

# BioFire® FilmArray® Torch Specