the complete, properly signed document, and ALL required forms and documentation listed in the proposal package which have been submitted in accordance with this RFP package. A Proposal submitted in accordance with this RFP is irrevocable during the specified time period for evaluation and acceptance of Proposals, unless a waiver is obtained from the Williamson County Purchasing Agent.

Respondent – means a person or entity who submits a Proposal in response to this RFP.

Request for Proposals (RFP) – means this document, together with the attachments thereto and any future Addenda issued by the County.

Successful Respondent– means the responsible Respondent who, in the County's sole opinion, submits the Proposal which is in the best interest of the County, taking into account factors identified herein, and to whom the County intends to award the Contract.

SECTION 2 - RESPONSE FORMAT AND SUBMISSION

2.1 INTRODUCTION

Each Proposal submitted in response to this RFP should clearly reference the numbered sections of this RFP that require a response. Failure to arrange the Proposal as requested may result in the disqualification of the Proposal.

Though there is not a page limit for Proposals, to save natural resources including paper, and to allow the County staff to efficiently evaluate all submitted Proposals, the County requests that Proposals be orderly, concise, but comprehensive in providing the requested information. Conciseness and clarity of content are emphasized and encouraged. If mailed or delivered in person, please limit additional, non requested information.

Please provide your Proposal response using:

A. 8 ½" x 11" pages, inclusive of any cover letter or supporting materials.

B. The least amount of plastic/laminate or other non-recyclable binding materials.

C. Single-sided printing.

Vague and general Proposals will be considered non-responsive, and may, at the County's sole discretion, result in disqualification. Proposals must be legible and complete. Failure to provide the required information may result in the disqualification of the Proposal. All pages of the Proposal should be numbered, and the Proposal should contain an organized, paginated table of contents corresponding to the sections and pages of the Proposal.

2.2 ORGANIZATION OF PROPOSAL CONTENTS AND TABLE OF CONTENTS

Each Proposal should be submitted with a table of contents that clearly identifies and denotes the location of all enclosures of the Proposal. The table of contents should follow the RFP's structure as much as is practical.

Each Proposal should be organized in the manner described below:

A. Transmittal Letter. Please see Section 2.3, Transmittal Letter, for more information.

B. Table of Contents.

C. Executive Summary. Please see Section 2.4, Executive Summary.

D. Proposal Response to Criteria. (Please see the sections in this RFP package that list the Specifications & Cost Proposal, Experience and Qualifications, References, and Implementation Strategy to respond to our criteria in a clear and concise manner)

E. Price Sheet.

F. References: Identification of three (3) references within the last four (4) years, for which the Respondent is providing, or has provided, the goods and/or services (public sector) of the type requested in this RFP. Include the name, position/title, and telephone number of a contact person at each entity.

G. Conflict of Interest Questionnaire.

H. Proposal Affidavit (Signature Page).

I. Attach your entities sample Contract, if applicable, for the County's review and consideration. This should include any additional terms or conditions. The County is not required to use the sample Contract submitted.

2.3 TRANSMITTAL LETTER

The Respondent should submit a Transmittal Letter that provides the following information:

A. Name and address of individual or business entity submitting the Proposal.

B. Respondent's type of business entity (i.e., Corporation, General Partnership, Limited Partnership, LLC, etc.). See Section 3.5, Signature of Respondent, for more information.

C. Place of incorporation or organization, if applicable.

D. Name and location of major offices and other facilities that relate to the Respondent performance under the terms of this RFP.

E. Name, physical address, email address, business and fax number of the Respondent's principal contact person regarding all contractual matters relating to this RFP.

F. The Respondent's Federal Employer Identification Number.

G. A commitment by the Respondent to provide the services required by the County;

H. A statement that the Proposal is valid for the time specified on page three (3), under the section named *Prices Good for*, of this Proposal packet. Any Proposal containing a term of less than t required amount, may at the County's sole discretion, be rejected as non-responsive.

I. If the Proposal being submitted will have an effect on air quality for the County (as it relates to any state, federal, or voluntary air quality standard), then the Respondent is encouraged to provide information in narrative indicating the anticipated air quality impact. See Section 4.40, Air Quality for more information.

The Transmittal Letter should be signed by a person legally authorized to bind the Respondent to t representations in the Transmittal Letter and the Proposal. In the case of a joint Proposal, each party must sign the Transmittal Letter.

2.4 EXECUTIVE SUMMARY

The Respondent should provide an Executive Summary of its Proposal that asserts that the Respondent is providing in its response all of the requirements of this RFP. The Executive Summary should not include any information concerning the cost of the Proposal, but instead must represent a full and concise summary of the contents of the Proposal. It is recommended the Executive Summary include the following information:

A. Identify any goods and/or services that are provided beyond those specifically requested. If the Respondent is providing services and/or goods that do not meet the specific requirements of this RFP, but in the opinion of the Respondent are equivalent or superior to those specifically requested, any such differences should be noted in the Executive Summary. However, the Respondent must realize that failure to provide the goods and/or services specifically required, at the County's sole discretion, may result in disqualification of the Proposal.

B. Indicate why the Respondent believes that it is the most qualified Respondent to provide the services described in this RFP. The Successful Respondent must demonstrate extensive experience and understanding of the intent of this project. The Respondent should describe in detail the current and historical experience the Respondent and its subcontractors have that would be relevant to completing the project. References must contain the name of key personnel and telephone numbers for each contact, as described in Section 3.14, References.

C. Briefly state why the Respondent believes its proposed goods and/or services best meet the County's needs and RFP requirements, and the Respondent also should concisely describe any additional features, aspects, or advantages of its goods and/or services in any relevant area not covered elsewhere in its Proposal.

2.5 CONFLICT OF INTEREST

No public official shall have interest in a contract, in accordance with Vernon's Texas Codes Annotated, Local Government Code, Title 5, Subtitle C, Chapter 171, as amended.

As of January 1, 2006, all Respondents are responsible for complying with Local Government Code, Title 5, Subtitle C, Chapter 176. Additional information may be obtained from the County's website at the following link:

http://www.wilco.org/CountyDepartments/Purchasing/ConflictofInterestDisclosure/tabid/689/language/en-US/Default.aspx

Each Respondent must disclose any existing or potential conflict of interest relative to the performance of the requirements of this RFP. **Examples of potential conflicts of interest may include an existing business or personal relationship between the Respondent, its principal, or any affiliate or subcontractor with the County or any other entity or person involved in any way with the project that is subject to this RFP**. Similarly, any personal or business relationship between the Respondent, the principals, or any affiliate or subcontractor with any employee, or official of the County or its suppliers must be disclosed. Any such relationship that might be perceived or represented as a conflict must be disclosed. Failure to disclose any such relationship or reveal personal relationships with the County employees or officials may be cause for termination.

The County will decide if an actual or perceived conflict should result in Proposal disqualification.

By submitting a Proposal in response to this RFP, all Respondents affirm they have not given, nor intend to give, at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a the County public servant or any employee, official or representative of same, in connection with this procurement.

Each Respondent must provide a Conflict of Interest Statement with their Proposal Package. Package may be deemed incomplete without this form.

2.6 CERTIFICATE OF INTERESTED PARTIES – FORM 1295

As of January 1, 2016, all Respondents are responsible for complying with the Texas Government Code, Section 2252.908. The law states that the County may not enter into certain contracts with a Respondent unless the Respondent submits a disclosure of interested parties to the County at the time the Respondent submits the signed contract. The law applies only to a contract of the County on or after January 1, 2016 that either:

A. Requires an action or vote by the Commissioners Court before the contract may be signed (all contracts that fall under the jurisdiction of the Commissioners Court approval, such as contracts resulting from an Initiation for Bid (IFB), RFP, Request for Qualifications (RFQ), etc., excluding,

but not limited to, certain Juvenile Service contracts, contracts funded with Sheriff's seized fun monies, etc.); or

B. Has a value of at least $1,000,000.

By January 1, 2016, the Texas Ethics Commission will make available on its website, a new filing application that must be used to file Form 1295. Information regarding how to use the filing application is available on the Texas Ethics Commission website at the following link:

https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

A Respondent must:

A. Use the online application to process the required information on Form 1295.

B. Print a copy of the form which will contain a unique certification number.

C. An authorized agent of the Respondent must sign the printed copy of the form.

D. Have the form notarized.

E. File the completed Form 1295 and certification of filing (scanning and emailing form is sufficient) with Williamson County Purchasing Agent at the time the signed Contract is submitted for approval.

After the Commissioners Court award of the contract, the County shall notify the Texas Ethics Commission, using the Texas Ethics Commission's filing application, of the receipt of the filed Form 1295 and certification of filing not later than the 30th day after the date the contract binds all parties to the contract. The Texas Ethics Commission will post the completed Form 1295 to its website within seven business days after receiving notice from the County.

2.7 PROPOSAL AFFIDAVIT

The Respondent attests to abiding by Texas Government Code Chapter 2270, Subtitle F, Title 10 stating that they neither currently boycott Israel, nor will the boycott Israel during the term of the contract. Furthermore, the Respondent certifies and agrees to furnish any and/or all goods and/or services upon which prices are extended at the price Proposal, and upon the conditions contained in the RFP. Additionally, the Respondent certifies that the Proposal has not been prepared in collusion with any other Proposer or other person or persons engaged in the same line of business prior to the official opening of this Proposal. Further, Proposer certifies that the he or she is not now, nor has been for the past six months, directly or indirectly concerned in any pool or agreement or combination, to control the price services/commodities Proposal on, or to influence any person or persons to submit a Proposal or not submit a Proposal thereon. **Each Respondent must provide a Proposal Affidavit with their Proposal Package. Package may be deemed incomplete without this form.**

2.8 PROPOSAL SUBMITTAL DEADLINE

The Proposal is due no later than the submittal date and time set forth in the Public Announcement and General Information listed in this RFP package. Contents of each Proposal shall be submitted in accordance with this RFP.

2.9 ETHICS

The Respondent shall not accept or offer gifts or anything of value, nor enter into any business

arrangement with any employee, official or agent of the County.

2.10 DELIVERY OF PROPOSALS

The County uses BidSync to distribute and receive bids and Proposals. It is preferred that Proposals be submitted electronically through BidSync; however, Respondents can submit a hard copy.

Refer to www.bidsync.com for further information on how to submit electronically.

If mailed or delivered in person, Proposal and Proposal Addenda are to be delivered in sealed envelope on or before the submittal deadline, as noted in the Public Announcement and General Information listed in this RFP package, to:

Williamson County Purchasing Department
Attn: **Proposal Name and Number**
901 South Austin Avenue
Georgetown, Texas 78626

Also, all Respondents should list their Name and Address, and the Date of the Proposal opening on the outside of the box or envelope and note "Sealed Proposal Enclosed." Williamson County will not accept any Proposals after the submittal deadline, and shall return such Proposals unopened to the Respondent. The County will not accept any responsibility for Proposals being delivered by third party carriers.

Proposals will be opened publicly; however, in a manner to avoid public disclosure of contents, only names of Respondents will be read aloud: no pricing will be announced at the opening.

SECTION 3 - INSTRUCTIONS AND GENERAL REQUIREMENTS

3.1 INSTRUCTIONS

Read this document carefully, and follow all instructions and requirements. All Respondents are responsible for fulfilling all requirements and specifications. Be sure to have a clear understanding of this RFP.

General requirements apply to all advertised RFPs; however, these may be superseded, in whole or in part, by the proposal specifications, Addenda and modifications issued as a part of this RFP. Be sure your Proposal package is complete.

3.2 AMBIGUITY, CONFLICT, OR OTHER ERRORS IN THIS RFP

If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in this RFP, the Respondent shall immediately notify the County Purchasing Department of such error in writing and request modification or clarification of the document.

Modifications will be made by issuing Addenda. If the Respondent fails to notify the County prior to the date and time fixed for submission of Proposals of an error or ambiguity in the RFP known to the Respondent, or an error or ambiguity that reasonably should have been known to the Respondent, then the Respondent shall be deemed to have waived the error or ambiguity or its later resolution.

The County may also modify the RFP, no later than forty-eight (48) hours prior to the date and time fixed for submission of Proposals, by issuance of an Addendum. All Addenda will be numbered consecutively, beginning with one (1).

3.3 NOTIFICATION OF MOST CURRENT ADDRESS

All Respondents in receipt of this RFP shall notify the Williamson County Purchasing Department of any address changes, contact person changes, and/or telephone number changes no later than forty-eight (48) hours prior to the date and time fixed for submission of Proposals.

3.4 SIGNATURE OF RESPONDENT

A Transmittal Letter, which shall be considered an integral part of the Proposal as stated in Section 2.3, Transmittal Letter, shall be signed by an individual who is authorized to bind the Respondent contractually.

A. If the Respondent is a Corporation or Limited Liability Company, the legal name of the Corporation or Limited Liability Company shall be provided together with the signature of the officer or officers authorized to sign on behalf of such entity.

B. If the Respondent is a General Partnership, the true name of the firm shall be provided with the signature of each partner authorized to sign.

C. If the Respondent is a Limited Partnership, the name of the Limited Partner's General Partner shall be provided with the signature of the officer authorized to sign on behalf of the General Partner.

D. If the Respondent is a Sole Proprietor(s) (individual), each Sole Proprietor(s) shall sign.

E. If signature is by an agent, other than the Sole Proprietor(s) or an officer of a Corporation, Limited

Liability Company, General Partner or a member of a General Partnership, a power of attorney equivalent document must be submitted to the Williamson County Purchasing Department.

3.5 ASSUMED BUSINESS NAME

If the Respondent operates business under an Assumed Business Name, the Respondent must have file with the Williamson County Clerk a current Assumed Name Certificate and provide a file marked copy of same prior to contract award.

3.6 ECONOMY OF PRESENTATION

Proposals should not contain promotional or display materials, except as they may directly answer in whole or in part questions contained in the RFP. Such exhibits shall be clearly marked with the applicable reference number of the question in the RFP. Proposals must address the technical requirements as specified in the RFP. All questions posed by the RFP must be answered concisely and clearly. Proposals that do not address each criterion may be, at the sole discretion of the County, rejected and not considered.

3.7 REJECTION OR ACCEPTANCE

It is understood that the Commissioners Court of Williamson county, Texas, reserves the right to accept or reject any and/or all proposals for any or all materials and/or services covered in the RFP, and to waive informalities or defects in the proposal or to accept such proposal it shall deem to be in the best interest of Williamson County.

3.8 PROPOSAL OBLIGATION

The contents of the RFP, Proposal, and any clarification thereof submitted by the Successful Respondent shall become part of the contractual obligation and incorporated by reference into the Contract and any Ensuing Agreement(s).

3.9 COMPLIANCE WITH RFP SPECIFICATIONS

It is intended that this RFP describe the requirements and the Proposal format in sufficient detail to secure comparable Proposal. Failure to comply with all provisions of the RFP may, at the sole discretion of the County, result in disqualification.

3.10 EVALUATION

The County reserves the right to use all pertinent information (also learned from sources other than disclosed in the RFP process) that might affect the County's judgment as to the appropriateness of award to the best evaluated Respondent. This information may be appended to the Proposal evaluation process results. Information on a Respondent from reliable sources, and not within the Respondent Proposal, may also be noted and made part of the evaluation file. The County shall have sole discretion for determining the reliability of the source. The County reserves the right to conduct written and/or oral discussions/interviews after the Proposal opening. The purpose of such discussions/interviews is to provide clarification and/or additional information to make an award that is in the best interest of the County.

3.11 WITHDRAWAL OF PROPOSAL

The Respondent may withdraw its Proposal by submitting a written request with the company letterhead and the signature of an authorized individual, as described in Section 3.4, Signature of Respondent, to the Williamson County Purchasing Department any time prior to the submission deadline.

The Respondent may submit a new Proposal prior to the deadline. Alterations of the Proposal in any

manner will not be considered if submitted after the deadline. Withdrawal of a Proposal after the deadline will be subject to written approval of the Williamson County Purchasing Agent.

3.12 RESPONSIBILITY

It is expected that a Respondent will be able to affirmatively demonstrate responsibility. A prospective Respondent should be able to meet the following requirements:

A. Have adequate financial resources, or the ability to obtain such resources as required;
B. Be able to comply with the required or proposed delivery schedule;
C. Have a satisfactory record of performance that can be determined thru references provided; and
D. Be otherwise qualified and eligible to receive an award.

The County may request representation and other information sufficient to determine the Respondent ability to meet these minimum standards listed above.

3.13 PURCHASE ORDERS

If required by the Williamson County Purchasing Department, a purchase order(s) may be generated to the Successful Respondent for goods and/or services. If a purchase order is issued, the purchase order number must appear on all itemized invoices and/or requests for payment.

3.14 SILENCE OF SPECIFICATIONS

The apparent silence of any RFP specifications as to any detail or to the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

3.15 REFERENCES

Respondents shall furnish a list of contracts where similar responsibilities and goods and/or services have been required and/or performed for the past five (5) years, to include names, titles, phone numbers and email addresses of reference contacts, contract numbers and dates of performance.

Also, Respondents shall include a list of any contracts that have been cancelled or terminated within the last five (5) years, along with an explanation of the cancellation and the names, email address and phone number of a reference person with that institution.

The County may contact some or all of the references in order to determine the Respondent performance record on work similar to that described in this RFP. The County reserves the right to contact references other than those provided in the response and to use the information gained from them in the evaluation process.

References should be provided in accordance with this RFP. Proposal may not be deemed complete without the inclusion of requested references.

SECTION 4 - TERMS AND CONDITIONS

4.1 VENUE AND GOVERNING LAW

The Respondent hereby agrees and acknowledges that venue and jurisdiction of any suit, right, or cause of action arising out of or in connection with this RFP, the Contract and any Ensuing Agreement(s), shall lie exclusively in either Williamson County, Texas or in the Austin Division of the Western Federal District of Texas, and the parties hereto expressly consent and submit to such jurisdiction. Furthermore, except to the extent that this RFP, the Contract and any Ensuing Agreement(s) is governed by the laws of the United States, this RFP, the Contract and any Ensuing Agreement(s) shall be governed by and construed in accordance with the laws of the State of Texas, excluding, however, its choice of law rules.

4.2 INCORPORATION BY REFERENCE AND PRECEDENCE

A. The Contract shall be derived from the RFP and its Addenda (if applicable), and the Respondent Proposal. In the event of a dispute under the Contract, applicable documents will be referred to for the purpose of clarification or for additional detail in the following order of precedence:

   1. The RFP and its Addenda (if applicable); and

   2. The Respondent's Proposal.

B. In the event the County requires that an Ensuing Agreement be executed following award and a dispute arises between the terms and conditions of the Ensuing Agreement, the RFP and its Addenda (if applicable), and the Respondent's Proposal, applicable documents will be referred to for the purpose of clarification or for additional detail in the following order of precedence:

   1. The terms and conditions of the Ensuing Agreement;

   2. The RFP and its Addenda; and

   3. The Respondent's Proposal.

4.3 OWNERSHIP OF PROPOSAL

Each Proposal shall become the property of the County upon submittal and will not be returned to Respondents unless received after the submittal deadline.

4.4 DISQUALIFICATION OF RESPONDENT

Upon signing and submittal of the Proposal, a Respondent offering to sell supplies, materials, services, or equipment to the County, certifies that the Respondent has not violated the antitrust laws of the State of Texas codified in Business & Commerce Code, Section 15.01, or the Federal Antitrust Laws, and has not communicated directly or indirectly the offer made to any competitor or any other person engaged such line of business. Any or all Proposals may be rejected if the County believes that collusion exists among the Respondents.

4.5 FUNDING

The County intends to budget and make sufficient funds available and authorize funds for expenditure to finance the costs of the Contract. All Respondents understand and agree that the County's payment of

amounts under the Contract shall be contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to make payments under this Contract.

4.6 ASSIGNMENT, SUCCESSORS AND ASSIGNS

The Successful Respondent may not assign, sell, or otherwise transfer the Contract or any other rights or interests obtained under the Contract without written permission of the Williamson County the Commissioners Court. The Contract and any Ensuing Agreement(s) shall be binding upon and inure to the benefit of the contracting parties hereto and their respective successors and permitted assigns.

4.7 IMPLIED REQUIREMENTS

Products or services not specifically described or required in the RFP, but are necessary to provide the functional capabilities described by the Respondent, shall be implied and deemed to be included in the Proposal.

4.8 TERMINATION

A. **Termination for Cause:** The County reserves the right to terminate the Contract and/or any Ensuing Agreement(s) for default if the Successful Respondent breaches any of the Proposal specifications, terms and conditions, including warranties of the Respondent, if any, or if the Successful Respondent becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies the County may have at law or equity or as may otherwise be provided hereunder. Default may be construed as, but not limited to, failure to deliver the proper goods and/or services within the proper amount of time, and/or to properly perform any and all other requirements to the County's satisfaction, and/or to meet all other obligations and requirements.

B. **Termination for Convenience:** The County may terminate the Contract and/or any Ensuing Agreement(s) for convenience and without cause or further liability, upon no less than thirty (30) calendar days written notice to the Successful Respondent. The County reserves the right to extend this period if it is in the best interest of the County. In the event the County exercises its right to terminate without cause, it is understood and agreed that only the amounts due to the Successful Respondent for goods, commodities and/or services provided, and expenses incurred to and including the date of termination, will be due and payable. No penalty will be assessed for the County's termination for convenience.

4.9 NON-PERFORMANCE

It is the objective of the County to obtain complete and satisfactory performance of the requirements set forth herein. In addition to any other remedies available at law, in equity or that may be set out herein, failure to perform may result in a deduction of payment equal to the amount of the goods and/or services that were not provided and/or performed to the County's satisfaction.

In the event of such non-performance, the County shall have the right, but shall not be obligated, to complete the services itself or by others and/or purchase the goods from other sources. If the County elects to acquire the goods or perform the services itself or by others, pursuant to the foregoing, the Successful Respondent shall reimburse the County, within ten (10) calendar days of demand, for all costs incurred by the County (including, without limitation, applicable, general, and administrative expenses, and field overhead, and the cost of necessary equipment, materials, and field labor) in correcting the nonperformance which the Successful Respondent fails to meet pursuant to the requirements set out herein. In the event the Successful Respondent refuses to reimburse the County as set out in this provision, the County shall have the right to deduct such reimbursement amounts from any amounts that may be then owing or that may become owing in the future to the Successful Respondent.

4.10 PROPRIETARY INFORMATION AND THE TEXAS PUBLIC INFORMATION ACT

All material submitted to the County shall become public property and subject to the Texas Public Information Act upon receipt. If a Respondent does not desire proprietary information in the Proposal to be disclosed, each page must be clearly identified and marked proprietary at time of submittal or, more preferably, all proprietary information may be placed in a folder or appendix and be clearly identified and marked as being proprietary. Failure to clearly identify and mark information as being proprietary as set forth under this provision will result in all unmarked information being deemed non-proprietary and available to the public. For all information that has not been clearly identified and marked as proprietary by the Respondent, the County may choose to place such information on the County's website and/or a similar public database without obtaining any type of prior consent from the Respondent.

The County will, to the extent allowed by law, endeavor to protect from public disclosure the information that has been identified and marked as proprietary. The final decision as to what information must be disclosed, however, lies with the Texas Attorney General.

To the extent, if any, that any provision in this RFP or in the Respondent's Proposal is in conflict with Texas Government Code, Chapter 552, as amended (the "Public Information Act"), the same shall be of no force or effect. Furthermore, it is expressly understood, and agreed, that the County, and its officers and employees, may request advice, decisions and opinions of the Attorney General of the State of Texas in regard to the application of the Public Information Act to any items or data furnished to the County as to whether or not the same are available to the public. It is further understood that that the County, and its officers and employees, shall have the right to rely on the advice, decisions and opinions of the Attorney General, and that the County, its officers and employees shall have no liability or obligation to any party hereto for the disclosure to the public, or to any person or persons, of any items or data furnished to the County by a party hereto, in reliance of any advice, decision or opinion of the Attorney General of the State of Texas.

4.11 RIGHT TO AUDIT

The Successful Respondent agrees that the County or its duly authorized representatives shall, until the expiration of three (3) years after termination or expiration of the services to be performed, have access to and the right to examine and photocopy any and all books, documents, papers and records of the Successful Respondent, which are directly pertinent to the services to be performed or goods to delivered for the purposes of making audits, examinations, excerpts and transcriptions. The Successful Respondent agrees that the County shall have access during normal working hours to all necessary facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. The County shall give the Successful Respondent reasonable advance notice of intended audits.

4.12 TESTING AND INSPECTIONS

The County reserves the right to inspect and test equipment, supplies, materials and goods for quality and compliance with this RFP, and ability to meet the needs of the user. Demonstration units must be available for review. Should the goods or services fail to meet requirements and/or be unavailable for evaluation, the County can deem the Respondent to be in breach and terminate the Contract and/or any Ensuing Agreement(s).

4.13 PROPOSAL PREPARATION COSTS

The cost of developing Proposals is the sole responsibility of the Respondents and shall not be charged to the County. There is no expressed or implied obligation for the County to reimburse the Respondents for any expense incurred in preparing a Proposal in response to this RFP and the County will not reimburse the Respondents for such expenses.

4.14 INDEMNIFICATION

The Successful Respondent shall indemnify, defend and save harmless, the County, its officials, employees, agents and agent's employees from, and against, all claims, liability, and expenses including reasonable attorneys' fees, arising from activities of the Respondent, its agents, servants or employees, performed hereunder that result from the negligent act, error, or omission of the Respondent or any of the Respondent's agents, servants or employees, as well as all claims of loss or damage to the Respondent's and the County's property, equipment, and/or supplies.

Furthermore, the County, its officials, employees, agents and agents' employees shall not be liable for damages to the Successful Respondent arising from any act of any third party, including, but not limited to, theft. The Successful Respondent further agrees to indemnify, defend and save harmless, the County from its officials, employee, agents and agents' employees against all claims of whatever nature arising from any accident, injury, or damage whatsoever, caused to any person, or the property of any person, occurring in relation to the Successful Respondent's performance of any services requested hereunder during the term of the Contract and/or any Ensuing Agreement(s).

The Successful Respondent shall timely report all claims, demands, suits, actions, proceedings, liens or judgements to the County and shall, upon the receipt of any claim, demand, suit, action, proceeding, lien or judgement, not later than the fifteenth (15^{th}) day of each month; provide the County with a written report on each such matter, setting forth the status of each matter, the schedule or planned proceedings with respect to each matter and the cooperation or assistance, if any, of the County required by the Successful Respondent in the defense of each matter. The Successful Respondent's duty to defend, indemnify and hold the County harmless shall be absolute. It shall not abate or end by reason of the expiration or termination of the Contract and/or any Ensuing Agreement(s), unless otherwise agreed by the County in writing. The provisions of this section shall survive the termination of the Contract and shall remain in full force and effect with respect to all such matters no matter when they arise.

In the event of any dispute between the parties, as to whether a claim, demand, suit, action, proceeding, lien or judgement, that appears to have been caused by or appears to have arisen out of or in connection with acts or omissions of the County, the Respondent shall nevertheless fully defend such claim, demand, suit or action, proceeding, lien or judgement, until and unless there is a determination by a court of competent jurisdiction that the acts and omissions of the Respondent are not an issue in the matter.

The Successful Respondent's indemnification shall cover, and the Successful Respondent agrees to, indemnify the County, in the event the County is found to have been negligent for having selected the Successful Respondent to perform the work described in this request. The provision by the Successful Respondent of insurance shall not limit the liability of the Successful Respondent under the Contract and/or any Ensuing Agreement(s).

4.15 WAIVER OF SUBROGATION

The Successful Respondent and the Successful Respondent's insurance carrier waive any and all rights whatsoever with regard to subrogation against the County as an indirect party to any suit arising out of personal or property damages resulting from the Respondent's performance under this Contract and any Ensuing Agreement(s).

4.16 RELATIONSHIP OF THE PARTIES

The Successful Respondent shall be an independent contractor and shall assume all of the rights, obligations, liabilities, applicable to it as such independent contractor hereunder and any provisions herein which may appear to give the County the right to direct the Successful Respondent as to details of doing work herein covered, or to exercise a measure of control over the work, shall be deemed to mean that the Successful Respondent shall follow the desires of the County in the results of the work only. The County shall not retain or have the right to control the Successful Respondent's means, methods or

details pertaining to the Successful Respondent's performance of the work. The County and the Successful Respondent hereby agree and declare that the Successful Respondent is an independent contractor and as such meets the qualifications of an "Independent Contractor" under Texas Workers Compensation Act, Texas Labor Code, Section 406.141, that the Successful Respondent is not an employee of the County, and that the Successful Respondent and its employees, agents and subcontractors shall not be entitled to workers compensation coverage or any other type of insurance coverage held by the County.

4.17 SOLE PROVIDER

The Successful Respondent agrees and acknowledges that it shall not be considered a sole provider of the goods and/or services described herein and that the County may contract with other providers of such goods and/or services if the County deems, at its sole discretion, that multiple providers of the same goods and/or services will serve the best interest of the County.

4.18 FORCE MAJEURE

If the party obligated to perform is prevented from performance by an act of war, order of legal authority, act of God, or other unavoidable cause not attributable to the fault or negligence of said party, the other party shall grant such party relief from the performance. The burden of proof for the need of such relief shall rest upon the party obligated to perform. To obtain release based on force majeure, the party obligated to perform shall file a written request with the other party.

4.19 SEVERABILITY

If any provision of this RFP, the Contract or any Ensuing Agreement(s) shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision thereof, but rather the entire RFP, Contract or any Ensuing Agreement (s) will be construed as if not containing the particular invalid or unenforceable provision or provisions, and the rights and obligation of the parties shall be construed and enforced in accordance therewith. The parties acknowledge that if any provision of this RFP, the Contract or any Ensuing Agreement(s) is determined to be invalid or unenforceable, it is the desire and intention of each that such provision be reformed and construed in such a manner that it will, to the maximum extent practicable, give effect to the intent of this RFP, the Contract or any Ensuing Agreement(s) and be deemed to be validated and enforceable.

4.20 EQUAL OPPORTUNITY

Neither party shall discriminate against any employee or applicant for employment because of race, color, sex, religion or national origin.

4.21 NOTICE

Any notice to be given shall be in writing and may be distributed by personal delivery, or by registered or certified mail, return receipt requested, addressed to the proper party, at the following address:

The County: Williamson County Purchasing Department
Attn: Purchasing Agent
901 South Austin Avenue
Georgetown, Texas 78626

The Respondent: Address set out in Respondent's Transmittal Letter

Notices given in accordance with this provision shall be effective upon (1) receipt by the party to which notice is given, or (2) on the third (3rd) calendar day following mailing, whichever occurs first.

4.22 SALES AND USE TAX EXEMPTION

The County is a body, corporate and politic, under the laws of the State of Texas and claims exemption from sales and use taxes under Texas Tax Code, Section 151.309, as amended, and the services and/or goods subject hereof are being secured for use by the County.

4.23 COMPLIANCE WITH LAWS

The County and the Successful Respondent shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of the Contract and any Ensuing Agreement(s), including, without limitation, Workers' Compensation laws, salary and wage statutes and regulations, licensing laws and regulations. When required, the Successful Respondent shall furnish the County with certification of compliance with said laws, statues, ordinances, rules, regulations, orders, and decrees above specified.

4.24 INCORPORATION OF EXHIBITS, APPENDICES AND ATTACHMENTS

All of the Exhibits, Appendices and Attachments referred to herein are incorporated by reference as if set forth verbatim herein. Any conflicting terms in the Contract documents will be resolved at the sole discretion of the Commissioners Court.

4.25 NO WAIVER OF IMMUNITIES

Nothing herein shall be deemed to waive, modify or amend any legal defense available at law or in equity to the County, its past or present officers, employees, or agents, nor to create any legal rights or claim on behalf of any third party. The County does not waive, modify, or alter to any extent whatsoever the availability of the defense of governmental immunity under the laws of the State of Texas and of the United States.

4.26 NO WAIVER

The failure or delay of any party to enforce at any time or any period of time any of the provisions of this RFP, the Contract or any Ensuing Agreement(s) shall not constitute a present or future waiver of such provisions nor the right of either party to enforce each and every provision. Furthermore, no term or provision hereof shall be deemed waived and no breach excused unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. Any consent by any party to, or waiver of, a breach by the other, whether expressed or implied, shall not constitute a consent to, waiver of or excuse for any other, different or subsequent breach.

4.27 CURRENT REVENUES

The obligations of the parties under the Contract and any Ensuing Agreement(s) do not constitute a general obligation or indebtedness of the County for which the County is obligated to levy, pledge, or collect any of taxation. It is understood and agreed that the County shall have the right to terminate the Contract and any Ensuing Agreement(s) at the end of any the County fiscal year if the governing body of the County does not appropriate sufficient funds as determined by the County's budget for the fiscal year in question. The County may effect such termination by giving written notice of termination to the Successful Respondent at the end of its then-current fiscal year.

4.28 BINDING EFFECT

This Contract and any Ensuing Agreement(s) shall be binding upon and inure to the benefit of the parties and their respective permitted assigns and successors.

4.29 ASSIGNMENT

The Successful Respondent's interest and duties hereunder may not be assigned or delegated to a third party without the express written consent of the County.

4.30 SAFETY

The Successful Respondent is responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with any services to be provided hereunder. The safety program shall comply with all applicable requirements of the current federal Occupational Safety and Health Act and all other applicable federal, state and local laws and regulations.

4.31 GENERAL OBLIGATIONS AND RELIANCE

The Successful Respondent shall perform all services and/or provide all goods, as well as those reasonably inferable and necessary for completion and provision of services and/or goods required hereunder. The Successful Respondent shall keep the County informed of the progress and quality the services. The Successful Respondent agrees and acknowledges that the County is relying on the Successful Respondent's represented expertise and ability to provide the goods and/or services described herein. The Successful Respondent agrees to use its best efforts, skill, judgment, and abilities to perform its obligations in accordance with the highest standards used in the profession and to further the interests of the County in accordance with the County's requirements and procedures. The Successful Respondent's duties, as set forth herein, shall at no time be in any way diminished by reason of any approval by the County, nor shall the Successful Respondent be released from any liability reason of such approval by the County, it being understood that the County at all times is ultimately relying upon the Successful Respondent's skill and knowledge in performing the services and providing any goods required hereunder.

4.32 CONTRACTUAL DEVELOPMENT

The Commissioners Court may award the Contract on the basis of the initial Proposals received, without any further or additional discussions. Therefore, each initial Proposal should contain the Respondent best terms and offer. The contents of the RFP and the selected Proposal will become an integral part of the Contract, but may be modified, at Williamson County's sole discretion, by provisions of an Ensuing Agreement. Therefore, the Respondent must agree to inclusion in an Ensuing Agreement of t Proposal specifications, terms and conditions of this RFP. Williamson County may, at its discretion, opt to conduct further discussions with responsible offerors and request the highest ranked firm's Best and Final Offer (BAFO).

4.33 ENTIRE AGREEMENT

The Contract and any Ensuing Agreement(s) shall supersede all prior Agreements, written or oral between the Successful Respondent and the County and shall constitute the entire Agreement and understanding between the parties with respect to the services and/or goods to be provided. Each of the provisions herein shall be binding upon the parties and may not be waived, modified, amended or altered, except by writing signed by the Successful Respondent and the County.

4.34 SURVIVABILITY

All applicable agreements that were entered into between the Successful Respondent and the County, under the terms and conditions of the Contract and/or any Ensuing Agreement(s), shall survive the expiration or termination thereof for ninety (90) days unless a new contract has been awarded.

The County may exercise, by written notice to the Successful Respondent no later than ten (10) calendar days of the Contract expiration, this clause for emergency cases only.

4.35 PAYMENT

The County's payment for goods and services shall be governed by the Texas Government Code, Chapter 2251. An invoice shall be deemed overdue the thirty-first (31st) day after the later of the following:

A. The date the County receives the goods under the Contract;
B. The date the performance of the service under the Contract is completed; or
C. The date the Williamson County Auditor receives an invoice for the goods or services.

Interest charges for any overdue payments shall be paid by the County in accordance with Texas Government Code, Section 2251.025. More specifically, the rate of interest that shall accrue on a late payment is the rate in effect on September 1 of the County's fiscal year in which the payment becomes due. The said rate in effect on September 1 shall be equal to the sum of one (1) percent and the prime rate published in the Wall Street Journal on the first (1st) day of July of the preceding fiscal year that does not fall on a Saturday or Sunday.

In the event that an error appears in an invoice submitted by the Successful Respondent, the County shall notify the Successful Respondent of the error not later than the twenty-first (21st) day after the date the County receives the invoice. If the error is resolved in favor of the Successful Respondent, the Successful Respondent shall be entitled to receive interest on the unpaid balance of the invoice submitted by the Successful Respondent beginning on the date that the payment for the invoice became overdue. If the error is resolved in favor of the County, the Successful Respondent shall submit a corrected invoice that must be paid in accordance within the time set forth above. The unpaid balance accrues interest as provided by the Texas Government Code, Chapter 2251, if the corrected invoice is not paid by the appropriate date.

As a minimum, invoices shall include:

A. Name, address, and telephone number of the Successful Respondent and similar information in the event the payment is to be made to a different address.

B. The County Contract, Purchase Order.

C. Identification of items or service as outlined in the Contract.

D. Quantity or quantities, applicable unit prices, total prices and total amount.

E. Any additional payment information which may be called for by the Contract.

Payment inquiries should be directed to the following address:

Williamson County Auditor's Office, Accounts Payable Department
Email: accountspayable@wilco.org
Phone: 512-943-1500

4.36 CONTRACTUAL FORMATION AND ENSUING AGREEMENT

The RFP and the Respondent's Proposal, when properly accepted by the Commissioners Court, shall constitute a Contract equally binding between the Successful Respondent and the County. The Successful Respondent may be required by Williamson County to sign an additional Agreement containing terms necessary to ensure compliance with the RFP and Respondent's Proposal.

4.37 LEGAL LIABILITY INFORMATION

The Successful Respondent shall disclose all legal liability information by listing any pending litigation anticipated litigation that your firm is involved in including, but not limited to, potential or actual legal matters with private parties and any local, state, federal or international governmental entities. The County reserves the right to consider legal liability information in the recommendation of any proposed contract to the Commissioners Court.

4.38 CONFIDENTIALITY

Respondent expressly agrees that it will not use any direct or incidental confidential information that may be obtained while working in a governmental setting for its own benefit, and agrees that it will not access unauthorized areas or confidential information and it will not disclose any information to unauthorized third parties, and will take care to guard the security of the information at all times.

4.39 INCLEMENT WEATHER

In case of inclement weather or any other unforeseen event causing the County to close for business on the date of a Proposal submission deadline, the Proposal closing will automatically be postponed until the next business day the County is open. If inclement weather conditions or any other unforeseen event causes delays in carrier service operations, the County may issue an Addendum to all known Respondents interested in the project to extend the deadline. It will be the responsibility of the Respondent to notify the County of their interest in the project if these conditions are impacting their ability to turn in a submission within the stated deadline. The County reserves the right to make the final judgement call to extend any deadline.

4.40 AIR QUALITY

In determining the overall best Proposal, the County may, to the extent applicable, exercise the option granted to local governments under the Texas Local Government Code, Section 271.907.

This option allows the County to evaluate Proposals and give preference to goods and/or services of Respondent that demonstrates that the Respondent meets or exceeds any and all state or federal environmental standards, including voluntary standards, relating to air quality. If the Proposal being submitted will have an effect on air quality for the County (as it relates to any state, federal, or voluntary air quality standard), then the Respondent is encouraged to provide information in narrative indicating the anticipated air quality impact. All Respondents are expected to meet all mandated state and federal air quality standards.

4.41 COOPERATIVE PURCHASING PROGRAM

During the term of the Contract resulting from this RFP, the County would like to afford the same prices, terms and conditions to other political subdivisions or public entities. Another entity's participation in the Contract resulting from this RFP is subject to a properly authorized Purchasing Cooperative Inter-local Agreement (ILA) with the County. Any liability created by purchase orders issued against the Contract shall be the sole responsibility of the governmental agency placing the order.

4.42 CONFIDENTIALITY

The Respondent expressly agrees that it will not use any direct or incidental confidential information that may be obtained while working in a governmental setting for its own benefit, and agrees that it will not access unauthorized areas or confidential information and it will not disclose any information to unauthorized third parties, and will take care to guard the security of the information at all times.

Monitor Attributes

WCEMS Clinical Practices Requirements

KEY TO RANK:

- Required: These attributes are considered highly critical and must be satisfied by the solution offered.
- Expected: These attributes are important to the system; but may, in some cases, be met with other features or work-arounds.
- Desired: These attributes add value to the device.

ID	Category	Description	Rank
CP01	Alarms	Programmable audio and visual alerts for parameters out of definable age-specific limits	Required
CP02	Alarms	Specific audio and visual alerts for fatal arrhythmias	Required
CP03	Alarms	Alerts for detached leads	Required
CP04	Alarms	Alert limits that are easily customizable by the medic for each patient	Required
CP05	Alarms	Audible and visual alerts for STEMI based on continuous ST segment monitoring	Expected
CP06	Alarms	Audible and visual alerts based on sudden increases in EtCO2	Expected
CP07	Alarms	Automatically sends emails to administration when system tests fail	Desired
CP08	Monitor Config	Adjustable amperage & rate transthoracic pacing capability	Required
CP09	Monitor Config	Default alert limits that are configurable, without vendor involvement, prior to or after device deployment	Required
CP10	Monitor Config	System configurable, without vendor involvement, default intervals for measurement of vital signs	Required
CP11	Monitor Config	System configurability of CPR feedback standards (i.e. compression only, adult, child, etc.)	Required
CP12	Monitor Config	Allow integration of specific, system-definable, time-stamped interventions, vital signs, ECGs and other recorded parameters into activity log of variety of ePCRs	Required
CP13	Monitor Config	Record and maintain a minimum of 12 hours of continuous data	Required
CP14	Monitor Config	Automatically performs and records system tests when not in use without user prompting	Desired
CP15	Technical Specs	Support in the following environment, and be user independent (i.e. without user security permission constraints) - VPN Software: Net motion 11.32 or greater - Cradlepoint Mobile Access Point with Verizon 4G/5G - Support for PC with Windows 7 and 10 for any mobile device interface or administrative workstation features - Support for iOS 10.3 for mobile device interface - Support integration with major ePCR software providers Require no user configuration or manipulation and work from one monitor/toughbook combination to the next consistently	Required

ID	Category	Description	Rank
CP16	Technical Specs	Data transfer: Wireless to Cloud over Wi-Fi or LAN connection. - Provide backup mechanism to get monitor data from monitor to the cloud. I.E. load data to a memory card and use a different "interface/mechanism" to upload to the cloud in the event of a wireless card failure on the monitor. This must be achieved without an internal dedicated cell card	Required
CP17	Technical Specs	Wi-Fi___33 capability that automatically finds and joins - authorized networks when available with no user intervention should allow for more than one network configuration at a time	Required
CP18	Technical Specs	Provide for central database of all recorded event data in both individual and aggregate form	Required
CP19	Technical Specs	Provide pre-defined/"canned" reports on CPR quality based on original or modified data files to include the following metrics: event time, excluded time, number of compressions, rate of compressions, average depth of compressions, percent of compressions of adequate depth, percent of compressions with adequate release, flow time, number of ventilations and time of all system defined events	Required
CP20	Technical Specs	No dependence on monitor/Toughbook "pairing" i.e. any combination of monitor/Toughbook may occur with no user intervention required - No dependency on Bluetooth stacks, drivers etc. Note: A true cloud solution addresses this requirement	Required
CP21	Technical Specs	Provide ability to easily export full call data from central database in an industry standard format. May be located on your cloud if hosting model is used. - Must be able to download to a local repository behind the county firewall if no cloud access is available for the central repository for historical analysis In addition, hosted information/data must be protected by industry standard security measures for healthcare / patient data / information	Required
CP22	Technical Specs	Code review software solution which allows for analysis, trending, graphing, and export in standard format (.csv, .txt) of all captured biometric data with the ability for real-time playback of waveforms (ECG, SpO2, EtCO2) for all call types, not just cardiac arrest. Additionally: for CPR data includes pre-defined reports on original or modified data files minimally including the following metrics: event time, excluded time, number of compressions, rate of compressions, average depth of compressions, percent of compressions at adequate depth, percent of compressions with adequate release, flow time, number of ventilations, maximum period of compression interruption, number of times compressions were interrupted for more than 10 seconds, and marked events.	Required
CP23	Technical Specs	Call review interface with multi-user access, usable for both Mac and Windows, which allows for ability to annotate case and modify start/end periods of exclusion from analysis. Include the ability to change data and save separately without overwriting original data.	Required

ID	Category	Description	Rank
CP24	Technical Specs	Ability to electronically collate data collected between multiple monitors into one consolidated electronic record. An example flow: First responder arrives on-scene with monitor and obtains vital signs and runs a 12-lead ECG. WCEMS Paramedic arrives on-scene with monitor of same brand. Transfer of care occurs between parties and original first responder monitor is turned off and patient is transferred over to WCEMS monitor, moved to truck, and transported. At this point, both monitor's data would need to be collected into one record without manual manipulation.	Required
CP25	Technical Specs	Must be able to integrate with any of the ePCR vendors on EMS side - Support export of 12 lead ECGs in standard image format (.jpg, .pdf) for inclusion with ePCR and viewing without need for additional software - Allow user to specify which parameters/events are printed or transmitted to ePCR - Provide software (Windows and Mac) for analysis of individual calls with real-time replay of all recorded biometrics - Able to transmit 12 lead data to multiple pre-programmed addresses without interfering with ability to view on-screen waveforms - Able to copy all recorded data to flash memory cards (if applicable) For Hospital - Easily transmit 12 lead ECGs to predefined facilities without additional expense or user input Receiving facilities may easily receive 12-lead ECGs without additional cost	Required
CP26	Technical Specs	All software will have multi-user (up to 200 users – 75 concurrent), multi-site licenses	Required
CP27	Technical Specs	Allow remote (over Wi-Fi or LAN connection) inventorying of and changes (without vendor involvement) to the device's (system's) - configuration (all settings and properties) - Example: Remotely see list of all monitors with configuration set to print 12-lead interpretation. Remotely push out change to turn off 12-lead interpretation - status - GPS location (if possible) ability to synchronize internal clock to a standard Navy Reference	Expected
CP28	Technical Specs	Provide password-protected, web-enabled/viewable interface to central data repository	Expected
CP29	Technical Specs	Automatically (without user intervention) transmit data to central data repository for later analysis via (Wi-Fi or Lan connection) – Cloud solution meets this requirement automatically.	Expected
CP30	Technical Specs	Provide ability to review/export second by second data on all recorded channels regardless of call type	Expected

ID	Category	Description	Rank
CP31	Display	Display multiple waveforms (ECG, SaO2, NIBP etc.) simultaneously	Required
CP32	Display	Display waveform and quantitative measurements of EtCO2	Required
CP33	Display	Record and display Sp02 with probes for all age ranges of patients	Required
CP34	Display	Simultaneously display multiple biometric parameters, at a minimum ECG, HR, SaO2, EtCO2 and BP	Required
CP35	Display	Display that is color capable and glare resistant with wide angle of viewing	Required
CP36	Display	Calculate and display mean arterial pressure (MAP)	Required
CP37	Display	Display waveform and quantitative measurements of SpO2	Required
CP38	Display	Record and display both side-stream and in-line EtCO2	Required
CP39	Display	Continuously and automatically monitor ST segments for changes while leads are attached without requiring a specific 12 lead to be obtained	Expected
CP40	Display	Display underlying ECG rhythm during ongoing chest compressions with compression artifact filtered out	Expected
CP41	Display	Display all 12 leads of an ECG on the screen simultaneously	Expected
CP42	Display	Display and print waveform and quantitative carbon monoxide values	Expected
CP43	Display	Display that offers both day and night configuration	Expected
CP44	Display	Monitor, record and display invasive blood pressure values	Desired
CP45	General	Monitor, record and display accurate and vibration resistant Non-Invasive Blood Pressure (NIBP) with patient in vehicle both at rest and in motion	Required
CP46	General	Biphasic waveform defibrillation via hands-free multi-function pads with adult and pediatric capability	Required
CP47	General	Acquire, record and interpret 12 lead ECGs	Required
CP48	General	Provide real time feedback to user on the following CPR metrics: compression/ventilation rate, compression depth and recoil, no-flow time and compression time	Required
CP49	General	Provide audible and visual feedback, with correction instructions, when CPR metrics fall outside of system defined limits (compress faster, etc.)	Required
CP50	General	Ability to safely discharge energy while connected to a patient; but, without delivering a charge. - Example: to allow for pre-charge while performing compressions and then discharge after rhythm check if the patient does not require defibrillation.	Required
CP51	General	Provide synchronized cardioversion at multiple energy levels	Required
CP52	General	Pacing capability with fixed, demand and overdrive modes	Required
CP53	General	Monitor capability to detect and indicate presence of internal pacemaker	Required
CP54	General	Provide system-definable event record buttons for quick use during patient care	Required
CP55	General	Print 12 lead ECGs in 4X3 format with interpretation and segment/interval measurement (including ST segments for all 12 leads)	Required
CP56	General	Provide data on sensitivity and specificity of STEMI analysis algorithms	Required
CP57	General	Provide variety of BP cuffs for all age ranges from neonate to adult and bariatric patients	Required
CP58	General	Audio recording	Expected
CP59	General	Monitor CPR metrics with the use of automated CPR devices	Expected

ID	Category	Description	Rank
CP60	General	Monitor, record and display carbon monoxide levels non-invasively	Expected
CP61	General	Monitor, record and display continuous esophageal temperature values	Expected
CP62	General	Print 12 lead ECGs on large format paper	Desired
CP63	General	Print event summary with customizable components	Desired
CP64	General	Print device system test results	Desired
CP65	General	Print summary of vital signs/biometric values	Desired

Monitor Attributes
WCEMS Field Requirements

KEY TO RANK:

- Required: These attributes are considered highly critical and must be satisfied by the solution offered.
- Expected: These attributes are important to the system; but may, in some cases, be met with other features or work-arounds.
- Desired: These attributes add value to the device.

ID	Category	Description	Rank
F01	Case, Power, Cables	Case provides ample cable management solutions that provide ease of access and protects cables from wear/damage	Required
F02	Case, Power, Cables	Case provides effective storage for reusable consumables such as pulse ox probes, additional sizes of NIBP cuffs, 12-leads, 4-leads, etc.	Required
F03	Case, Power, Cables	Patient monitoring devices are easy to access to swap out (i.e. assorted NIBP cuffs, pulse ox probes, etc.)	Required
F04	Case, Power, Cables	Cable attachment points/printer are easy to access with case in place	Required
F05	Case, Power, Cables	Cables are rugged and withstand high usage without damage	Required
F06	Case, Power, Cables	Monitor when in case and loaded with required accessories, remains easy to carry and lightweight	Expected
F07	Case, Power, Cables	Handle shape is comfortable to carry by hand with case fully loaded	Expected
F08	Case, Power, Cables	Case has shoulder strap option	Expected
F09	Case, Power, Cables	Monitor has the option of attaching to a safety mount inside of EMS unit without removing from case	Expected
F10	Case, Power, Cables	Case provides effective, organized areas for system required one use consumables such as MFP's, spare paper, end tidal CO2 tubing, oxygen tubing, MFPs, additional pulse ox probes, etc.	Expected
F11	Case, Power, Cables	Cable's port positioning provides protection for cable insertion point while secured in case	Expected
F12	Case, Power, Cables	Monitor battery solution will last through heavy usage over a 24-hour shift	Expected
F13	Case, Power, Cables	Case has an option to convert to backpack style carrying	Desired
F14	Case, Power, Cables	Monitor has a solution for mounting at the foot of a Stryker stretcher for safety and visibility without removing from case	Desired
F15	Case, Power, Cables	Monitor batteries are easy to access for change out while monitor is in case	Desired
F16	Alarms	Ability for user to temporary modified alert limits for each patient	Required
F17	Alarms	Ability for user to temporarily modify default alarms by selecting age group	Required
F18	Alarms	System set programmable audio and visual alerts for parameters by definable age-specific limits	Required
F19	Alarms	Alerts for detached leads	Required
F20	Alarms	Specific audio and visual alerts for fatal arrhythmias	Required
F21	Alarms	Ability for user to easily adjust vital sign intervals on the fly as needed	Required
F22	Alarms	Ability to filter artifact from data allowing for display and record of highly accurate data whether stationary or in-motion	Required
F23	Alarms	Alarm sound that is customizable to be different for sensor error alert vs patient alarm	Expected
F24	Alarms	Alarms which can filter out artifact to minimize unnecessary alarms on preset perimeters	Expected

ID	Category	Description	Rank
F25	Alarms	Ability for user to fine tune ECG readings to account for wandering baseline and artifact while monitoring	Desired
F26	Alarms	Audible and visual alerts for STEMI based on continuous background ST segment monitoring	Desired
F27	Alarms	Audible and visual alerts based on sudden increases in EtCO2	Desired
F28	Alarms	Detect CPR in progress and alert user to move to CPR mode	Desired
F29	Display	Large, color capable, glare resistant display which allows for wide angle viewing	Required
F30	Display	Simultaneously display multiple biometric parameters, at a minimum ECG, HR, SaO2, EtCO2 and BP	Required
F31	Display	Easily change between monitor functions such as monitoring, CPR, Pacing, etc.	Required
F32	Display	Display all 12 leads of an ECG on the screen simultaneously	Expected
F33	Display	User able to easily view vital sign trends while continuing to see active monitoring	Expected
F34	Display	Display that offers both day and night configuration	Desired
F35	CPR	CPR dashboard display with easy to view CPR feedback	Required
F36	CPR	Easily pause/restart CPR mode (in case of ROSC and re-arrest)	Required
F37	CPR	Visual and audible CPR coaching with ability to toggle voice/no voice	Required
F38	CPR	Ability to filter out compressions displaying underlying ECG rhythm	Expected
F39	12-Lead	Ability for user to easily change between leads displayed on screen	Required
F40	12-Lead	Print 12 lead ECGs in 4X3 format with interpretation and segment/interval measurement (including ST segments for all 12 leads)	Expected
F41	12-Lead	Visual marker for j-points on 12-leads	Desired
F42	12-Lead	Ability for user to easily change printer speed on the fly	Desired
F43	Printing	Ability for user to configure monitor printing of full data record by end user specified categories (i.e.: HR, 12 leads, marked events, EtCO2) at specified data interval time (eg: 1min, 2min, 5min, 10min)	Expected
F44	Printing	Ability to easily mark events, capture, and print with 5-15 sec record of element prior to mark (i.e.: EtCO2 sudden increase, 4-lead prior to rhythm conversion)	Expected
F45	Printing	Ability to easily access location of printer paper to access printouts and change paper rolls	Expected
F46	Printing	Built in printer	Expected
F47	Printing	On user request, print by default baseline vital signs at user selected intervals (1 min, 2min, 5 min, 10min) (i.e.: HR, SaO2, EtCO2, BP, RR)	Desired
F48	Configuration	Ability for end user to view all data collected for a call electronically in an easy to navigate call review format	Required
F49	Configuration	User able to load data file from monitor to ESO software with minimal steps	Required
F50	Configuration	User able to switch to a simple back-up solution to load call data into ESO if primary data transfer fails.	Required
F51	Configuration	Monitor automatically performs, records, and provides results to admin of defined system tests without end user intervention	Desired

Price Sheet

- Total estimated units to be purchased: **30**
- If awarded contract, product delivery to specified WCEMS address would be no later than: **September 16, 2019**
- Estimated date of contract award notification**: June 18, 2019**

Base model pricing to include below listed complete kit and all options:

- Cardiac monitor
- 3 Batteries
- Monitor case and straps
- Monitor Printer
- Network connectivity
- External media storage device (i.e. flash drive, SD card)
- Therapy cable
- 12 Lead ECG Cable
- 4 Lead Cable
- CPR Sensor/metronome and associated cables
- Set of reusable NIBP cuffs and associated cables/adapters
    - Size: bariatric, adult large, adult regular, adult small, pediatric, neonate
- Pulse ox probes and required associated cables/adapters
    - Reusable: adult, pediatric
- Surface temperature probe and associated cables/adapters (if applicable)
- Carbon monoxide probe and associated cables/adapters (if applicable)
- Test load

Additional Pricing Requirement:

- 10 total additional batteries
- 20 software and multi-user licenses (if applicable)
- On-site training for train the trainer super users
- Battery charging station:
    - If battery is compatible with CadEx charging system: 2 units
    - If battery is compatible but requires adapter for CadEx charging system: 50 units plus 2 full units
    - If battery is not compatible with CadEx charging station, provide cost of charging station: 22 units

Warranty:

- 1-year parts and service agreement
- All warranty work must be completed at our facility
- Additional option to renew yearly for a length of up to 5 years at the original contract price

Trade-In Credits:

- What is the trade in value you would offer on the Philips MRX (29 total)
- If your battery is not compatible with the CadEx charging station, would you provide a credit for our current 20 units? (20 total)

Weighted Evaluation Criteria

33.4% Price
33.3% Clinical Practices Requirements and Trial
33.3% Field Services Requirements and Trial

Field Trial Data

Total Required Monitors

- Each monitor should have full base kit included as well as enough recommended consumable products to support the full length of trial
- 6 for WCEMS
- 1 for WCEMS Clinical Practice
- 1 for Round Rock Fire Department
- All monitors/extra supplies will be available for return a week following trial's end

Trial Dates (43 Days Each): Day 1-monitor config/testing, Day 2-4 training, Day 5-39 field testing

- Trial A: Dec 10-Jan 21
- Trial B: Feb 4-Mar 18
- Trial C: Apr 1-May 13

Point of Contacts:

- Singular point of contact during entire RFP process to communicate with WCEMS Project Manager
- Point of contact, escalation process available 24/7 during trial to help troubleshoot and provide immediate end user support to resolve immediate and non-urgent issues

Technical integration:

- At a minimum 30 days prior to trial, provide WCEMS with access to vendor technical personnel required to answer questions, create timeline, and design solution for testing and trial
- Seven Days Prior: Have a control ECG Monitor for preparation and trial-period troubleshooting
- (Coinciding with "Trial Dates" above), 96 hours prior to beginning of field evaluation, access to vendor technical subject matter experts for completion of monitor and environment (cloud, ePCR) configuration.

Pre-Trial Training by Vendor:

- In-person with no expectation of on-line training required
- Day 2-4 of each trial period
- Hold two classes per day for trial participants
    - 9-12pm and 1-4pm
- What is the lead time required to schedule your trainer?

WILLIAMSON COUNTY
1848

ADDENDUM NO. 1

Date: **October 12, 2018**

Owner: **Williamson County, Texas**

Project Name: **Patient Cardiac Care Monitor**

Project No: **1808-255**

This Addendum forms a part of the Contract and clarifies, corrects or modifies the original Construction Documents, dated October 2, 2018.

DESCRIPTION OF ADDITION OR CHANGE:

1) Added Pre-Bid Conference Sign-In Sheet (1 page).
2) Added questions received during Pre-Bid Conference with responses (3 pages).
3) Added Updated RFP Trial Requirements and removed previous document.

This addendum consists of 4 pages (including this sheet).

Melissa Hurka
Approved by Purchasing

END

WILLIAMSON COUNTY
PRE-PROPOSAL SIGN IN SHEET

Patient Cardiac Care Monitor

October 12, 2018 9:00 am RFP 1808-255

WILLIAMSON COUNTY REPRESENTATIVE(S): Melissa Gluka

****PLEASE PRINT****

NAME	COMPANY NAME	EMAIL ADDRESS (or Business CARD)
Luis Sanchez	ZOLL MEDICAL	LSanchez@zoll.com
Ryan Gnulke	ZOLL	rgnulke@zoll.com
Laura Castleberry	ZOLL	lCastleberry@zoll.com
Chad Lewis	Physio-Control	Chad.lewis@stryker.com

RFP 1808-255

Patient Cardiac Care Monitor

Optional Pre-Proposal Conference

10.12.2018 at 9:00AM

Questions and Responses:

Question: What should the package price include? Do we include the Required, Expected, Desired as part of the package price?

- **Wilco Response: We do not want line item pricing for items included in the package price. We would like a package price which is all inclusive. You may list what is included in the package price such as the audio feature; but, we do not want to see the line item cost of this. If you answer "yes" to a required, expected or desired item, it should be included in the pricing.**

Question: Batteries are a large expense and degrade overtime if not rotated through charging. Where will the additional 20 batteries be stored and utilized?

- **Wilco Response: They will be located at central stocking stations and clinical practices. They will be used and rotated into use per operational guidelines.**

Question: If our batteries do not work with CadEx and there is not an adapter how will this be reflected in pricing?

- **Wilco Response: Follow the specifications in the RFP Pricing Sheet. You may specify an amount for trade-in value.**

Question: Do we include pricing for disposable items in the package price.

- **Wilco Response: No. Any special pricing for items such as disposable pulse ox probes, electrodes, end tidal, etc. would follow a different pricing process.**

Question: Are you defining SPO2 and PulseOx differently?

- **Wilco Response: No, consider them one in the same for this purpose.**

Question: Will WCEMS want to transmit 12-leads to hospital locations or require bedside transmission abilities.

- **Wilco Initial Response: No.**
- **After further review, it has been determined that yes, the monitor will need to have the ability to transmit 12-leads. The state is mandating that we must have a monitor that has the ability to transmit a 12-lead by 2020, thus the change.**

Question: Will you clarify the cloud solution expected?

- **Wilco Response: Must not require use of blue tooth or cable to transmit data. Solution must be able to connect to a WiFi to transmit call data to your cloud solution. WCEMS will work with our ePCR vendor to ensure we are able to pull data back out of the cloud.**

Question: What type of WiFi solutions does WCEMS have?

- **Wilco Response: Answer: In the ambulance, we use Cradlepoint and Verizon which are outside of the county firewall. In the stations, we utilize the county intranet WiFi Meraki which are behind the county firewall.**
- **As a government entity we have unlimited bandwidth; but, are capped and therefore need an understanding of how much data on average your product utilizes. Please include your average file size for a typical call with cardiac monitoring as well as your**

average file size for a significant event such as a cardiac arrest. For those products which may be able to capture audio, how much would this increase the file size.

Question: Who is the POC for this project?

- **Wilco Response: Melissa Gurka in Purchasing. During trial, Kirsti Elias will be the project manager and key point of contact for all correspondence.**

Question: What is the last day for questions?

- **Wilco Response: October 24, 2018 (Wednesday).**

Question: Does WCEMS want financing options?

- **Wilco Response: No, this is a one-time purchase.**

Meeting was adjourned at 9:45AM

Additional Stipulations

1 Additional Stipulations

1.1 Introduction

The Proposal evaluation and selection process is detailed in this section, as are other factors, and the format in which the Price Proposal of each Proposal should be submitted.

1.2 Price Proposal

The Respondent must utilize the price sheet form as provided in the Appendix A which will be attached to this RFP. The Price Proposal should be included in each copy of the Proposal if submitted in paper form.

Note: Any reworked version of the Appendix that is intended to be a substitute and that is provided by a Respondent may be determined as non-responsive, and may, at the County's sole discretion, result in the Respondent's disqualification.

1.3 Proposal Evaluation and Selection

1.3.1 Evaluation/Selection Criteria

All Proposals received by the designated date and time will be evaluated based on the Respondent's Proposal. Other information may be taken into consideration when that information potentially provides an additional benefit to the County, and further helps the County in receiving the services listed in the RFP.

Respondents' Proposals must meet all mandatory (minimum) requirements in order to be scored. Scoring may also be based on total information gathered by the County at its discretion, including but not limited to respondent's ability to perform "without delay or interference, character,

responsibility, integrity, and experience or demonstrated capability; quality of prior work; compliance with laws; and noncompliance with requirements as to submission of relevant information."

1.3.2 Evaluation Committee and Selection Process

All Proposals will be evaluated by a County appointed Evaluation Committee. The Evaluation Committee may be composed of County Staff that may have expertise, knowledge or experience with the services and/or goods being procured hereunder. Those Respondents meeting all requirements and deemed most qualified may receive further evaluation via telephone or in-person interviews with members of the Evaluation Committee. The County will select a Respondent determined best and most responsible Respondent meeting minimum specifications and qualifications.

Respondents are advised that the Evaluation Committee, at its option, may recommend an award strictly on the basis of the initial RFP responses, or in addition, may have interviews with firms to determine its final recommendation. The Evaluation Committee will present its recommendation to the Williamson County Commissioners' Court for approval and award of contract.

Finalist shall be determined by the Respondent receiving the most points in relation to the following Evaluation Criteria. Additional scoring may be conducted based upon Respondent's presentation during the interview process and may or may not include previous scores from Respondent's Proposal.

1.3.3 Mandatory Criteria

Minimum requirements must be passed in order to be considered for scoring as described in section 1.3.4

1.3.4 Graded Evaluation Factors

The following graded evaluation factors will be used to determine how well a Respondent(s) meet(s) the desired performance.

1.3.5 Interviews

Interview scoring (if applicable) will be provided along with invitation to interview candidates. Best and Final Offer will be required from all Respondents scheduled for interviews, twenty-four (24) hours prior to scheduled interview.

1.3.6 Additional Evaluation Information

The County reserves the right to award a contract for any or all areas of this RFP.

It is the responsibility of the Respondent to provide sufficient information/data in a convincing manner to the County to assure all of the terms, conditions and

expectations **for** satisfactory performance of the services requested herein will be met.

All contact during the evaluation phase shall be through the Williamson County Purchasing Department only. The Respondent shall neither contact nor lobby evaluators during the evaluation process. Attempts by the Respondent to contact and/or influence members of the Evaluation Committee may result in disqualification of Proposal.

1.4 Technical Contact

Mike Knipstein, EMS Director (or successor), Williamson County, 3189 SE Inner Loop, Georgetown, TX shall serve as the County's Technical Contact with designated responsibility to ensure compliance with the requirements of the Contract and any ensuing agreement, such as but not limited to, acceptance, inspection and delivery, together with the Purchasing Department. The Technical Contact, together with the Purchasing Department, will serve as liaison between Williamson County Commissioners Court and the Successful Respondent.

1.5 Initial Contract Term

This is a one time purchase with no options to renew.

1.6 Contract Extensions

If applicable, at the end of the Initial Contract Term, the Commissioners Court reserves the right to extend the Initial Contract Term, by mutual agreement of both parties, as it deems to be in the best interest of the County. The extension may be negotiated if renewal indications are provided within the County's timeframe which reflect renewal terms for the forthcoming policy year that are deemed by the County to be competitive with current market conditions. However, the County may terminate the contract at any time if funds are restricted, withdrawn, not approved, or if service is unsatisfactory. Any extension will be in twelve (12) month increments for up to an additional twenty-four (24) months, with the terms and conditions remaining the same. The total period of the contract, including all extensions will not exceed a maximum combined period of sixty (60) months. The extension of the contract is contingent on the appropriation of necessary funds by the Commissioners Court for the fiscal year in question. Upon the failure of the Commissioners Court to so appropriate in any year, the Respondent may elect to terminate the contract, with no additional liability to the County. The County and the Respondent agree that termination shall be the Respondent's sole remedy under this circumstance.

1.7 Insurance Requirements

By signing its Bid, the Respondent agrees to maintain at all times during any term of the Contract and any ensuing Agreement at Respondent 's cost, insurance in accordance with this provision. Respondent will be required to submit Certificates of Insurance **prior to contract award and any renewals.**

All certificates of insurance coverage as specified below must be provided to the following Location and should include the RFP number and description:

Williamson County Purchasing Department
901 S Austin Ave
Georgetown, Texas 78626

Failure to comply with these Insurance Requirements may result in the termination of the Contract and any ensuing Agreement(s) between the Successful Respondent and County.

Successful Respondent must comply with the following insurance requirements at all times during this Contract:

A. Coverage Limits. Except as specified otherwise in the Contract and any ensuing Agreement(s), Successful Respondent, at Successful Respondent's sole cost, shall purchase and maintain during the entire term while the Contract and any ensuing Agreement(s)is in effect the following insurance:

1. Worker's Compensation in accordance with statutory requirements.
2. Commercial General Liability Insurance with a combined minimum Bodily Injury and Property Damage limits of $1,000,000.00 per occurrence and $2,000,000.00 in the aggregate.
3. Automobile Liability Insurance for all owned, non-owned, and hired vehicles with combined minimum limits for Bodily Injury and Property Damage limits of $500,000.00 per occurrence and $1,000,000.00 in the aggregate.
4. Professional Liability Errors and Omissions Insurance in the amount of $2,000,000.00 per claim.

B. Additional Insureds; Waiver of Subrogation. County, its directors, officers and employees shall be added as additional insureds under policies listed under (2) and (3) above, and on those policies where County, its directors, officers and employees are additional insureds, such insurance shall be primary and any insurance maintained by County shall be excess and not contribute with it. Such policies shall also include waivers of subrogation in favor of County.

C. Premiums and Deductible. Successful Respondent shall be responsible for payment of premiums for all of the insurance coverages required under this section. Successful Respondent further agrees that for each claim, suit or action made against insurance provided hereunder, with respect to all matters for which the Successful Respondent is responsible, Successful Respondent shall be solely responsible for all deductibles and self-insured retentions. Except as specified otherwise in the Contract and any ensuing Agreement(s), any deductibles or self-insured retentions **over $50,000** in the Successful Respondent's insurance must be declared and approved in writing by County in advance.

D. Commencement of Work. Successful Respondent shall not commence any field work under this Contract until he/she/it has obtained all required insurance and such insurance has been approved by County. As further set out below, Successful Respondent shall not allow any subcontractor/subconsultant(s) to commence work to be performed in connection with this Contract until all required insurance has been obtained and approved and such approval shall not be unreasonably withheld. Approval of the insurance by County shall not relieve or decrease the liability of Successful Respondent hereunder.

E. Insurance Company Rating. The required insurance must be written by a company approved to do business in the State or Texas with a financial standing of at least an A- rating, as reflected in Best's insurance ratings or by a similar rating system recognized within the insurance industry at the time the policy is issued.

F. Certification of Coverage. Successful Respondent shall furnish County with a certification of coverage issued by the insurer. Successful Respondent shall not cause any insurance to be canceled nor permit any insurance to lapse. **In addition to any other notification requires set forth hereunder, Successful Respondent shall also notify County, within twenty-four (24) hours of receipt, of any notices of expiration, cancellation, non-renewal, or material change in coverage it receives from its insurer.**

G. No Arbitration. It is the intention of the County and agreed to and hereby acknowledged by the Successful Respondent, that no provision of this Contract shall be construed to require the County to submit to mandatory arbitration in the settlement of any claim, cause of action or dispute, except as specifically required in direct connection with an insurance claim or threat of claim under an insurance policy required hereunder or as may be required by law or a court of law with jurisdiction over the provisions of this Contract.

H. Subcontractor/Subconsultant's Insurance. Without limiting any of the other obligations or liabilities of Successful Respondent, Successful Respondent shall require each subcontractor/subconsultant performing work under the Contractor and any ensuing Agreement(s) (to the extent a subcontractor/subconsultant is allowed by County) to maintain during the term of the Contract and any ensuing Agreement(s), at the subcontractor/subconsultant's own expense, the same stipulated minimum insurance required in this section above, including the required provisions and additional policy conditions as shown below in this section.

Successful Respondent shall obtain and monitor the certificates of insurance from each subcontractor/subconsultant in order to assure compliance with the insurance requirements. Successful Respondent must retain the certificates of insurance for the duration of the Contract and any ensuing Agreement(s), and shall have the responsibility of enforcing these insurance requirements among its subcontractor/subconsultants. County shall be entitled, upon request and without expense, to receive copies of these certificates of insurance.

I. Insurance Policy Endorsements. Each insurance policy shall include the following conditions by endorsement to the policy:

1. County shall be notified thirty (30) days prior to the expiration, cancellation, non-renewal or any material change in coverage, and such notice thereof shall be given to County by certified mail to:

   Williamson County Purchasing Department
   901 S Austin Ave
   Georgetown, Texas 78626

2. The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by County, to any such future coverage, or to County's Self-Insured Retentions of whatever

nature.

J. Cost of Insurance. The cost of all insurance required herein to be secured and maintained by Successful Respondent shall be borne solely by Successful Respondent, with certificates of insurance evidencing such minimum coverage in force to be filed with County.

1.8 Tentative Schedule

Event	Date	Time
RFP released in BidSync	October 2, 2018	
Deadline for RFP questions	October 24, 2018	4:00PM
RFP final responses due	October 31, 2018	10:00AM
Evaluation Committee Meeting – Final Selection of Vendors for Trial	November 8, 2018	
Contract awarded	June 18, 2019	
Contract effective date	June 18, 2019	

Question and Answers for Bid #1808-255 - Patient Cardiac Care Monitor

Overall Bid Questions

Question 1

Can you please provide your Cooperating Agencies within your Primary Service Area? **(Submitted: Oct 23, 2018 12:37:27 PM CDT)**

Answer

- City of Georgetown
City of Round Rock
City of Hutto
City of Leander
City of Taylor
City of Cedar Park
City of Pflugerville
City of Austin
Hutto ISD
Round Rock ISD **(Answered: Oct 24, 2018 8:50:06 AM CDT)**

Question 2

Is the bid bond required by the time of award, or would you require the bond with our proposal? **(Submitted: Oct 23, 2018 12:38:50 PM CDT)**

Answer

- Bid bond is due at the time of proposal submission. **(Answered: Oct 24, 2018 8:49:21 AM CDT)**

Question Deadline: Oct 24, 2018 4:00:00 PM CDT

Section 2

Pricing and Warranty

Physio-Control, Inc
11811 Willows Road NE
P.O. Box 97006
Redmond, WA 98073-9706 U.S.A.
www.physio-control.com
tel 800.442.1142
Sales Order fax 800.732.0956
Service Plan fax 800.772.3340

To

WILLIAMSON CTY EMS
Attn: John Gonzales, Commander, Clinical Practice
321 W 8TH ST
GEORGETOWN,TX 78627
(512) 943-1491 /c512-966-8972
jgonzales@wilco.org

Quote Number	00147692
Revision #	1
Created Date	10/24/2018
Sales Consultant	Chad Lewis (210) 884-0891 chad.lewis@physio-control.com
FOB	Redmond, WA
Terms	All quotes subject to credit approval and the following terms and conditions
NET Terms	NET 30
Expiration Date	12/31/2018

Product	Product Description	Quantity	List Price	Unit Discount	Unit Sales Price	Total Price
99577-001958	LIFEPAK 15 V4 Monitor/Defib, Adaptive Biphasic, Manual & AED, Color LCD, 100mm Printer, Noninvasive Pacing, Metronome, Trending, SpO2, NIBP, 12-Lead ECG, EtCO2, Carbon Monoxide, Bluetooth, Temp INCLUDED AT NO CHARGE: 2 PAIR QUIK-COMBO ELECTRODES PER UNIT - 11996-000091, TEST LOAD - 21330-001365, N-SERVICE DVD - 21330-001486 (one per order) , SERVICE MANUAL CD- 26500-003612 (one per order) and ShipKit- (RC Cable) 41577-000290 INCLUDED. HARD PADDLES, BATTERIES, CARRYING CASE NOT INCLUDED.	1.00	37,000.00	-9,250.00	27,750.00	27,750.00
11140-000015	AC power cord	1.00	83.00	-20.75	62.25	62.25
11140-000052	LP15 REDI-CHARGE Adapter Tray	1.00	211.00	-52.75	158.25	158.25
11141-000115	REDI-CHARGE Base (power cord not included)	1.00	1,555.00	-388.75	1,166.25	1,166.25
11160-000011	NIBP Cuff-Reusable, Infant	1.00	22.00	-5.50	16.50	16.50
11160-000013	NIBP Cuff-Reusable, Child	1.00	25.00	-6.25	18.75	18.75
11160-000015	NIBP Cuff-Reusable, Adult	1.00	31.00	-7.75	23.25	23.25
11160-000017	NIBP Cuff -Reusable, Large Adult, Bayonet	1.00	34.00	-8.50	25.50	25.50
11160-000019	NIBP Cuff-Reusable, Adult X Large	1.00	49.00	-12.25	36.75	36.75
11171-000049	Rainbow DCI Adt Reusable Sensor, 1/box	1.00	640.00	-160.00	480.00	480.00
11171-000050	Rainbow DCIP Pedi Reusable Sensor, 1/box	1.00	705.00	-176.25	528.75	528.75
11220-000028	Carry case top pouch for use w/LIFEPAK 12 or LIFEPAK 15	1.00	59.00	-14.75	44.25	44.25
11260-000039	LIFEPAK 15 Carry case back pouch	1.00	84.00	-21.00	63.00	63.00

11577-000002	LIFEPAK 15 Basic carry case w/right & left pouches; shoulder strap (11577-000001) included at no additional charge when case ordered with a LIFEPAK 15 device	1.00	327.00	-81.75	245.25	245.25
11600-000030	CODE-STAT 11 DATA REVIEW SEAT LICENSE	1.00	2,760.00	-690.00	2,070.00	2,070.00
11996-000359	Temp Sensor, Skin Probe, High Dielectric, Disp (box of 20)	1.00	146.00	-36.50	109.50	109.50
21330-001176	LP 15 Lithium-ion Battery 5.7 amp hrs	3.00	479.00	-119.75	359.25	1,077.75
21996-000109	Titan III – WiFi Gateway	1.00	1,035.00	-258.75	776.25	776.25
80596-000003	TrueCPR Coaching Device Includes TrueCPR device, USB cable for data download, 2 batteries and Instructions for Use. Limited one year warranty.	1.00	1,795.00	-448.75	1,346.25	1,346.25
LP15-OSCOMP-1-POS-UP	LIFEPAK 15 Service - 1 YEAR. On-site Comprehensive Coverage. Up Front Payment. Includes: -Services performed at customer's location by a Physio-Control Technical Specialist -Parts and labor necessary to restore device to original specifications -Annual Preventive Maintenance and inspections including quality assurance documentation -Discounts on accessories, disposables, and upgrades -Updates to the latest software version -Preconfigured loaner device provided if needed -Battery Replacement Service	1.00	1,764.00	-176.40	1,587.60	1,587.60
Trade-in product	Trade in of Philips MRx towards the purchase of Lifepak 15	1.00	0.00	0.00	-5,000.00	-5,000.00

Subtotal	USD 32,586.10
Estimated Tax	USD 0.00
Estimated Shipping & Handling	USD 185.00

Current Sales Tax Rates will be applied at the time of Invoice and tax rate is based on the Ship To location

Grand Total	USD 32,771.10

Pricing Summary Totals

List Price Total	USD 49,762.00
Total Contract Discounts Amount	USD -176.40
Total Discount	USD -11,999.50
Trade In Discounts	USD -5,000.00
Tax + S&H	USD 185.00

GRAND TOTAL FOR THIS QUOTE

USD 32,771.10

Please provide a company issued Purchase Order that includes Billing and Shipping Address.
PO must reference payment terms of Net 30 days.

- OR –

Required information if no Purchase Order is provided

Billing Address ☐ same as address on quote	**Shipping Address** ☐ same as Billing Address
Account Name	Account Name
Address	Address
City	City
State / Zip Code	State / Zip Code
Accounts Payable Contact Information	
Accounts Payable Contact	Accounts Payable Phone Number
Accounts Payable Email	**Customer is Tax Exempt?** ☐ **Yes** ☐ **No**
Authorized Customer Signature	
Name	Signature
Title	Date

Optional information:

Special Ship to Address

Comments

For Multiple End Users, please attach a supporting document with End User name, physical location, product type and quantity

Reference Number RS/19773001/168456

General Terms for all Products, Services and Subscriptions.

Physio-Control, Inc. ("Physio") accepts Buyer's order expressly conditioned on Buyer's assent to the terms set forth in this document. Buyer's order and acceptance of any portion of the goods, services or subscriptions shall confirm Buyer's acceptance of these terms. Unless specified otherwise herein, these terms constitute the complete agreement between the parties. Amendments to this document shall be in writing and no prior or subsequent acceptance by Seller of any purchase order, acknowledgment, or other document from Buyer specifying different and/or additional terms shall be effective unless signed by both parties.

Pricing. Prices do not include freight insurance, freight forwarding fees, taxes, duties, import or export permit fees, or any other similar charge of any kind applicable to the goods and services. Sales or use taxes on domestic (USA) deliveries will be invoiced in addition to the price of the goods and services unless Physio receives a copy of a valid exemption certificate prior to delivery. Discounts may not be combined with other special terms, discounts, and/or promotions.

Payment. Payment for goods and services shall be subject to approval of credit by Physio. Unless otherwise specified by Physio in writing, the entire payment of an invoice is due thirty (30) days after the invoice date for deliveries in the USA, and sight draft or acceptable (confirmed) irrevocable letter of credit is required for sales outside the USA.

Minimum Order Quantity. Physio reserves the right to charge a service fee for any order less than $200.00.

Patent Indemnity. Physio shall indemnify Buyer and hold it harmless from and against all demands, claims, damages, losses, and expenses, arising out of or resulting, from any action by a third party against Buyer that is based on any claim that the services infringe a United States patent, copyright, or trademark, or violate a trade secret or any other proprietary right of any person or entity. Physio's indemnification obligations hereunder will be subject to (i) receiving prompt written notice of the existence of any claim; (ii) being able to, at its option, control the defense and settlement of such claim (provided that, without obtaining the prior written consent of Buyer, Physio will enter into no settlement involving the admission of wrongdoing); and (iii) receiving full cooperation of Buyer in the defense of any claim.

Limitation of Interest. Through the purchase of Physio products, services, or subscriptions, Buyer does not acquire any interest in any tooling, drawings, design information, computer programming, patents or copyrighted or confidential information related to said products or services, and Buyer expressly agrees not to reverse engineer or decompile such products or related software and information.

Delays. Physio will not be liable for any loss or damage of any kind due to its failure to perform or delays in its performance resulting from an event beyond its reasonable control, including but not limited to, acts of God, labor disputes, the requirements of any governmental authority, war, civil unrest, terrorist acts, delays in manufacture, obtaining any required license or permit, and Physio inability to obtain goods from its usual sources.

Limited Warranty. Physio warrants its products and services in accordance with the terms of the limited warranties located at http://www.physio-control.com/Documents/. The remedies provided under such warranties shall be Buyer's sole and exclusive remedies. Physio makes no other warranties, express or implied, including, without limitation, **NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND IN NO EVENT SHALL PHYSIO BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL OR OTHER DAMAGES.**

Compliance with Confidentiality Laws. Both parties acknowledge their respective obligations to maintain the security and confidentiality of individually identifiable health information and agree to comply with applicable federal and state health information confidentiality laws.

Compliance with Law. The parties agree to comply with any and all laws, rules, regulations, licensing requirements or standards that are now or hereafter promulgated by any local, state, and federal governmental authority/agency or accrediting/administrative body that governs or applies to their respective duties and obligations hereunder.

Regulatory Requirement for Access to Information. In the event 42 USC § 1395x(v)(1)(I) is applicable, Physio shall make available to the Secretary of the United States Department of Health and Human Services, the Comptroller General of the United States General Accounting Office, or any of their duly authorized representatives, a copy of these terms, such books, documents and records as are necessary to certify the nature and extent of the costs of the products and services provided by Physio.

No Debarment. Physio represents and warrants that it and its directors, officers, and employees (i) are not excluded, debarred, or otherwise ineligible to participate in the Federal health care programs as defined in 42 USC § 1320a-7b(f); (ii) have not been convicted of a criminal offense related to the provision of healthcare items or services; and (iii) are not under investigation which may result in Physio being excluded from participation in such programs.

Choice of Law. The rights and obligations of Physio and Buyer related to the purchase and sale of products and services described in this document shall be governed by the laws of the state where Buyer is located. All costs and expenses incurred by the prevailing party related to enforcement of its rights under this document, including reasonable attorney's fees, shall be reimbursed by the other party.

Additional Terms for Purchase and Sale of Products.

In addition to the General Terms above, the following terms apply to all purchases of products from Physio:

Delivery. Unless otherwise specified by Physio in writing, delivery shall be FOB Physio point of shipment and title and risk of loss shall pass to Buyer at that point. Partial deliveries may be made and partial invoices shall be permitted and shall become due in accordance with the payment terms. In the absence of shipping instructions from Buyer, Physio will obtain transportation on Buyer's behalf and for Buyer's account. Delivery dates are approximate. Freight is pre-paid and added to Buyer's invoice. Products are subject to availability.

Inspections and Returns. Within 30 days of receipt of a shipment, Buyer shall notify Physio of any claim for product damage or nonconformity. Physio, at its sole option and discretion, may repair or replace a product to bring it into conformity. Return of any product shall be governed by the Returned Product Policy located at http://www.physio-control.com/Documents/. Payment of Physio's invoice is not contingent on immediate correction of nonconformities.

No Resale. Buyer agrees that products purchased hereunder will not be resold to third parties and will not be reshipped to any persons or places prohibited by the laws of the United States of America.

Additional Terms for Purchase and Sale of Service Plans.

In addition to the General Terms above, the following terms apply to all Physio Service Plans.

Service Plans. Physio shall provide services according to the applicable Service Plan purchased by Buyer and described at http://www.physio-control.com/ServicePrograms.aspx for the length of the subscription purchased and for the devices specified as covered by the Service Plan ("Covered Equipment").

Pricing. If the number or configuration of Covered Equipment changes during the Service Plan subscription, pricing shall be pro-rated accordingly. For Preventative Maintenance, Inspection Only, Comprehensive, and Repair & Inspect Service Plans, Buyer is responsible to pay for preventative maintenance and inspections that have been performed since the last anniversary of the subscription start date and such services shall not be pro-rated.

Device Inspection Before Acceptance. All devices that are not covered under Physio's Limited Warranty or a current Service Plan must be inspected and repaired (if necessary) to meet specifications at then-current list prices prior to being covered under a Service Plan.

Unavailability of Covered Equipment. If Covered Equipment is not made available at a scheduled service visit, Buyer is responsible to reschedule with the Physio Service Technician, or ship-in the Equipment to a Physio service depot. Physio reserves the right to charge Buyer a surcharge for a return visit. Surcharges will be based on then-current Physio list price of desired services, less 10% for labor and 15% for parts, plus applicable travel costs. The return visit surcharge will be in addition to the subscription price of the Service Plan. To avoid the surcharge, Buyer may ship devices to a Physio service depot. Buyer shall be responsible for round-trip freight for ship-in service.

Unscheduled or Uncovered Services. If Buyer requests services to be performed on Covered Equipment which are not covered by a Service Plan, or are outside of designated Services frequency or hours, Physio-Control will charge Buyer for such services at 10% off Physio-Control's standard rates (including overtime, if appropriate) and applicable travel charges. Repair parts required for such repairs will be made available at 15% off the then-current list price.

Loaners. If Covered Equipment must be removed from service to complete repairs, Physio will provide Buyer with a loaner device, if one is available. Buyer assumes complete responsibility for the loaner and shall return the loaner to Physio in the same condition as received, normal wear and tear exempted, upon the earlier of the return of the removed Covered Equipment or Physio's request.

Cancellation. Buyer may cancel a Service Plan upon sixty (60) days' written notice to Physio. In the event of such cancellation, Buyer shall be responsible for the portion of the designated price which corresponds to the portion of the Service Plan subscription prior to the effective date of termination and the list-price cost of any preventative maintenance, inspections, or repairs rendered after the last anniversary date of the subscription start date.

No Solicitation. During the Service Plan subscription and for one (1) year following its expiration Buyer agrees to not to actively and intentionally solicit anyone who is employed by Physio to provide services such as those described in the Service Plan.

Additional Terms for Purchase and Sale of Software Licenses and Software-as-Service.
In addition to the General Terms above, software and software-as-service is licensed (not sold) pursuant to the following terms:
Licenses. Upon full payment, Physio will grant to Buyer the licenses to the software and/or software-as-service ordered by Buyer according to the applicable End User License Agreement or Software-As-Service Agreement. The duration of each license is the term of the subscription purchased by Buyer.

Additional Terms Regarding Wireless Enabled Devices.
In addition to the General Terms above, the data services provided by a third party are pursuant to the following terms:
Payments. Payments to Physio are non-refundable as they are incorporating into the pricing of the connected devices.
Geolocation. Buyer is responsible for maintaining the actual location of the devices within their facilities, property or buildings.
Not Wireless Provider. Physio has contracted with an outside data services provider for the provision of services on behalf of Buyer. Physio is not a telecommunications services company nor does it possess any telecommunications personal property.
Security. Buyer has the sole responsibility for ensuring the security of its network and data. Buyer will take reasonable measures to protect against unauthorized access.
No Guarantee. **PHYSIO DOES NOT GUARANTEE SECURITY, UNINTERRUPTED DATA SERVICES, THE ACCURACY OF GEOLOCATION SERVICES, NETWORK TRANSMISSION CAPACITY, COVERAGE OR THE INTEGRITY OF THE DATA TRANSMITTED**. Physio is not responsible for any consequential damages caused in any way by Buyer's hardware, software, network or other Buyer responsibilities.

Additional Terms for Purchase and Sale of Software Implementation Services.
In addition to the General Terms above, the following terms apply to all purchases of Software Implementation Services from Physio:
Physio's Duties. Physio agrees to make commercially reasonable efforts to: (i) commence implementation of all applicable software in accordance with a mutually agreed upon schedule; (ii) diligently perform the implementation process in a professional and workmanlike manner; (iii) provide the training associated with purchased subscriptions, components and/or software; and (iv) provide access to technical support.
Buyer's Duties. Buyer agrees to make commercially reasonable efforts to: (i) cooperate with and reasonably assist Physio in the implementation process; (ii) have all equipment, connections and facilities prepared and ready for implementation in accordance with the mutually agreed upon schedule.
Completion of Implementation. Implementation is complete when Buyer is able to transmit/receive data through the implemented software.
Fees and Billing. Upon implementation, Physio shall provide Buyer with an invoice setting forth the amount due. If implementation is delayed by more than six (6) months, solely due to Buyer's delay, Physio reserves the right to invoice prior to implementation. Payment is due thirty (30) days after receipt of invoice.
Confidential Information. In the course of performing Implementation Services, each party may receive, be exposed to or acquire confidential and/or proprietary information of the other party ("Confidential Information"). All Confidential Information disclosed by a party will bear a legend "Confidential," "Proprietary" or words of similar import. All Confidential Information disclosed by a party in any manner other than in writing will be preceded by an oral statement indicating that the information is Confidential Information. Each party agrees to take reasonable steps to protect the other party's Confidential Information, including not disclosing it to third parties except as otherwise permitted. The restrictions and obligations upon the parties concerning confidentiality shall not apply to any portion of the Confidential Information of either party which: (a) is or becomes publicly available to the receiving party through no fault of such receiving party; or (b) can be reasonably demonstrated to have been known to or hereafter developed by the receiving party independently of any disclosure of Confidential Information by the disclosing party; or (c) is disclosed to the receiving party by a third party who, to the best of the receiving party's knowledge, is lawfully in possession of the same and has the right to make such disclosure.
Warranties. Physio represents and warrants that it will provide the Services in a professional and workmanlike manner consistent with good industry standards and practices. Physio warrants that the Service will perform in all material respects for a period of three (3) months after implementation. As Buyer's sole and exclusive remedy and Physio's entire liability for any breach of the foregoing warranty, Physio will re-perform the Services, or, if Physio is unable to do so, return the fees paid to Physio for such deficient Services. Except as specifically set forth herein, Physio expressly disclaims any and all warranties with respect to the services, **INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT**. Physio does not warrant that the services will be uninterrupted or error-free.
Exclusions and Limitations of Liability. In no event shall Physio be liable to Buyer or other employee, contractor or agent for any indirect, incidental, special, or consequential damages arising in connection with this agreement (whether in warranty, contract or tort, including negligence, and even if Physio has been advised of the possibility thereof), including without limitation medical expenses, loss of revenue or profits; or damages resulting from interruptions in or unavailability of telecommunications or Internet connections to the service, or from the impact of the services on any Buyer system.
PHYSIO'S TOTAL LIABILITY TO BUYER FOR DAMAGES WITH RESPECT TO THE SERVICES PROVIDED UNDER THIS AGREEMENT AND OTHERWISE ARISING UNDER THIS AGREEMENT REGARDLESS OF THE BASIS UNDER WHICH BUYER IS ENTITLED TO CLAIM DAMAGES (INCLUDING BREACH, NEGLIGENCE, OR ANY OTHER CONTRACT OR TORT CLAIM) SHALL NOT EXCEED THE FEES DUE HEREUNDER. EACH PARTY RECOGNIZES AND AGREES THAT THE WARRANTY DISCLAIMERS AND LIABILITY AND REMEDY LIMITATIONS IN THIS AGREEMENT ARE MATERIAL BARGAINED-FOR BASES OF THIS AGREEMENT AND THAT THEY HAVE BEEN TAKEN INTO ACCOUNT AND REFLECTED IN DETERMINING THE CONSIDERATION TO BE GIVEN BY EACH PARTY UNDER THIS AGREEMENT AND IN THE DECISION BY EACH PARTY TO ENTER INTO THIS AGREEMENT.

Physio-Control, Inc. Returned Product Policy

If Customer desires to return a purchased product, Customer must call its local Physio-Control representative or the Physio-Control regional sales office for information on credit or replacement of any purchased and non-expired product. A Returned Material Authorization (RMA) number will be provided and must be clearly identified on the carton of any returned product. Customer must return the product to Physio-Control in its original packaging, unopened, and undamaged, except for product that was received in a damaged condition or as otherwise authorized by Physio-Control, which product may be returned in its existing condition. Physio-Control will not accept the return of a non-defective and conforming product if Customer breaks the security seal on the product.

Physio-Control will provide an RMA and accept the return of any product under any of the following circumstances:

a) Physio-Control shipped the product in error;

b) Customer received the product after the product's expiration date;

c) Customer received the product in a damaged condition;

d) The product is recalled and must be removed from the market; or

e) Physio-Control specifically authorizes the return of the product (a 15% restocking fee may apply).

Product must be returned within 30 working days from the date the Customer receives the product or within 30 working days from the date the Customer receives notice of recall, if applicable. Upon receipt of a properly returned product, Physio-Control will apply a full credit to Customer's account or provide replacement. Customer is advised that product returned without an RMA number, or not otherwise authorized, will not be accepted and will be returned to Customer at Customer's expense.

For further information, please contact Physio-Control at 800.442.1142 or visit our website at www.physio-control.com.

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 01/21/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

Holder Identifier :

PRODUCER	CONTACT NAME:	
Aon Risk Services Central, Inc. Grand Rapids MI Office 50 Louis Street NW Suite 200 Grand Rapids MI 49503 USA	PHONE (A/C. No. Ext): (616) 456-5366	FAX (A/C. No.): (616) 456-7451
	E-MAIL ADDRESS:	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
Stryker Corporation & Subsidiaries 2825 Airview Boulevard Kalamazoo MI 49002 USA	INSURER A: Old Republic Insurance Company	24147
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 570070020358 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** CLAIMS-MADE / X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY / PRO-JECT / LOC OTHER:			MWZY 312747	02/01/2018	02/01/2019	EACH OCCURRENCE	$5,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$500,000
							MED EXP (Any one person)	Excluded
							PERSONAL & ADV INJURY	$2,000,000
							GENERAL AGGREGATE	$5,000,000
							PRODUCTS - COMP/OP AGG	$5,000,000
A	**AUTOMOBILE LIABILITY** X ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY X Phys-Dmge-Self Insd			MWTB 312744	02/01/2018	02/01/2019	COMBINED SINGLE LIMIT (Ea accident)	$2,000,000
							BODILY INJURY (Per person)	
							BODILY INJURY (Per accident)	
							PROPERTY DAMAGE (Per accident)	
	UMBRELLA LIAB / OCCUR **EXCESS LIAB** / CLAIMS-MADE DED / RETENTION						EACH OCCURRENCE	
							AGGREGATE	
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N: N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		MWC 312743 00 AOS	02/01/2018	02/01/2019	X PER STATUTE / OTH-ER	
A				MWXS 312745 Excess wc - MI	02/01/2018	02/01/2019	E.L. EACH ACCIDENT	$2,000,000
							E.L. DISEASE-EA EMPLOYEE	$2,000,000
							E.L. DISEASE-POLICY LIMIT	$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Physio-Control, Inc. and its affiliated companies are named under the referenced policy(s).

Evidence of Coverage

Certificate No : 570070020358

CERTIFICATE HOLDER

Physio-Control International, Inc.;
Physio-Control, Inc.
11811 Willows Road NE
PO Box 97006
Redmond WA 98073 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Aon Risk Services Central Inc.

Section 3

Product Information

LIFEPAK® 15 Monitor/Defibrillator

stryker

By The Numbers

Empowering great teams with a better device

More than **35** enhancements over prior generation device that improve the performance of lifesaving systems in **5** key ways:

- Better CPR quality
- Better airway management
- Improved STEMI care
- Enhanced durability
- Greater operational effectiveness

Designed to be LIFEPAK TOUGH™

Rigorous testing ensures the LIFEPAK 15 withstands the harshest environments:

- Dropped on **six** sides onto a steel plate from **30**" high, without bags
- **2", 1.2 lb.** steel ball dropped onto enclosure, connectors, keypads, and display
- **5 lb.** steel impact weight dropped to impact each side of therapy connector
- **IP44**, protection from objects **1mm** in diameter or larger
- Cable impulse pull testing – **90** impulses at up to **8.8 ft.-lbs.** on therapy and ECG cables

Smart power management

Two battery system provides up to **six hours** of uninterrupted monitoring.

Legacy of Lifesaving

9th generation LIFEPAK device designed for EMS. Physio-Control has been making lifesaving tools for lifesaving teams for **six decades**.

Powerful therapy

The highest escalating energy available, up to **360J** biphasic, for difficult-to-defibrillate patients.

Proven CPR guidance

Metronome and voice prompts—shown to guide responders to perform compressions at **100/minute** and avoid over-ventilation.[3]

Advanced monitoring capabilities

The **1st** monitor/defibrillator to incorporate Masimo rainbow SET® technology to noninvasively monitor SpCO and SpMet.

Confident, reliable therapy delivery

Defibrillation therapy circuit is proven on over **150,000** LIFEPAK devices; **tens of thousands** of lives saved.

Trusted, Proven 12-lead algorithm

The Glasgow ECG Analysis Program has almost **40 years** of history, over **100** published articles, and is widely considered to be one of the top ECG interpretive algorithms in the world.

- Includes interpretive statements for all ages, down to **one day old**[1]

The only commercially available monitor/defibrillator that continuously monitors **all 12 leads** in the background and alerts to changes using ST-Segment trend monitoring.

Easy to use

More than **20** dedicated, clearly labeled buttons put all key functionality at only **one button-push**; no complicated soft keys or submenus

Best full-glare view in the industry

Switch to high-contrast SunVue™ mode with only **one button-push**.

Front-facing printer

100mm printer is **25% larger** than competitive device.[4]

Maximum screen visibility

59% larger screen than competitive device;[4] **8.4**" diagonal screen, anti-reflective display designed to be read from across the ambulance, on the scene, or across the hospital room.

Reliable, rapid data transmission

Cloud-connected through the LIFENET® System for **4** key reasons:

- Transmit emergent patient data to the hospital
- Rapid export of monitor data to cloud-connected ePCR platforms
- Export CPR quality data to CODE-STAT™ software for QA/QI and feedback to care teams
- Export device health and readiness data to the LIFENET Asset Management System Simple **3-step** transmission process; Over **1,000,000** transmissions monthly via the LIFENET System, with **99.99%** uptime.[2]

Makes lifesaving easier

References:

1. Macfarlane PW, Coleman EN, Devine B, et al. A new 12-lead pediatric ECG interpretation program. J Electrocardiol. 1990;23(suppl):76-81
2. Annual uptime as of October 2017
3. Kern KB, Stickney RE, Gallison L, Smith R. Metronome improves compression and ventilation rates during CPR on a manikin in a randomized trial. *Resuscitation*. 2010;81:206-210
4. Physio-Control internal observation (Jan 2015)

All claims valid as of January 2018.

Physio-Control is now part of Stryker.

For further information, please contact Physio-Control at 800.442.1142 (U.S.), 800.895.5896 (Canada) or visit our website at www.physio-control.com

Physio-Control Headquarters
11811 Willows Road NE
Redmond, WA 98052
www.physio-control.com

Customer Support
P. O. Box 97006
Redmond, WA 98073
Toll free 800 442 1142
Fax 800 426 8049

Physio-Control Canada
Physio-Control Canada Sales, Ltd.
45 Innovation Drive
Hamilton, ON
L9H 7L8
Canada
Toll free 800 895 5896
Fax 866 430 6115

Physio-Control, Inc., 11811 Willows Road NE, Redmond, WA 98052 USA

GDR 3335491_A

Evolution of the device

From its initial launch to its latest release in 2015, the LIFEPAK 15 monitor/defibrillator has evolved to add new features and functionality with the goal of empowering great teams with a better device. Here are some highlights of what has changed on the LIFEPAK 15 monitor/defibrillator over time.

Internal architecture refinements

Updated internal components have contributed to a 1.4lb (7%) weight reduction while not sacrificing the LIFEPAK TOUGH™ reliability standards at the core of the device.

Enhanced data software

Capture all displayed waveforms for review in CODE-STAT™ data review software.

Nellcor™ pulse oximetry compatibility

Allows for the use of Nellcor™ SpO_2 sensors to help with standardization.

LIFENET® Asset integration

Centralized reporting of device health, battery status, device usage, and configuration.

Continuous temperature monitoring

Continuous monitoring and trending of body temperature using multiple probe types, including esophageal/rectal, Foley catheter, and skin probes.

AC/DC Power

Continuous power and battery charging with AC or DC power adapter and optional extension cable with breakaway connector to allow for rapid movement.

Enhanced AED analysis algorithm

Improved accuracy and shock decisions for patients with implantable devices.

Capture impedance from any lead

Real-time capture of impedance for post-event review of CPR statistics, regardless of displayed ECG lead.

Keypad improvements

Enhanced tactile feedback and improvements to make the keypad even more durable.

STJ values on 12-lead printout

Helps identify changes in ST elevation or depression without the need to measure or count blocks.

Empowering great teams with a better device

Physio-Control is now part of Stryker.

For further information, please contact Physio-Control at 800.442.1142 (U.S.), 800.895.5896 (Canada) or visit our website at www.physio-control.com

Physio-Control Headquarters
11811 Willows Road NE
Redmond, WA 98052
www.physio-control.com

Customer Support
P. O. Box 97006
Redmond, WA 98073
Toll free 800 442 1142
Fax 800 426 8049

Physio-Control Canada
Physio-Control Canada Sales, Ltd.
45 Innovation Drive
Hamilton, ON
L9H 7L8
Canada
Toll free 800 895 5896
Fax 866 430 6115

Physio-Control, Inc., 11811 Willows Road NE, Redmond, WA 98052 USA

GDR 3335511_B

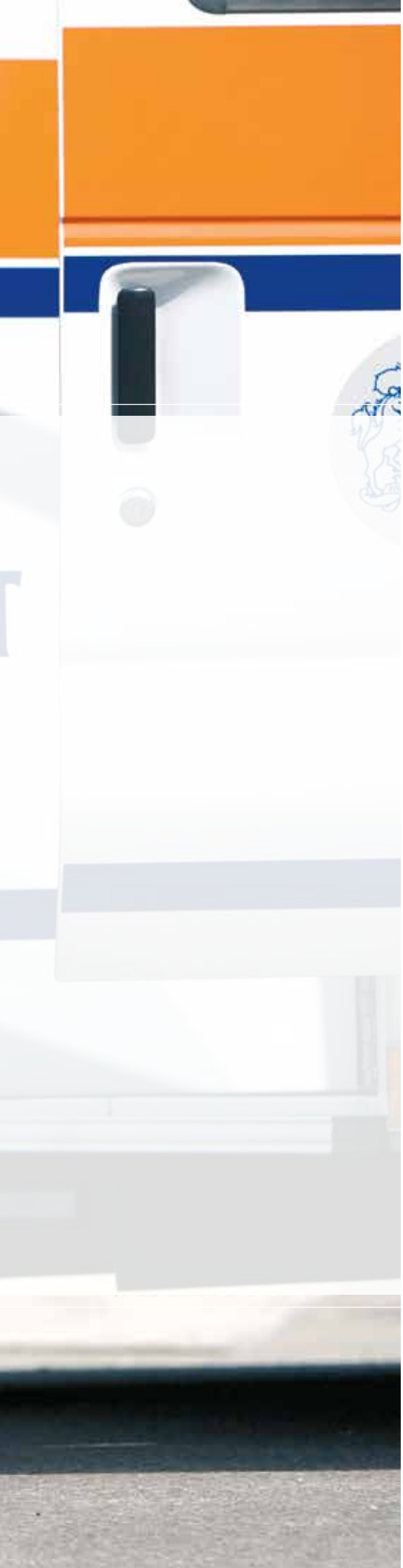
PHYSIO CONTROL

PRODUCT BROCHURE

LIFEPAK® 15 MONITOR/DEFIBRILLATOR

For Emergency Medical Services

When you respond to emergencies, you need the most advanced monitor/defibrillator that sets the standard in innovation, operations and toughness.



The LIFEPAK 15 monitor/defibrillator delivers.

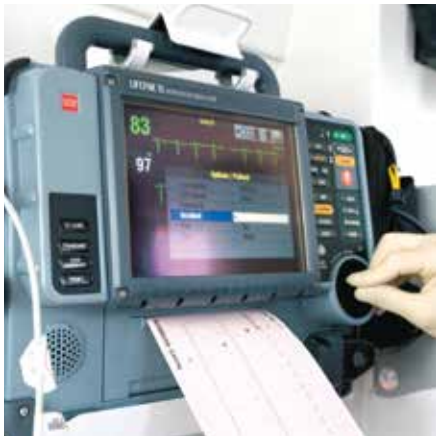
Physio-Control defibrillators have set the standard for six decades, and the latest version of the LIFEPAK® 15 monitor/defibrillator raises the bar. As our most advanced emergency response monitor/defibrillator, the LIFEPAK 15 device balances sophisticated clinical technologies and supreme ease of use in a device that's tough enough to stand up to your most challenging environments. Evolving from its original platform, the *15* features temperature monitoring and external power to complement 360J of energy and 12-lead ECG transmission capability. And that means your team can be even more effective.

A LIFEPAK device never stands on its own—and the LIFEPAK 15 monitor is no different. Physio-Control is committed to providing innovative solutions for emergency response care, from first responders to throughout the hospital.

Our products have helped save tens of thousands of lives. We're proud to continue this work with the features in the LIFEPAK 15 monitor/defibrillator.

The standard in clinical innovation.

The pioneer in portable defibrillation and monitoring technology, Physio-Control is committed to creating technologies and devices that change the way you provide emergency care. You can see the results in the latest version of the LIFEPAK 15 monitor/defibrillator, which sets the standard in innovation—yet again.



Advanced monitoring parameters

With more monitoring capabilities than any other monitor/defibrillator, the *15* gives you $EtCO_2$ with continuous waveform capture. Masimo® Rainbow® technology helps you detect hard-to-diagnose conditions and improve patient care with noninvasive monitoring of carbon monoxide, SpO_2 and methemoglobin. In addition, the *15* offers temperature monitoring—and like other data, you can transmit it to other systems, trend it, or display for post-event review in CODE-STAT™ data review software.

Advanced support for treating cardiac patients

The *15* continuously monitors all 12 leads in the background and alerts you to changes using the ST-Segment trend monitoring feature, after acquiring the initial 12-lead. Additionally, STJ values are included on the 12-lead printout to help you identify changes. The *15* also works seamlessly with the web-based LIFENET System 5.0, so you can automatically share critical patient data with multiple patient care teams.

Full energy up to 360 joules, for every patient who needs it

The LIFEPAK 15 monitor/defibrillator features 360J biphasic technology, which gives you the option of escalating your energy dose up to 360J for difficult-to-defibrillate patients. Why is this necessary? Recent studies have shown that refibrillation is common among VF cardiac arrest patients and that defibrillation of recurring episodes of VF is increasingly difficult. A randomized controlled clinical trial shows the rate of VF termination was higher with an escalating higher energy regimen of 200J and over.[1]

Proven CPR guidance and post event review

The CPR Metronome in the LIFEPAK 15 monitor uses audible prompts to guide you without distracting vocal critique. A metronome has been a feature that has been demonstrated to help professionals perform compressions and ventilations within the recommended range of the 2010 AHA Guidelines. Post-event review of CPR data and delivering feedback to the team has been shown to be effective in improving CPR quality in both hospital and out-of-hospital.[2,3,4] And by transmitting code data directly to CODE-STAT Data Review software, EMS personnel can review CPR statistics and provide training and feedback where it is most needed.

Post-event review of CPR data and delivering feedback to the team has been shown to be effective in improving CPR quality in both hospital and out-of-hospital.[2,3,4]

LIFEPAK® 15 MONITOR/DEFIBRILLATOR


ON
ENERGY SELECT
CHARGE
PACER
RATE
CPR
ANALYZE
LEAD
200J
SpO2

The standard in operational effectiveness.

Flexible, connected and easy to use, the LIFEPAK 15 monitor/defibrillator was designed based on the feedback and needs specific to working in the field.

Dual-mode LCD screen with SunVue™ display

Switch from full-color to high-contrast SunVue mode with a single touch for the best full-glare view in the industry. A large screen (8.4 inches diagonally) and full-color display provide maximum viewability from all angles.

Flexible power options

Choose between external worldwide AC or DC power, or use the latest Lithium-ion dual battery technology for up to six hours of power. The LIFEPAK 15 monitor's two-battery system requires no maintenance or conditioning, and allows you to charge batteries in the device. In addition, you can track the status and service life of your batteries using LIFENET® Asset, part of the LIFENET System data network.

Data connectivity

The *15* collects code summaries and equipment status data along with critical clinical information as you treat patients. Using LIFENET Connect, part of the LIFENET System data network, the code summaries can be sent directly to your quality improvement team for review with CODE-STAT Data Review Software. Your equipment manager can also view equipment status on the LIFENET System 5.0 using LIFENET Asset and alert you to any potential issues.

Code summaries can be sent directly to your quality improvement team for review with CODE-STAT Data Review Software.

Upgradable platform

The *15* platform is flexible enough to adapt to evolving protocols and new guidelines, and can be upgraded as you're ready to deliver new capabilities. With more processing power and speed, the *15* is designed to grow as your needs change, helping you avoid costly premature replacements.

Attention to detail

The LIFEPAK 15 monitor is designed based on field feedback to make it a more effective tool. The *15* has a larger handle for easier handoffs, an easy to clean keypad, and a common interface to the LIFEPAK 12 defibrillator/monitor that helps reduce training.

The standard in toughness.

We believe LIFEPAK equipment should live up to the highest expectations of those working in the harshest settings. The *15* is LIFEPAK TOUGH, with improved ruggedness and durability you can rely on.

Works when dropped, kicked, soaked or dirty

The LIFEPAK 15 monitor/defibrillator passes 30-inch drop tests, which is equal to falling off a cot or dropping it in transit. And with an IP44 rating, it doesn't matter how wet or dirty it gets, so you can keep working in steady wind, rain and other harsh environments.

Toughened inside and out

We heard from emergency response teams that they wanted a tougher device—so we added a shock-absorbing handle, a double-layer screen that can take a beating from doorknobs and cot handles, and redesigned cable connections for confident monitoring and therapy delivery.

Unmatched field service

The unit's self-checking feature alerts our service team if the device needs attention. Our on site maintenance and repair, access to original manufacturer parts, and highly trained, experienced service representatives give you the peace of mind that your LIFEPAK 15 monitor will be ready when you need it.*

Data connectivity


LIFEPAK TOUGH™


Dual-mode LCD screen with SunVue display

** A variety of customized service options are available.*

LIFEPAK® 15 MONITOR/DEFIBRILLATOR

The latest Lithium-ion battery technology and dual battery system allows for nearly six hour run time, automatic switching between external power and batteries, and an approximate two-year replacement cycle.

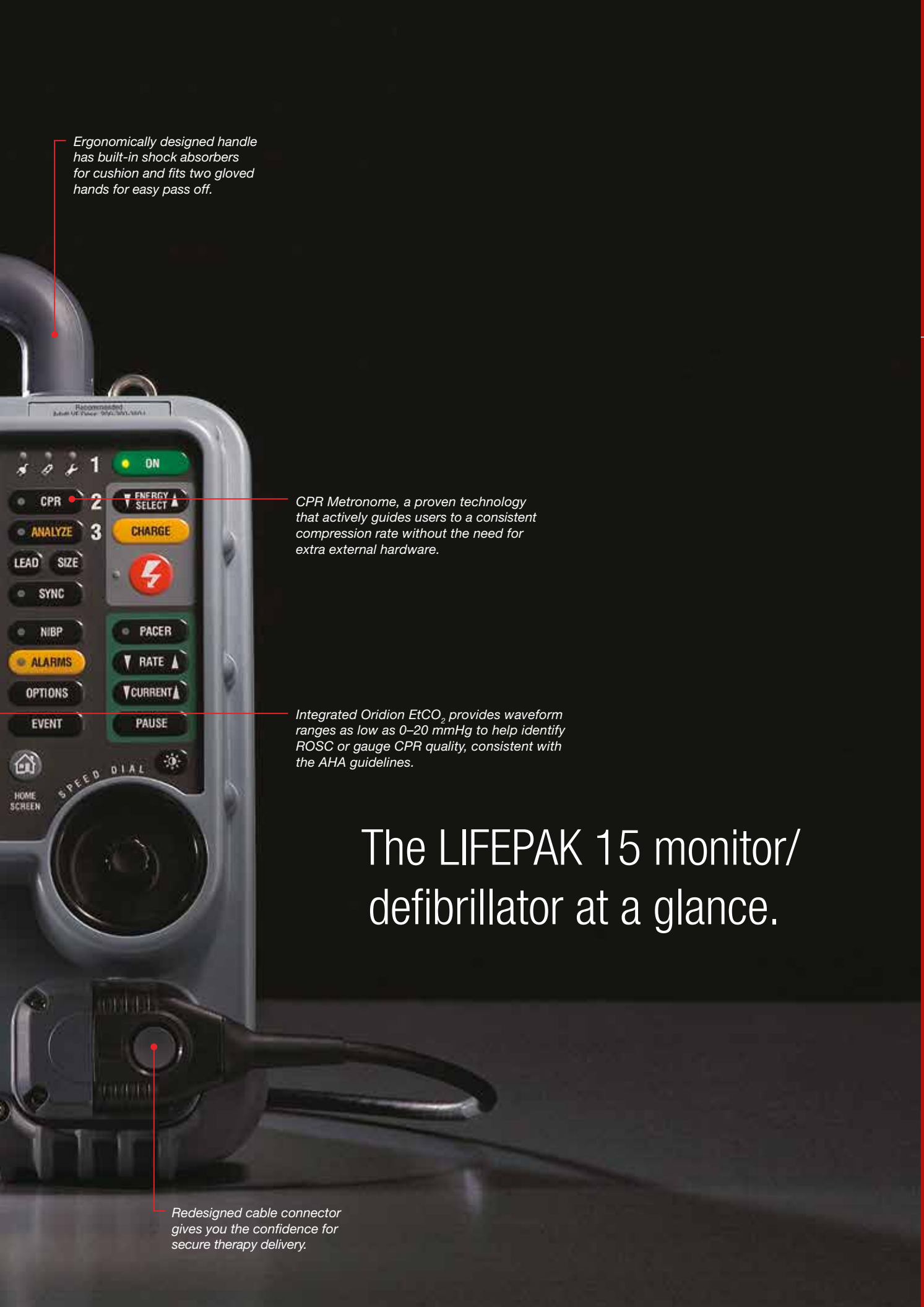
Easy one-touch Bluetooth® data transmission.

12-lead ECG transmissions via the LIFENET System and ST segment trend monitoring make the LIFEPAK 15 device a vital part of decreasing EMS-to-Balloon (E2B) response times.

Integrated Carbon Monoxide and Methemoglobin monitoring.

On-screen temperature display in either Celsius or Fahrenheit.

Large screen for better visibility and easy monitoring and one touch to switch from LCD color view to SunVue mode for best viewing in sunlight.



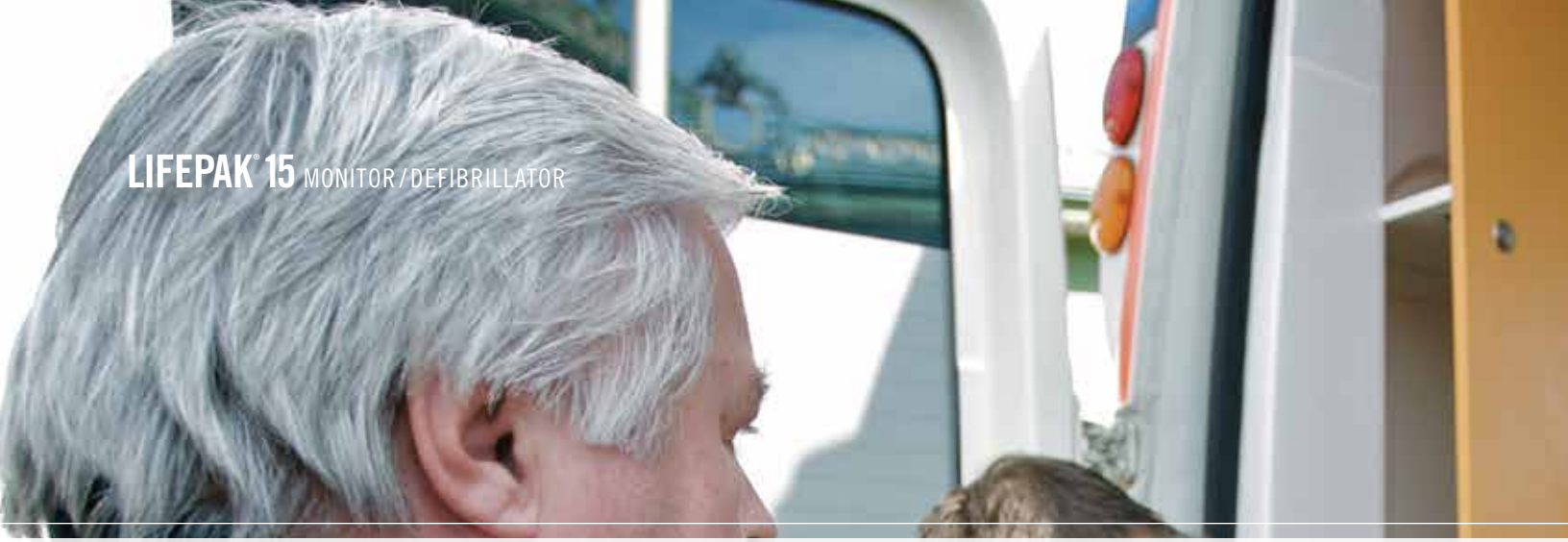
Ergonomically designed handle has built-in shock absorbers for cushion and fits two gloved hands for easy pass off.

CPR Metronome, a proven technology that actively guides users to a consistent compression rate without the need for extra external hardware.

Integrated Oridion $EtCO_2$ provides waveform ranges as low as 0–20 mmHg to help identify ROSC or gauge CPR quality, consistent with the AHA guidelines.

The LIFEPAK 15 monitor/ defibrillator at a glance.

Redesigned cable connector gives you the confidence for secure therapy delivery.



For six decades, Physio-Control has been developing technologies and designing devices that are legendary among first response professionals, clinical care providers, and the community.

A legacy of trust.

Since we were founded in 1955, Physio-Control has been giving medical professionals around the world legendary quality and constant innovation. Our LIFEPAK devices have been carried to the top of Mount Everest. They've been launched into orbit on the International Space Station. And you'll find more than half a million units in use today on fire rescue rigs, ambulances, and hospital crash carts worldwide.

We are inspired and informed by the rescuers who choose our products to save lives. The knowledge gained from working with some of the world's largest EMS organizations helps us constantly improve clinical standards and durability.

Today, we continue our legacy of innovation with leading technologies that improve patient care. Our 360J biphasic technology gives patients the best chance at survival. Our secure, web-based flow of ECG data helps improve STEMI patient outcomes. And our carbon monoxide monitoring helps catch the number one cause of poisoning deaths.

From the streets to the emergency room to the administrative office, we offer a powerful suite of solutions that range from code response to quality control analysis. And even as we bring ground-breaking products to the market, some things don't change. As always, when you choose our products, you don't just get a device. You also get the most comprehensive warranty in the business, industry-leading technical service, and a partner with six decades of experience in emergency care.

For more information about the LIFEPAK 15 monitor/defibrillator—and how it can help you do what you do best—please contact your local Physio-Control representative or visit ***www.physio-control.com****.*

Physio-Control Family of Products and Services

Defibrillators/Monitors

LIFEPAK CR® Plus Automated External Defibrillator (AED)

Featuring the same advanced technology trusted by emergency medical professionals—yet simple to use—the fully automatic LIFEPAK CR Plus AED is designed specifically for the first person to respond to a victim of sudden cardiac arrest (SCA).

LIFEPAK® 1000 Defibrillator

The LIFEPAK 1000 Defibrillator is a powerful and compact device designed to treat cardiac arrest patients and provide continuous cardiac monitoring capabilities. Built-in flexibility allows the *1000* to be programmed for use by first responders or professionals and enables care providers to change protocols as standards of care evolve.

LIFEPAK® 15 Monitor/Defibrillator

The LIFEPAK 15 monitor/defibrillator is the standard in emergency care for ALS teams who want the most clinically innovative, operationally effective and LIFEPAK TOUGH™ device available today. The *15* offers sophisticated clinical technologies with a rich array of features—like the most powerful escalating energy available (up to 360J), advanced monitoring parameters and a completely upgradable platform.

LIFEPAK® 20e Defibrillator/Monitor with CodeManagement Module™

Clinically advanced and packed with power, the LIFEPAK 20e defibrillator/monitor is highly intuitive for first responders, and also skillfully combines AED function with manual capability so that ACLS-trained clinicians can quickly and easily deliver advanced therapeutic care. The CodeManagement Module adds waveform capnography and wireless connectivity to enhance your hospital's ability to effectively manage resuscitations from preparedness through review.

CPR Assistance

LUCAS® 2 Chest Compression System

Designed to provide effective, consistent and uninterrupted compressions according to AHA Guidelines, LUCAS can be used on adult patients in out-of-hospital and hospital settings.

TrueCPR™ Coaching Device

TrueCPR helps your team optimize their manual CPR performance using simple real-time and post-event feedback on the most critical resuscitation parameters. It accurately measures compression depth through proprietary Triaxial Field Induction technology.

Data Solutions

LIFENET® System

The LIFENET System provides EMS and hospital care teams with reliable, quick access to clinical information through a secure, web-based platform, helping to improve patient care, flow and operational efficiency.

CODE-STAT™ Data Review Software

CODE-STAT data review software is a retrospective analysis tool that provides easy access to data, reports and post-event review.

HealthEMS®

HealthEMS is a remote-hosted field data collection, management and reporting software solution which is proven to help Fire and EMS providers improve patient care and financial performance. HealthEMS creates a two-way information flow which dramatically improves the accuracy and timeliness of information needed to support billing and clinical decision-making.

PulsePoint

PulsePoint Respond alerts CPR-trained bystanders about nearby sudden cardiac arrests in a public area. The app guides the responder to the public location of the incident using a map while also identifying nearby AEDs. Because the PulsePoint solution is integrated into the local dispatch center, alerts are only sent after 911 has been notified.

PulsePoint AED is an app designed to build a comprehensive registry of AEDs available for use during cardiac emergencies. AED submissions are verified by the local agency and then become available within the Respond app.

Support

Physio-Control Service

With a service plan from Physio-Control, you are free to focus on your mission while relying on us to help to ensure the integrity of your lifesaving tools. From emergency repairs to software updates to preventive maintenance, we respond to every service call with speed and expertise so you have the peace of mind to do your job with confidence.

LIFEPAK® 15 MONITOR/DEFIBRILLATOR


3

SPECIFICATIONS

GENERAL

The LIFEPAK 15 monitor/defibrillator has six main operating modes:

AED Mode: for automated ECG analysis and a prompted treatment protocol for patients in cardiac arrest.

Manual Mode: for performing manual defibrillation, synchronized cardioversion, noninvasive pacing, and ECG and vital sign monitoring.

Archive Mode: for accessing stored patient information.

Setup Mode: for changing default settings of the operating functions.

Service Mode: for authorized personnel to perform diagnostic tests and calibrations.

Demo Mode: for simulated waveforms and trend graphs for demonstration purposes.

PHYSICAL CHARACTERISTICS

Weight:

Basic monitor/defibrillator with new roll paper and two batteries installed: 7.9 kg (17.5 lb)

Fully featured monitor/defibrillator with new roll paper and two batteries installed: 8.4 kg (18.5 lb)

Lithium-ion battery: ≤0.6kg (1.3lb)

Accessory Bags and Shoulder Strap: 1.77 kg (3.9 lb)

Standard (hard) Paddles: 0.95 kg (2.1 lb)

Height: 31.7 cm (12.5 in)

Width: 40.1 cm (15.8 in)

Depth: 23.1 cm (9.1 in)

DISPLAY

Size (active viewing area): 212 mm (8.4 in) diagonal; 171 mm (6.7 in) wide x 128 mm (5.0 in) high

Resolution: display type 640 dot x 480 dot color backlit LCD

User Selectable Display Mode: full color or SunVue™ display high contrast

Display: a minimum of 5 seconds of ECG and alphanumerics for values, device instructions, or prompts

Display: up to three waveforms

Waveform Display Sweep Speed: 25 mm/sec for ECG, SpO_2, IP, and 12.5 mm/sec for CO_2

DATA MANAGEMENT

The device captures and stores patient data, events (including waveforms and annotations), and continuous waveform and patient impedance records in internal memory.

The user can select and print reports, and transfer the stored information via supported communication methods.

Report Types:

- Three format types of CODE SUMMARY™ critical event record: short, medium, and long
- 12-lead ECG with STEMI statements
- Continuous Waveform (transfer only)
- Trend Summary
- Vital Sign Summary
- Snapshot

Memory Capacity: Total capacity is 360 minutes of continuous ECG, 90 minutes of continuous data from all channels, or 400 single waveform events.

Maximum memory capacity for a single patient includes up to 200 single waveform reports and 90 minutes of continuous ECG.

COMMUNICATIONS

The device is capable of transferring data records by wired or wireless connection. This device complies with Part 15 of the FCC rules, and its operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Serial Port RS232 communication + 12V available

Limited to devices drawing maximum 0.5 A current

Bluetooth® technology provides short-range wireless communication with other Bluetooth-enabled devices

MONITOR

ECG

ECG is monitored via several cable arrangements:

A 3-wire cable is used for 3-lead ECG monitoring.

A 5-wire cable is used for 7-lead ECG monitoring.

A 10-wire cable is used for 12-lead ECG acquisition. When the chest electrodes are removed, the 10-wire cable functions as a 4-wire cable.

Standard paddles or QUIK-COMBO pacing/defibrillation/ECG electrodes are used for paddles lead monitoring.

Frequency Response:

Monitor: 0.5 to 40 Hz or 1 to 30 Hz

Paddles: 2.5 to 30 Hz

12-lead ECG diagnostic: 0.05 to 150 Hz

Lead Selection:

Leads I, II, III, (3-wire ECG cable)

Leads I, II, III, AVR, AVL, and AVF acquired simultaneously (4-wire ECG cable)

Leads I, II, III, AVR, AVL, AVF, and C lead acquired simultaneously (5-wire ECG cable)

Leads I, II, III, AVR, AVL, AVF, V1,V2,V3,V4,V5, and V6 acquired simultaneously (10-wire ECG cable)

ECG size: 4, 3, 2.5, 2, 1.5, 1, 0.5, 0.25 cm/mV (fixed at 1 cm/mV for 12-lead)

Heart Rate Display:

20–300 bpm digital display

Accuracy: ±4% or ±3 bpm, whichever is greater

QRS Detection Range Duration: 40 to 120 msec

Amplitude: 0.5 to 5.0 m

Common Mode Rejection (CMRR): ECG Leads: 90 dB at 50/60 Hz

SpO_2/SpCO/SpMet

Sensors:

MASIMO® sensors including RAINBOW® sensors

NELLCOR® sensors when used with the MASIMO RED™ MNC adapter

SpO_2

Displayed Saturation Range: "<50" for levels below 50%; 50 to 100%

Saturation Accuracy: 70–100% (0–69% unspecified)

Adults/Pediatrics:
±2 digits (during no motion conditions)
±3 digits (during motion conditions)

Dynamic signal strength bar graph

Pulse tone as SpO_2 pulsations are detected

SpO_2 Update Averaging Rate User selectable: 4, 8, 12 or 16 seconds

SpO_2 Sensitivity User selectable: Normal, High

SpO_2 Measurement: Functional SpO_2 values are displayed and stored

Pulse Rate Range: 25 to 240 bpm

Pulse Rate Accuracy (Adults/Pediatrics):
±3 digits (during no motion conditions)
±5 digits (during motion conditions)

Optional SpO_2 waveform display with autogain control

SpCO®

SpCO Concentration Display Range: 0 to 40%

SpCO Accuracy: ±3 digits

SpMET®

SpMet Saturation Range: 0 to 15.0%

SpMet Display Resolution: 0.1% up to 10%

SpMet Accuracy: ±1 digit

NIBP

Blood Pressure Systolic Pressure Range: 30 to 255 mmHg

Diastolic Pressure Range: 15 to 220 mmHg

Mean Arterial Pressure Range: 20 to 235 mmHg

Units: mmHg

Blood Pressure Accuracy: ±5 mmHg

Blood Pressure Measurement Time: 20 seconds, typical (excluding cuff inflation time)

Pulse Rate Range: 30 to 240 pulses per minute

Pulse Rate Accuracy: ±2 pulses per minute or ±2%, whichever is greater

Operation Features Initial Cuff Pressure: User selectable, 80 to 180 mmHg

Automatic Measurement Time Interval: User selectable, from 2 min to 60 min

Automatic Cuff Deflation Excessive Pressure: If cuff pressure exceeds 290 mmHg

Excessive Time: If measurement time exceeds 120 seconds

CO_2

CO_2 Range: 0 to 99 mmHg (0 to 13.2 kPa)

Units: mmHg, %, or kPa

Respiration Rate Accuracy:
0 to 70 bpm: ±1 bpm
71 to 99 bpm: ±2 bpm

Respiration Rate Range: 0 to 99 breaths/minute

Rise Time: 190 msec

Response Time: 3.3 seconds (includes delay time and rise time)

Initialization Time: 30 seconds (typical), 10-180 seconds

Ambient Pressure: automatically compensated internally

Optional Display: CO_2 pressure waveform

Scale factors: Autoscale, 0–20 mmHg (0–4 Vol%), 0–50 mmHg (0–7 Vol%), 0–100 mmHg (0–14 Vol%)

Invasive Pressure

Transducer Type: Strain-gauge resistive bridge

Transducer Sensitivity: 5µV/V/mmHg

Excitation Voltage: 5 Vdc

Connector: Electro Shield: CXS 3102A 14S-6S

Bandwidth: Digital filtered, DC to 30 Hz (< -3db)

Zero Drift: 1 mmHg/hr without transducer drift

Zero Adjustment: ±150 mmHg including transducer offset

Numeric Accuracy: ±1 mmHg or 2% of reading, whichever is greater, plus transducer error

Pressure Range: -30 to 300 mmHg, in six user selectable ranges

Invasive Pressure Display

Display: IP waveform and numerics

Units: mmHg

Labels: P1 or P2, ART, PA, CVP, ICP, LAP (user selectable)

Temperature

Range: 24.8° to 45.2°C (76.6° to 113.4°F)

Resolution: 0.1°C

Accuracy: ±0.2°C including sensor

Reusable Temperature Cable: 5 foot or 10 foot

Disposable Sensor Types: Surface–Skin; Esophageal/Rectal

Trend

Time Scale: Auto, 30 minutes, 1, 2, 4, or 8 hours

Duration: Up to 8 hours

ST Segment: After initial 12-lead ECG analysis, automatically selects and trends ECG lead with the greatest ST displacement

Display Choice of: HR, PR (SpO_2), PR (NIBP), SpO_2 (%), SpCO (%), SpMet (%), CO_2 ($EtCO_2$/$FiCO_2$), RR (CO_2), NIBP, IP1, IP2, ST

ALARMS

Quick Set: Activates alarms for all active vital signs

VF/VT Alarm: Activates continuous (CPSS) monitoring in Manual mode

Apnea Alarm: Occurs when 30 seconds has elapsed since last detected respiration

Heart Rate Alarm Limit Range: Upper, 100–250 bpm; lower, 30–150 bpm

INTERPRETIVE ALGORITHM

12-Lead Interpretive Algorithm: University of Glasgow 12-Lead ECG Analysis Program, includes AMI and STEMI statements

PRINTER

Prints continuous strip of the displayed patient information and reports

Paper Size: 100 mm (3.9 in)

Print Speed: 25 mm/sec or 12.5 mm/sec

Optional: 50 mm/sec time base for 12-lead ECG reports

Delay: 8 seconds

Autoprint: Waveform events print automatically

Frequency Response:

Diagnostic: 0.05 to 150 Hz or 0.05 to 40 Hz

Monitor: 0.67 to 40 Hz or 1 to 30 Hz

DEFIBRILLATOR

Biphasic Waveform: Biphasic Truncated Exponential

The following specifications apply from 25 to 200 ohms, unless otherwise specified:

Energy Accuracy: ±1 joule or 10% of setting, whichever is greater, into 50 ohms, ±2 joules or 15% of setting, whichever is greater, into 25-175 ohms.

Voltage Compensation: Active when disposable therapy electrodes are attached. Energy output within ±5% or ±1 joule, whichever is greater, of 50 ohms value, limited to the available energy which results in the delivery of 360 joules into 50 ohms.

Paddle Options: QUIK-COMBO® pacing/defibrillation/ECG electrodes (standard). Cable Length 8 foot long (2.4 m) QUIK-COMBO cable (not including electrode assembly).

Standard paddles (optional)

Manual Mode

Energy Select: 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 50, 70, 100, 125, 150, 175, 200, 225, 250, 275, 300, 325, and 360 joules

Charge Time: Charge time to 360 joules in less than 10 seconds, typical

Synchronous Cardioversion: Energy transfer begins within 60 msec of the QRS peak

Paddles Leads OFF Sensing: When using QUIK-COMBO electrodes, the device indicates Paddles Leads OFF if the resistive part of the patient impedance is greater than 300 ±15% ohms, or if the magnitude of the patient impedance is greater than 440 ±15% ohms.

AED Mode

Shock Advisory System™ (SAS): an ECG analysis system that advises the operator if the algorithm detects a shockable or non-shockable ECG rhythm. SAS acquires ECG via therapy electrodes only.

Shock Ready Time: Using a fully charged battery at normal room temperature, the device is ready to shock within 20 seconds if the initial rhythm finding is "SHOCK ADVISED"

Biphasic Output: Energy Shock levels ranging from 150–360 joules with same or greater energy level for each successive shock

cprMAX™ Technology: In AED mode, cprMAX™ technology provides a method of maximizing the CPR time that a patient receives, with the overall goal of improving the rate of survival of patients treated with AEDs.

Setup Options:

- Auto Analyze: Allows for auto analysis. Options are OFF, AFTER 1ST SHOCK
- Initial CPR: Allows the user to be prompted for CPR for a period of time prior to other activity. Options are OFF, ANALYZE FIRST, CPR FIRST
- Initial CPR Time: Time interval for Initial CPR. Options are 15, 30, 45, 60, 90, 120, and 180 seconds.
- Pre-Shock CPR: Allows the user to be prompted for CPR while the device is charging. Options are OFF, 15, 30 seconds.
- Pulse Check: Allows the user to be prompted for a pulse check at various times. Options are ALWAYS, AFTER EVERY SECOND NSA, AFTER EVERY NSA, NEVER
- Stacked Shocks: Allows for CPR after 3 consecutive shocks or after a single shock. Options are OFF, ON
- CPR Time: 1 or 2 User selectable times for CPR. Options are 15, 30, 45, 60, 90, 120, 180 seconds and 30 minutes.

PACER

Pacing Mode: Demand or non-demand rate and current defaults

Pacing Rate: 40 to 170 PPM

Rate Accuracy: ±1.5% over entire range

Output Waveform: Monophasic, truncated exponential current pulse (20 ± 1 ms)

Output Current: 0 to 200 mA

Pause: Pacing pulse frequency reduced by a factor of 4 when activated

Refractory Period: 180 to 280 msec (function of rate)

ENVIRONMENTAL

Unit meets functional requirements during exposure to the following environments unless otherwise stated.

Operating Temperature: 0° to 45°C (32° to 113°F); -20°C (-4°F) for 1 hour after storage at room temperature; 60°C (140°F) for 1 hour after storage at room temperature

Storage Temperature: -20° to 65°C (-4° to 149°F) except therapy electrodes and batteries

Relative Humidity, Operating: 5 to 95%, non-condensing. NIBP: 15 to 95%, non-condensing

Relative Humidity, Storage: 10 to 95%, non-condensing

Atmospheric Pressure, Operating: -382 to 4,572 m (-1,253 to 15,000 ft). NIBP: -152 to 3,048 m (-500 to 10,000 ft)

Water Resistance, Operating: IP44 (dust and splash resistance) per IEC 529 and EN 1789 (without accessories except for 12-lead ECG cable, hard paddles, and battery pack)

Vibration: MIL-STD-810E Method 514.4, Propeller Aircraft - category 4 (figure 514.4-7 spectrum a), Helicopter - category 6 (3.75 Grms), Ground Mobile - category 8 (3.14 Grms), EN 1789: Sinusoidal Sweep, 1 octave/min, 10-150 Hz, ±0.15 mm/2 g

Shock (drop): 5 drops on each side from 18 inches onto a steel surface EN 1789: 30-inch drop onto each of 6 surfaces

Shock (functional): Meets IEC 60068-2-27 and MIL-STD-810E shock requirements 3 shocks per face at 40 g, 6 ms half-sine pulses

Bump: 1000 bumps at 15 g with pulse duration of 6 msec

Impact, Non-operating: EN 60601-1 0.5 + 0.05 joule impact UL 60601-1 6.78 Nm impact with 2-inch diameter steel ball. Meets IEC62262 protection level IK 04.

EMC: EN 60601-1-2:2006 Medical Equipment -General Requirements for Safety - Collateral Standard: Electromagnetic Compatibility - Requirements and Tests EN 60601-2-4:2003: (Clause 36) Particular Requirements for the Safety of Cardiac Defibrillators and Cardiac Defibrillator-Monitors

Cleaning: Cleaning 20 times with the following: Quaternary ammonium, isopropyl alcohol, hydrogen peroxide

Chemical Resistance: 60 hour exposure to specified chemicals: Betadine (10% Povidone-Iodine solution), Coffee, Cola, Dextrose (5% Glucose solution), Electrode Gel/Paste (98% water, 2% Carbopol 940), HCL (0.5% solution, pH=1), Isopropyl Alcohol, NaCl solution (0.9% solution), Cosmetic discoloration of the paddle well shorting bar shall be allowed following exposure to HCL (0.5% solution).

POWER

Power Adapters: AC or DC

Power Adapters provide operation and battery charging from external AC or DC power

- Full functionality with or without batteries when connected to external AC/DC
- Typical battery charge time while installed in LIFEPAK 15 device is 190 minutes
- Indicators: external power indicator, battery charging indicator

Dual battery: Capability with automatic switching

Low battery indication and message: Low battery fuel gauge indication and low battery message in status area for each battery

Replace battery indication and message: Replace battery fuel gauge indication, audio tones and replace battery message in the status area for each battery. When replace battery is indicated, device auto-switches to second battery. When both batteries reach replace battery condition, a voice prompt instructs user to replace battery.

Battery Capacity For two, new fully-charged batteries, 20°C (68°F)

Operating Mode		Monitoring (minutes)	Pacing (minutes)	Defibrillation (360J discharges)
Total Capacity to Shutdown	Typical	360	340	420
	Minimum	340	320	400
Capacity After Low Battery	Typical	21	20	30
	Minimum	12	10	6

BATTERY

Battery Specifications

Battery Type: Lithium-ion

Weight: ≤0.6kg (1.3lb)

Charge Time (with fully depleted battery): 4 hours and 15 minutes (typical)

Battery indicators: Each battery has a fuel gauge that indicates its approximate charge. A fuel gauge that shows two or fewer LEDs after a charge cycle indicates that the battery should be replaced.

Charging Temperature Range: 5° to 45°C (41° to 113°F)

Operating Temperature Range: 0° to 45°C (32° to 113°F)

Short Term (<1 week) Storage Temperature Range: -20° to 60°C (-4° to 140°F)

Long Term (>1 week) Storage Temperature Range: 20° to 25°C (68° to 77°F)

Operating and Storage Humidity Range: 5 to 95% relative humidity, non-condensing

REFERENCES

1 Stiell I, Walker R, Nesbitt L, et al. Biphasic Trial: A randomized comparison of fixed lower versus escalating higher energy levels for defibrillation in out-of-hospital cardiac arrest. *Circulation.* 2007;115:1511-1517.

2 Edelson D, Litzinger B, Arora V, et al. Improving in-hospital cardiac arrest process and outcomes with performance debriefing. *Arch Intern Med.* 2008;168:1063-1069.

3 Olasveengen T, Wik L, Kramer-Johansen J, et al. Is CPR quality improving? A retrospective study of out-of-hospital cardiac arrest. *Resuscitation.* 2007;75:260-266.

4 Fletcher D, Galloway R, Chamberlain D, et al. Basics in advanced life support: A role for download audit and metronome. *Resuscitation.* 2008;78:127-134.

All claims valid as of December 2014.

For further information please contact your local Physio-Control representative or visit our website at www.physio-control.com

Physio-Control Headquarters
11811 Willows Road NE
Redmond, WA 98052
www.physio-control.com

Customer Support
P. O. Box 97006
Redmond, WA 98073
Toll free 800 442 1142
Fax 800 426 8049

Physio-Control Canada
Physio-Control Canada Sales, Ltd.
7111 Syntex Drive, 3rd Floor
Mississauga, ON
L5N 8C3
Canada
Toll free 800 895 5896
Fax 866 430 6115

Physio-Control, Inc., 11811 Willows Road NE, Redmond, WA 98052 USA

GDR 3301019_E

PHYSIO CONTROL

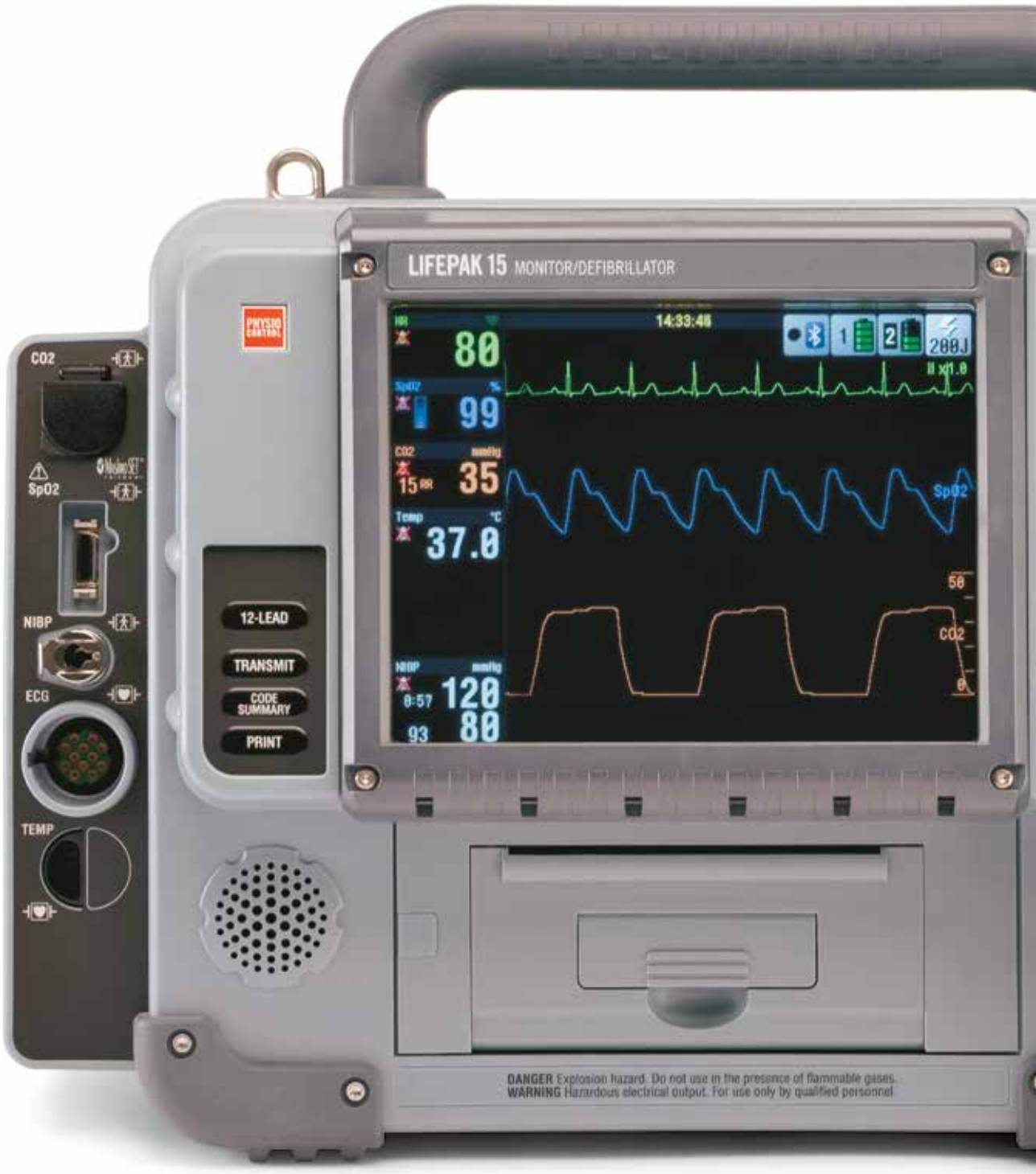
ACCESSORIES BROCHURE

LIFEPAK® 15

MONITOR/DEFIBRILLATOR

Genuine Accessories from Physio-Control

LIFEPAK® 15 MONITOR / DEFIBRILLATOR



Thank you for choosing Physio-Control as your partner in helping save lives and improve patient care.

You already know our reputation for quality and reliability in LIFEPAK defibrillators and AEDs. When it comes to LIFEPAK accessories, we know you won't accept anything less. Inside this catalog you'll find accessories designed to meet your needs and reliability standards. All the accessories and disposables in this catalog are designed to work with the LIFEPAK 15 monitor/defibrillator. If you have any questions about accessories or disposables, please contact your Physio-Control representative.

Temperature Monitoring

Temperature Adapter Cable
11140-000079 (10ft)
11140-000078 (5ft)

Esophageal-Rectal Temperature Sensor
11996-000360 (9FR, 20/box)

Skin Temperature Sensor
11996-000359 (20/box)

Foley Catheter Temperature Sensor
11996-000361 (14FR, 10/PK)
11996-000362 (16FR, 10/pk)
11996-000363 (18FR, 10/pk)

NIBP Monitoring Accessories

NIBP Tubing
21300-007299 (9ft)
21300-007298 (12ft)

NIBP Tubing, Coiled
21300-007300 (2-9ft)

Reusable Cuff

X-Large Adult
35 x 44 cm
11160-000009

Large Adult
32 - 42 cm
11160-000007

Adult
26 - 35 cm
11160-000005

Pediatric
13 - 20 cm
11160-000003

Infant
8 - 14 cm
11160-000001

Single Patient Use Cuff

X-Large Adult
35 x 44 cm
11160-000010

Large Adult
32 - 42 cm
11160-000008

Adult
26 - 35 cm
11160-000006

Pediatric
13 - 20 cm
11160-000004

Infant
8 - 14 cm
11160-000002

Power Options

REDI-CHARGE Base
AC power cord and adapter tray not included.
11141-000115

REDI-CHARGE LIFEPAK 15 Adapter Tray
11140-000052

AC Power Cord
11140-000015

Lithium-ion Battery 5.7 Ah
5.7 amp hour, 11.1 volt, rechargeable, with fuel gauge.
21330-001176

Mobile Battery Charger
Includes AC and DC power cords, mounting bracket and operating instructions.
11577-000011

AC Power Adapter
Includes Right Angle Cable (AC power cord not included)
11140-000072

DC Power Adapter
Includes DC cable and Right Angle Cable
11140-000074

AC Power Cord
11140-000015

Power Attachment Kit
11577-000019

Extension Cable for AC/DC Power Adapter
11140-000080

Replacement Right Angle Power Cable for AC/DC Power Adapter
11140-000081

Replacement DC Input Cable
11140-000084

ECG Monitoring Accessories

12-Lead ECG Cable Trunk Cable with 4-Wire Limb Leads

11111-000018 (5ft)
11111-000020 (8ft)

12-Lead ECG Cable 6-Wire Precordial Attachment

11111-000022

4-wire Cable Comb

21300-008054 (10/pk)

6-wire Cable Comb

21330-008055 (10/pk)

3-Wire ECG Cable

Right-angle connector
11110-000029

5-Wire ECG Cable

Right-angle connector, 4-wire limb plus one chest lead, labeled "V1" on the LIFEPAK 15 monitor reports.
11110-000066

Box of Strip Chart Recorder Paper

100mm x 22m
11240-000016 (2 rolls/box)

LIFE-PATCH® ECG Electrodes

Adult, pregelled.
11100-000001 (3/pk)

LIFE-PATCH ECG Electrodes

Adult, pregelled.
11100-000002 (4/pk)

Therapy Delivery Accessories

Hard Paddles and Electrode Gel

Standard Hard Paddles

11130-000061 (1 pair)

Pediatric Paddle, External

(Two required); slips onto standard adult hard paddle.

11133-000007 (1 paddle)

SIGNAGEL® Electrode Gel

For use with hard paddles. Highly conductive, multi-purpose electrolyte meets all the standards of the ideal saline electrode gel. Recommended for ECG, defibrillation, biofeedback and EMG.

21300-005847 (8.5 oz/tube)

Internal Paddles (Requires Internal Paddle Handles and Internal Paddles Adapter Cable)

1 in. size

11131-000010 (1 pair, 6.25 in. shaft)

1.5 in. size

11131-000011 (1 pair, 6 in. shaft)
11131-000021 (1 pair, 9 in. shaft)
11131-000024 (1 pair, 14 in. shaft)

2 in. size

11131-000012 (1 pair, 5.75 in. shaft)
11131-000022 (1 pair, 8.75 in. shaft)

2.5 in. size

11131-000013 (1 pair, 5.5 in. shaft)
11131-000019 (1 pair, 8.5 in. shaft)

3.5 in. size

11131-000014 (1 pair, 5 in. shaft)
11131-000023 (1 pair, 8 in. shaft)

Internal Paddle Handles with Discharge Control

(For use with the Internal Paddles Adapter Cable)

11131-000001 (1 pair)

Internal Paddles Adapter Cable

(For use with Internal Paddle Handles)

11998-000326

Therapy Delivery Accessories

EDGE System™ Electrodes for Pacing/Defibrillation/ECG with QUIK-COMBO® Connector

18-month minimum shelf life remaining at time of shipment from Physio-Control except where noted.

EDGE System Electrodes with QUIK-COMBO Connector

24 in. leadwire length

11996-000091

EDGE System RTS (Radiotransparent) Electrodes with QUIK-COMBO Connector

24 in. leadwire length

11996-000090

EDGE System Electrodes with QUIK-COMBO Connector and REDI-PAK™ Preconnect System

42 in. leadwire length

11996-000017

Pediatric EDGE System RTS Electrodes with QUIK-COMBO Connector

For use only with manual monitor/defibrillators; 12 month minimum shelf life at time of shipment 24 in. leadwire length.

11996-000093

QUIK-COMBO Therapy Cable

With convenient TRUE-LOCK™ Cable Connector. Length is approximately 8 ft. For use with LIFEPAK 15 monitor/defibrillator.

11113-000004

Pulse Oximetry Monitoring Accessories

Masimo SET® RC Patient Cables

RC Patient Cable

For use with M-LNCS and Rainbow Patient Sensors

11171-000037 (4ft)
11171-000038 (12ft)

Masimo SET RC Patient Cable Compatible SpO_2 Sensors

M-LNCS Reusable Sensor

11171-000046 (Ad)
11171-000047 (Ped)

M-LNCS Adhesive Sensors (20/box)

11171-000039 (Ad)
11171-000040 (Ped)

M-LNCS Adhesive Sensors (20/box)

11171-000043 (Neo/Pt)
11171-000042 (Neo/Ad)
11171-000041 (Inf)

Masimo SET RC Patient Cable Compatible Rainbow® SpO_2, SpCO, SpMet Sensors

Rainbow Reusable Sensor

11171-000049 (Ad)
11171-000050 (Ped)

Rainbow Adhesive Sensor (10/box)

11996-000342 (Inf)
11996-000341 (Neo/Ad)

Rainbow Adhesive Sensor (10/box)

11996-000339 (Ad)
11996-000340 (Ped)

Pulse Oximetry Monitoring Accessories

Masimo SET LNC Patient Cables

Red LNC Patient Cable
For Use with LNCS Patient Sensors
11996-000323 (4ft)
11996-000324 (10ft)
11996-000325 (14ft)

Masimo SET LNC Patient Cable Compatible SpO_2 Sensors

LNCS® Reusable Sensor
11171-000017 (Ad)
11171-000018 (Ped)

LNCS Reusable Soft Sensor
11171-000052 (Ad)

LNCS Adhesive Sensor (20/box)
11171-000019 (Ad)
11171-000020 (Ped)

LNCS Adhesive Sensor (20/box)
11171-000029 (Neo/Pt)
11171-000028 (Neo/Ad)
11171-000031 (Inf)

Pulse Oximetry Monitoring Accessories

LIFEPAK 15 Direct Connect SpO_2 Only Patient Sensors

Adult Reusable Direct Connect Sensor

11996-000331 (3ft)
11996-000332 (12ft)

Pediatric Reusable Direct Connect Sensor

11996-000333 (3ft)
11996-000334 (12ft)

Adult Reusable Soft Direct Connect Sensor

11171-000053 (8ft)

LIFEPAK 15 Direct Connect Rainbow SpO_2, SpCO, SpMet Patient Sensors

Adult Rainbow Direct Connect Reusable Sensor

11996-000335 (3ft)
11171-000032 (8ft)
11996-000336 (12ft)

Pediatric Rainbow Direct Connect Reusable Sensor

11996-000337 (3ft)
11171-000033 (8ft)
11996-000338 (12ft)

Additional Masimo Accessories

Reusable Ambient Light Shield

11171-000054 (5/bag)

Disposable Ambient Light Shield

11171-000055 (10/bag)

Red MNC Cable

Connects LIFEPAK 15 to Nellcor patient sensor

11996-000365 (4ft)
11996-000366 (10ft)

Pulse Oximetry Monitoring Accessories

Nellcor Reusable Sensors and Cables

DURASENSOR Reusable Clip
11996-000060 (Adult - Ref# DS100A)

DURA-Y Multisite Reusable Sensor
11996-000106 (≥ 1 kg - Ref# D-YS)

Oxiband Reusable Sensor
Includes 50 disposable adhesive sensors
11996-000061 (Ad/Neo - Ref# OXI A/N)
11996-000062 (Ped/Inf - Ref# OXI P/I)

Disposable Adhesive Bandage Wrap
Not Available in Canada. (100/pk)
11996-000048 (Ad/Neo - Ref# ADH A/N)
11996-000049 (Ped/Inf - Ref# ADH P/I)

Disposable Adhesive Foam Wrap
Not Available in Canada. (100/pk)
11996-000110 (Ad/Neo - Ref# FOAM A/N)
11996-000108 (Ped/Inf - Ref# FOAM P/I)

Nellcor Disposable Sensors

Single patient use

Oxisensor II (24/box)
Adult
11996-000113 (18 in. - Ref# D25)
11996-000114 (36 in. - Ref# D25L)

Pediatric
11996-000116 (18 in.- Ref# D20)

Oxisensor II (24/box)
Infant
11996-000115 (18 in. - Ref# I20)

Neonatal/Adult
11996-000117 (18 in. - Ref# N25)

End-Tidal CO_2 ($EtCO_2$) Monitoring Accessories

Oridion® Filterlines for Intubated Patients

Single patient use

FilterLine® SET

Key Applications: OR, EMS, ED, Rapid Response Teams, Transport.

Adult/Pediatric
11996-000081 (25/pk, 200 cm)
11996-000164 (25/pk, 400 cm)

FilterLine H SET

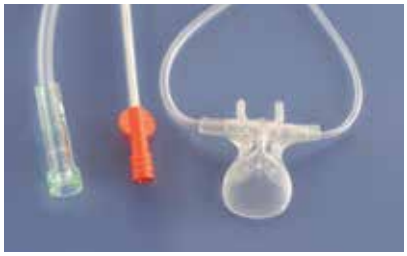
Key Applications: Critcal care, Humidified Environments.

Adult/Pediatric
11996-000080 (25/pk, 200 cm)

Adult/Neonatal
11996-000001 (25/pk, 200 cm)

Oridion Non-Intubated Filterlines

Single patient use



Smart CapnoLine® Plus

Key Applications: Procedural Sedation, Upper GI Procedures, MAC, RMS, BD, Rapid Response Teams.

Adult with O_2
11996-000163 (25/pk, 200 cm)
11996-000167 (100/pk, 200 cm)
11996-000165 (25/pk, 400 cm)

Adult without O_2
11996-000162 (25/pk, 200 cm)
11996-000166 (100/pk, 200 cm)

Smart CapnoLine

Key Applications: Procedural Sedation, SMS, SD, Rapid Response Teams.

Pediatric with O_2
11996-000128 (25/pk, 200 cm)

Pediatric without O_2
11996-000120 (25/pk, 200 cm)

Cases & Mounting Options

Standard Carrying Case
Includes right pouch and left pouch, for use with LIFEPAK 15 monitor/defibrillator.
11577-000002

Top Pouch
Storage for sensors and electrodes; insert in place of standard paddles.
11220-000028

Shoulder Strap
For use with LIFEPAK 15 monitor/defibrillator.
11577-000001

Back Pouch
Ideal for additional accessory storage.
For use with LIFEPAK 15 monitor/defibrillator.
11260-000039

Bed Connector
For use in hospital only.
11996-000374

Communication Accessories

LIFEPAK Monitor to PC Cable
For connecting LIFEPAK 12 or LIFEPAK 15 monitor/defibrillator to PC.
11230-000020 (Serial)
11996-000369 (USB)

Titan II Wireless Gateway
For transmitting data from LIFEPAK 12/15 to the LIFENET System or CODE-STAT data review software. Requires existing wireless network.
21996-000073 (Wireless Gateway)
21996-000095 (Wireless 3G Gateway - AT&T/Physio)
21996-000093 (Wireless 3G Gateway - AT&T, Verizon, Verizon/Physio)
21996-000094 (Wireless 3G + Voice Gateway - AT&T/Physio)
21996-000092 (Wireless 3G + Voice Gateway - AT&T, Verizon, Verizon/Physio))

3G Gateway
For transmitting data from LIFEPAK 12/15 to the LIFENET System or CODE-STAT data review software. Requires data plan.
21996-000086 (Verizon Gateway)
99428-000305 (Verizon Data Plan)
21996-000082 (AT&T Gateway)
99428-000304 (AT&T Data Plan)

Testers & Training Materials

12-Lead Patient Simulator (QUIK-COMBO)

Connects directly to your LIFEPAK defibrillator for safe simulation of cardioversion and electrical capture. Generates fibrillation, tachycardias, and bradycardias, as well as ST segment and T wave abnormalities. For use with LIFEPAK devices with a 12-lead ECG feature.

11996-000311

3-Lead Patient Simulator (QUIK-COMBO)

Connects directly to your LIFEPAK defibrillator for safe, interactive training. Select from 17 ECG rhythms including: fibrillation, tachycardias and bradycardias.

11996-000310

Defibrillator Checker

Tests integrity of energy delivery through standard hard paddles. Neon light indicates energy has been delivered.

11998-000060

Test Load

Use to perform therapy cable performance checks. Connects to the QUIK-COMBO therapy cable on the defibrillator.

21330-001365 (English only)
21330-001367 (English, French for Canada)

Training Tools

Inservice Video: LIFEPAK 15 Monitor/Defibrillator

21330-001357 (DVD - NTSC version)

Operating Instructions: LIFEPAK 15 Monitor/Defibrillator

Also available as free online download at www.physio-control.com

26500-002408

PHYSIO CONTROL
UNIVERSITY

Physio-Control University

12-Leads Made Easy
44500-000001
Capno Made Easy
44500-000003

For further information, please contact Physio-Control at 800.442.1142 (U.S.), 800.895.5896 (Canada) or visit our website at www.physio-control.com.

Physio-Control Headquarters
11811 Willows Road NE
Redmond, WA 98052
www.physio-control.com

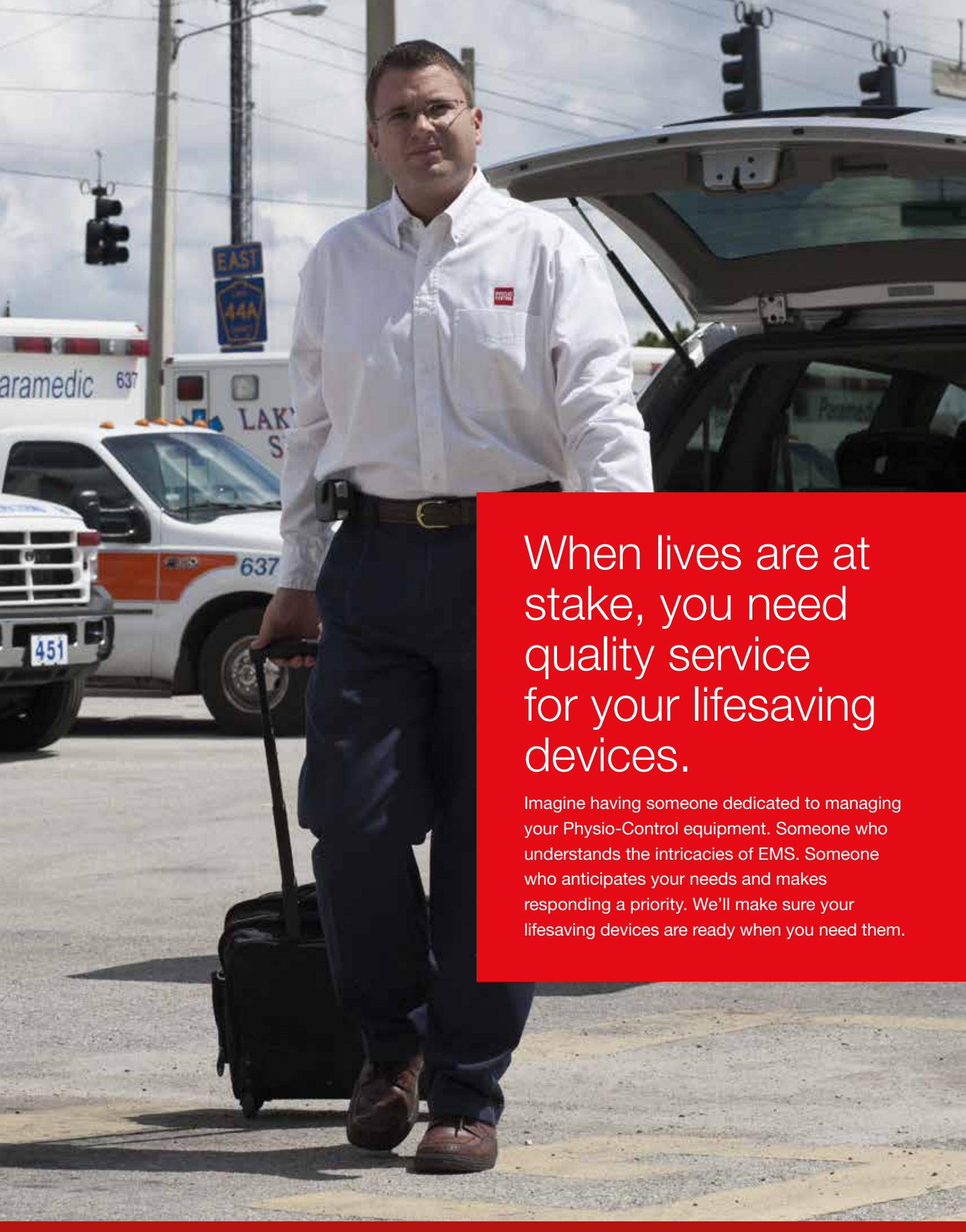
Customer Support
P. O. Box 97006
Redmond, WA 98073
Toll free 800 442 1142
Fax 800 426 8049

Physio-Control Canada
Physio-Control Canada Sales, Ltd.
7111 Syntex Drive, 3rd Floor
Mississauga, ON
L5N 8C3
Canada
Toll free 800 895 5896
Fax 866 430 6115

PHYSIO CONTROL

Respond with confidence: Rely on service from Physio-Control

stryker



When lives are at stake, you need quality service for your lifesaving devices.

Imagine having someone dedicated to managing your Physio-Control equipment. Someone who understands the intricacies of EMS. Someone who anticipates your needs and makes responding a priority. We'll make sure your lifesaving devices are ready when you need them.

Our service plans go beyond keeping your devices running at peak performance.

Your service representative will get to know you and your team, answer questions specific to your devices, give reminders about proper device operation, and advise you about new features and accessories to help you maximize efficiency.

Onsite service

If you ever need us, your dedicated service representative comes to your location with just one phone call. Backup support from our team is always available.

Expertise

Your service representative is 100% focused on Physio-Control devices. With an average of 14 years' experience, nobody knows your devices better. Because they carry a large inventory of spare parts, representatives can often repair your device onsite.

Customer satisfaction

Our service representatives consistently receive the highest marks in customer satisfaction—an average satisfaction rating of 6.8 out of 7 in our onsite service survey. Because they are part of your community, they are completely dedicated to helping you achieve your goals.

A service plan lets you focus on your mission.

Confidence in the readiness of your device.

- Comprehensive maintenance and inspections can help find issues before they cause problems
- Most repairs performed within 48 hours, if not sooner

Control costs.

- Minimize unexpected costs and make budgeting more predictable
- Stretch your budget further with additional discounts

Less hassle, fewer disruptions.

- Inspection schedules that put minimal demand on your staff and equipment
- Your rep tracks maintenance and device status, and provides documentation for your compliance needs
- Onsite Service option eliminates hassle of boxing up devices and shipping them out when a repair is needed
- No need to get a purchase order or obtain approvals

"The service representative caught a problem we didn't know we had. He fixed it the same day, and we didn't have to take it out of service."

—Small Hospital, Minnesota

"I've been in EMS for 27 years, and I can tell you that our representative is top-notch. He's an extremely pleasant person to work with, and pays great attention to detail. He truly cares for the customer as much as he does the product he services."

—Small Fire Department, Texas

Choose the best service plan for your needs.

	Preventive Maintenance	Repair Plus	Comprehensive
Preventive maintenance and inspection service	✓		✓
Configured loaner device during preventive maintenance or repairs	✓	✓	✓
Discounts on upgrades, accessories and disposables	✓	✓	✓
Software updates	✓	✓	✓
24/7 telephone support	✓	✓	✓
Battery-replacement service		✓	✓
Parts and labor for repairs	Discount	✓	✓
Onsite service	Optional	Optional	Optional
Ship-in service	Optional	Optional	Optional

To find out more about our Service Plans, please contact a Sales or Service Representative at 800-442-1142.

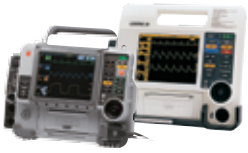
> "Our service representative promptly drove out to our remote station while our fire district was engaged in fighting a major wildfire. This helped us stay in service to our community and focus on the major emergency at hand."
>
> *—Medium Fire Department, California*

We're right here—right when you need us.

Every day, you protect the people in your community during all types of events—from festivals to football games, or even when disaster strikes.

With local representatives across the country, Physio-Control is able to respond when our customers need us most.

Specific services offered by device.



LIFEPAK® 15/12 monitor/defibrillator

LIFEPAK® 1000 defibrillator/ LIFEPAK CR® Plus AED

LUCAS® 2/3 chest compression system

Preventive Maintenance Plan

Update software to the most current version

Check all batteries and battery pins

Inspect the integrity of accessories and recommend replacement as needed

Test the integrity of all cables and recommend replacement as needed

Electrical safety check in accordance with NFPA guidelines

Computer-aided diagnostics to test 30 device dimensions and verify the unit functions accurately, from waveform shape and defibrillation energy to pacing current and capnography readings (if present)

Check electrode expiration dates and recommend replacement as needed

Check printer operation and trace quality

Test the integrity of all cables and recommend replacement as needed

Electrical safety check in accordance with NFPA guidelines

Computer-aided diagnostics to verify the unit functions accurately, including waveform shape (LIFEPAK 1000 defibrillator only) and defibrillation energy

Replace up to one (1) battery pack in accordance with the device operating instructions or upon battery failure (LIFEPAK 1000 defibrillator only)

Replace one (1) set of expired adult therapy electrodes at scheduled time of service (LIFEPAK 1000 defibrillator only)

Replace up to one (1) CHARGE-PAK™ and two (2) QUIK-PAK™ electrodes at time of service (LIFEPAK CR Plus AED)

Test linear sensor and recalibrate if needed

Lubricate and adjust mechanical parts, including compression module and claw lock

Clean hood, fan, intake and bellows

Perform functional test on all mechanical components and electronics

Computer-aided diagnostics

Replacement of LUCAS Disposable suction cup, LUCAS Patient Straps, or LUCAS Stabilization Strap, as deemed necessary by Physio-Control

Repair Plus Plan

Repairs (parts and labor) to restore equipment to manufacturer specifications

LIFEPAK battery-charger repair or replacement as deemed necessary by Physio-Control

Power-adapter repair or replacement

Replace up to three (3) lithium-ion batteries in accordance with the device operating instructions or upon failure

Replace two (2) NiCd or up to two (2) SLA batteries (LIFEPAK 12 only)

Replace up to one (1) coin cell memory battery in accordance with the device operating instructions or upon failure

Replace up to two (2) LUCAS chest compression system batteries in accordance with the Instructions for Use or upon battery failure

LUCAS Battery Desk-Top Charger, LUCAS Aux Power Supply, LUCAS Car Cable repair or replacement as deemed necessary by Physio-Control

Replacement of LUCAS Disposable suction cup, LUCAS Patient Straps, or LUCAS Stabilization Strap

Comprehensive Plan

Combines benefits of Repair Plus and Preventive Maintenance Service Plans

Service Plans are also available for the LIFEPAK® 20e defibrillator/monitor; please contact your local Physio-Control Representative for more information.

Service details.

Onsite Services are performed between 8:00am and 5:00pm local time, Monday through Friday, excluding holidays. Customer is to ensure Covered Equipment is available for Service at scheduled times or additional labor charges may apply. Some Services may not be completed onsite. Physio-Control will cover travel and/or round-trip freight for Covered Equipment that must be sent to our designated facility for repair.

Ship-In Service will ship your device to the nearest service center for repairs and inspections. We use only original manufacturer parts, and services will be performed at a designated Physio-Control facility. Physio-Control will cover round-trip shipping (ground only) for covered equipment sent to our designated facility for service.

Loaners will be provided as needed for either Preventive Maintenance or Repairs. Request for loaner through Service Advanced Plan must be made by 10:00am local time to receive the loaner the next day.

Updates are changes to a device to enhance its current features, stability or software. Physio-Control will install Updates at no additional cost, provided such Updates are installed at the time of regularly scheduled Services. Updates at a time other than regularly scheduled Services will be billed on a separate invoice at 20% off the then-current list price of the Update. If parts must be replaced to accommodate installation of new software, such parts may be purchased at 30% off the then-current list price.

Upgrades are major, standalone versions of software or the addition of features or capabilities to a device. For all Service Plans, Upgrades are not provided under the Plan and must be purchased separately. Upgrades are available at 17% off the then-current list price.

Service Plans do not include: supply or repair of accessories or disposables; repair of damage caused by misuse, abuse, abnormal operating conditions, operator errors, acts of God, and use of batteries, electrodes or other products not distributed by Physio-Control; replacement or repair of cases; repair or replacement of items not originally distributed or installed by Physio-Control; Upgrades and installation of Upgrades.

Physio-Control is now part of Stryker.

For further information, please contact Physio-Control at 800.442.1142 (U.S.), 800.895.5896 (Canada) or visit our website at www.physio-control.com

Physio-Control Headquarters
11811 Willows Road NE
Redmond, WA 98052
www.physio-control.com

Customer Support
P. O. Box 97006
Redmond, WA 98073
Toll free 800 442 1142
Fax 800 426 8049

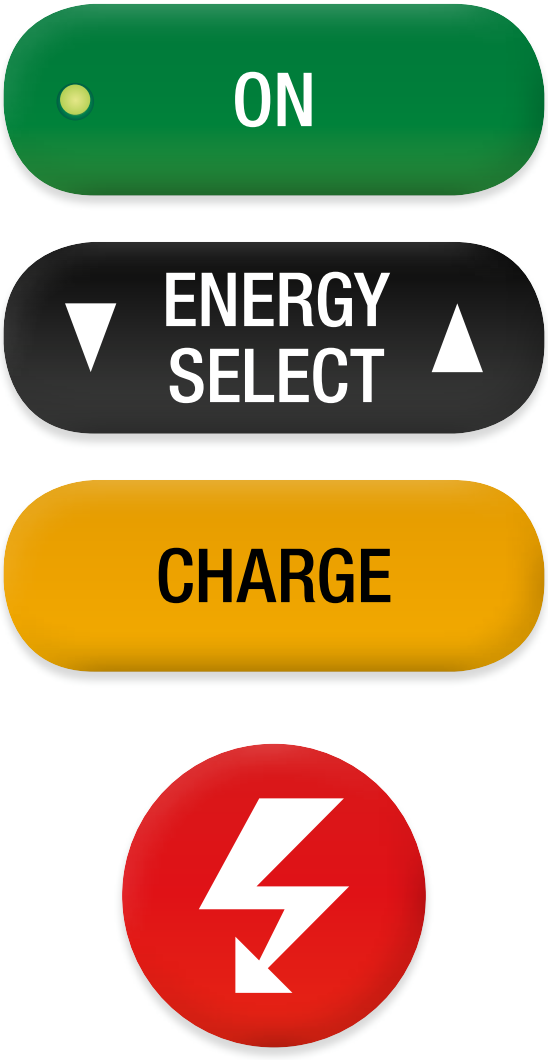
Physio-Control Canada
Physio-Control Canada Sales, Ltd.
7111 Syntex Drive, 3rd Floor
Mississauga, ON
L5N 8C3
Canada
Toll free 800 895 5896
Fax 866 430 6115

GDR 3324700_B

PHYSIO CONTROL

Why 360 Joules?

Clinical Overview



LIFEPAK® DEFIBRILLATORS

A compelling case for 360 joules.

1. When it comes to defibrillation, energy determines conversion rates*, not current or any single dimension of the shock.

2. In terms of converting patients, biphasic vs. biphasic studies show that waveforms are equivalent up to 200 joules.

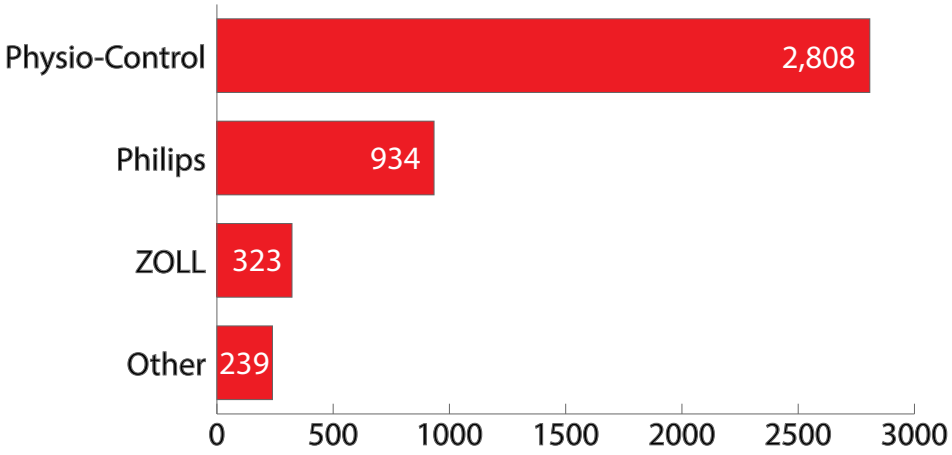
3. Not all patients convert at energy levels up to 200J. Clinicians are now using more targeted strategies for difficult-to-defibrillate patients.

4. Biphasic shocks at 360 joules have been shown to improve conversion rates.

*Conversion rate is defined as termination of AF/VT/VF (removal of the tachyarrhythmia for at least 5 seconds).

Over the last 18 years of biphasic defibrillation research, the Physio-Control waveform has been studied in nearly twice as many patients as all other commercially available waveforms combined.* This clinical research represents real-world performance in OHCA (out-of-hospital cardiac arrest) and IHCA (in-hospital cardiac arrest) patients. And this means confidence in technology when you need it most.

Published Research on Cardiac Arrest Patients Treated with Biphasic Shocks
1997-2015



*These data represent the cumulative number of cardiac arrest patients in whom the VF termination efficacy (using the established definition of “removal of VF for ≥ 5 seconds”) of specific biphasic waveforms and energy levels has been reported in published papers describing either randomized or consecutive case series of OHCA or IHCA patients.

Included are papers that report a VF termination rate for at least one of 1) first shocks or 2) all shocks.

When it comes to defibrillation, energy determines conversion rates, not current or any other single dimension of the shock.

Comparing modern biphasic waveforms to older monophasic waveforms no longer offers valuable clinical insight. What matters is how well your biphasic shocks work today. The fact is, high current alone, or any other singular aspect of the defibrillation shock, does not determine conversion rates. The evidence shows that many factors influence effective defibrillation, including:

1. Peak current delivered to the patient
2. Current delivery duration
3. Maintenance of current level throughout shock duration

Energy includes all three elements and has been shown to best describe the therapeutic dose delivered to the heart.

The evidence: biphasic vs. biphasic studies[1-5]

There are five independently conducted, peer-reviewed, clinical atrial fibrillation (AF) studies that compared conversion rates between biphasic truncated exponential waveforms (BTE) and ZOLL's rectelinear biphasic waveform (RBW). The same programmed energy settings resulted in the same conversion rates, regardless of the waveform or the amount of current. Energy dictated the conversion rates.

Why were AF studies used to compare waveforms? AF studies allow for consistent data collection and pad placement in a controlled research environment. AF and VF share common electrophysiological properties and defibrillation mechanisms.

2

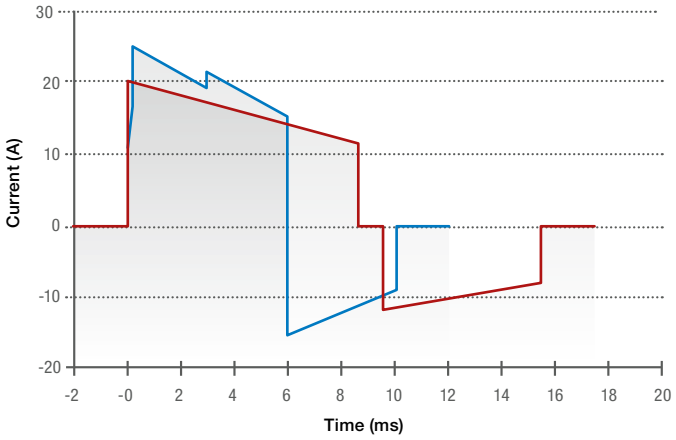
In terms of conversion rates, all biphasic waveforms are equivalent up to 200 joules.

Biphasic waveforms differ with respect to: peak current, how the current is maintained and how long the current is delivered. However, the cumulative output is measured as energy (joules). The same biphasic vs. biphasic studies that compared conversion rates between the biphasic truncated exponential waveform (BTE) and the ZOLL rectilinear biphasic waveform (RBW) showed that different levels of current, at the same programmed energies, did not produce different conversion rates. Rather, they were statistically equivalent at 100J, 150J and at 200 joules.[1-5] (Again), cumulative energy dictated the conversion rates, not peak current.

The evidence

Biphasic waveforms are equally effective at 200 joules

The level of current doesn't determine conversion rate[1, 2, 3]



Physio-Control

200 joules

96% efficacy

(184/192)

ZOLL

200 joules

96% efficacy

(188/195)

Three biphasic vs. biphasic clinical studies specifically compared waveforms used by Physio-Control and ZOLL in synchronized cardioversion. The combined results show that, though ZOLL's waveform delivers higher levels of current, the waveforms are equally effective at 200 joules.

3

Not all patients convert at energy levels up to 200J. Clinicians are now using more targeted strategies for difficult-to-defibrillate patients.

It's no longer controversial, there is a difficult-to-defibrillate patient population. Clinicians are now using strategies to help patients in refractory VF, such as:

1. Defibrillation protocols starting at maximum energy settings
2. Alternative/additional pad placement using maximum energy settings
3. Taking intra-arrest patients directly to cath lab and bypassing the ED

Recent defibrillation research even shows that lower conversion rates from variations in pad placement can be overcome by using a higher defibrillation energy.[25] And a recent U.S. hospital survey showed that 59% of Electrophysiology Labs are using external defibrillators that can deliver 360J for rescue shocks.[26]

Further evidence

Only 8 of the 27 published reports cite first shock success rates greater than 90%,[6-13] others report success rates of 70% or less,[14-17] including our competitors' largest published data sets:

- Philips® (Kramer-Johansen, et al.[17]) = 70% efficacy
- ZOLL® (Stothert, et al.[14]) = 67% efficacy

Recurrent VF is common in patients with VF cardiac arrest, with studies reporting rates as high as 74%.[18,19] VF can become more difficult to terminate in later episodes.[18] A small subset of difficult-to-defibrillate patients accounts for the majority of failed shocks[18,19] and the data shows us that it's impossible to predict who those patients will be.

The FDA is evaluating the significance of 17 reports of events since 2009 in which a 200 joules biphasic defibrillator was ineffective and a subsequent shock from a different 360 joules biphasic defibrillator resulted in immediate defibrillation/cardioversion.

4

Biphasic shocks at 360 joules have been shown to improve conversion rates.

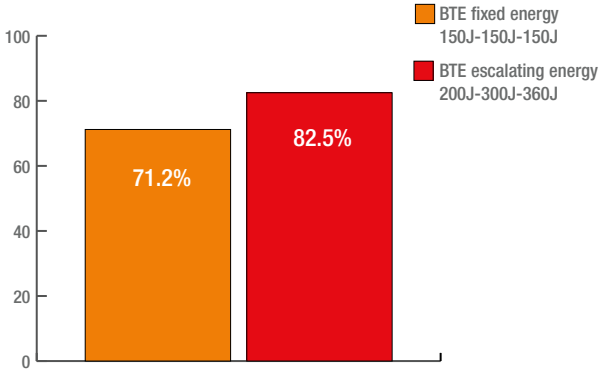
When low energy shocks fail, escalating energy to 360 joules improves conversion rates.

The evidence

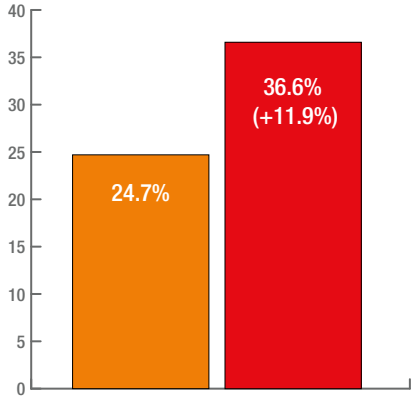
The 2010 International Consensus on CPR and ECC Science with Treatment Recommendations (CoSTR) confirms this is supported by high levels of evidence. “Evidence from one well-conducted randomized trial (LOE 1) and one other human study (LOE 2) employing BTE waveforms suggested that higher energy levels are associated with higher shock-success rates.”[20] Clinical data support full energy in both VF[19,20,21] and AF[22,23] patients. In AF studies, looking at variable initial shock energies, a 360 joule shock was recommended when the first 200 joule shock failed,[23] since a second 200 joule shock is rarely effective.[3]

The 2015 CoSTR did not change statements pertaining to higher energy and higher shock-success rates. It was stated “There are no major differences between the recommendations made in 2015 and those made in 2010.” (e73) [24]

Higher VF Termination with Higher Energy



Improved Conversion to an Organized Rhythm



A triple-blinded, multi-center, randomized, controlled trial showed significantly higher rates of VF termination and conversion to an organized rhythm when energy was escalated to 360 joules rather than maintaining the same first shock dose in patients needing more than one shock.[20]

A defibrillator purchase is an investment that lasts years. Choosing LIFEPAK defibrillator/monitors with full energy provides you the flexibility you need as guidelines and protocols evolve to reflect new understanding and research.

References

1. Alatawi F, Gurevitz O, White R, et al. Prospective, randomized comparison of two biphasic waveforms for the efficacy and safety of transthoracic biphasic cardioversion of atrial fibrillation. *Heart Rhythm.* 2005;2:382-387.
2. Kim M, Kim S, Park D, et al. Comparisonof rectilinear biphasic waveform energy versus truncated exponential biphasicwaveform energy for transthoracic cardioversion of atrial fibrillation. *Am J Cardiol.* 2004;94;1438-1440.
3. Neal S, Ngarmukos T, Lessard D, et al. Comparison of the efficacy and safetyof two biphasic defibrillator waveforms for the conversion of atrial fibrillation to sinusrhythm. *Am J Cardiol.* 2003;92;810-14.
4. Deakin C, Connelly S, Wharton R, et al. A comparison of rectilinear and truncatedexponential biphasic waveforms in elective cardioversion of atrial fibrillation: aprospective randomized controlled trial. *Resuscitation.* 2013;84(3)286-91.
5. Santomauro M, Borrelli A, Ottaviano L, et al.Transthoracic cardioversion in patients with atrial fibrillation: comparison of threedifferent waveforms. *Ital Heart J Suppl.* 2004;5(1):36-43.
6. Hess E, Atkinson E, White R. Increased prevalence of sustained return of spontaneous circulation following transition to biphasic waveform defibrillation. *Resuscitation.* 2008;77:39-45.
7. Hess E, White R. Ventricular fibrillation is not provoked by chest compression during post-shock organized rhythms in out-of-hospital cardiac arrest. *Resuscitation.* 2005;66:7-11
8. White R, Russell J. Refibrillation, resuscitation and survival in out-of-hospital sudden cardiac arrest victims treated with biphasic automated external defibrillators. *Resuscitation.* 2002;55:17-23.
9. Schneider T, Martens P, Paschen H, et al. Multicenter, randomized, controlled trial of 150-J biphasic shocks comparedwith 200- to 360-J monophasic shocks in the resuscitation of out-of-hospital cardiacarrest victims. *Circulation.* 2000;102:1780-7.
10. Koster R, Walker R, Chapman F. Recurrent ventricular fibrillation during advanced life support care of patients with prehospital cardiac arrest. *Resuscitation.* 2008;78:252-7.
11. Walker R, Koster R, Sun C, et al. Defibrillation probability and impedance change between shocks during resuscitation from out-of-hospital cardiac arrest. *Resuscitation.* 2009; 80:773-7.
12. Whitfield R, Colquhoun M, Chamberlain D, et al. The Department of Health National Defibrillator Programme: analysis of downloads from 250 deployments of public access defibrillators. *Resuscitation.* 2005;64:269-77.
13. Van Alem A, Chapman F, Lank P, et al. A prospective, randomised and blinded comparison of first shock success of monophasic and biphasic waveforms in out-of-hospital cardiac arrest. *Resuscitation.* 2003;58:17-24.
14. Stothert J, Hatcher T, Gupton C, et al.diac arrest. *Prehosp Emerg Care*. 2004;8:388-92.
15. Edelson DP Abella B, Kramer-Johansen J, et al. Effects of compression depth and pre-shock pauses predict defibrillation failure during cardiac arrest. *Resuscitation.* 2006;71:137-145.
16. Walsh S, McClelland A, Owens C, et al. Efficacy of distinct energy delivery protocols comparing two biphasic defibrillators for cardiac arrest. *Am J Cardiol.* 2004;94:378-380.
17. Kramer-Johansen J, Edelson D, Abella B, et al. Pauses in chest compression and inappropriate shocks: a comparison of manual and semiautomatic defibrillation attempts. *Resuscitation*. 2007;73:212-220.
18. Koster R, Walker R, Chapman F. Recurrent ventricular fibrillation during advanced life support care of patients with prehospital cardiac arrest. *Resuscitation.* 2008;78:252-257.
19. Walker R, Koster R, Sun C, et al. Defibrillation probability and impedance change between shocks during resuscitation from out-ofhospital cardiac arrest. *Resuscitation.* 2009;80:773-777.
20. 2010 International consensus on cardiopulmonary resuscitation and emergency cardiac care science with treatment recommendations. *Circulation.* 2010;122(suppl 2): S327.
21. Stiell I, Walker R, Nesbitt L, et al. The BIPHASIC Trial: A randomized comparison of fixed lower versus escalating higher energy levels for defibrillation in out-of-hospital cardiac arrest. *Circulation*. 2007;115:1511-1517.
22. Khaykin Y, Newman D, Kowalewski M, et al. Biphasic versus monophasic cardioversion in shock-resistant atrial fibrillation. *J Cardiovasc Electrophysiol.* 2003;14:868-72.
23. Rashba E, Gold M, Crawford F, et al. Efficacy of transthoracic cardioversion of atrial fibrillation using a biphasic, truncated exponential shock waveform at variable initial shock energies. *Am J Cardiol.* 2004;94:1572-1574.
24. 2015 Part 4: Advanced life support. International consensus on cardiopulmonary resuscitation and emergency cardiac care science with treatment recommendations. *Circulation.* 2015;95:e73
25. Esibov A, Chapman F, Melnick S, et al. Minor variations in electrode pad placement impact defibrillation success. *Prehospital Emergency Care.* March/April. 2016;20(2):292-298.
26. Interviews of 200 U.S. hospitals were conducted by Calo Research Services. September 2015.

All claims valid as of July 2016.

For further information, please contact Physio-Control at 800.442.1142 (U.S.), 800.895.5896 (Canada) or visit our website at www.physio-control.com

Physio-Control Headquarters
11811 Willows Road NE
Redmond, WA 98052
www.physio-control.com

Customer Support
P. O. Box 97006
Redmond, WA 98073
Toll free 800 442 1142
Fax 800 426 8049

Physio-Control Canada
Physio-Control Canada Sales, Ltd.
7111 Syntex Drive, 3rd Floor
Mississauga, ON
L5N 8C3
Canada
Toll free 800 895 5896
Fax 866 430 6115

GDR 3306561_E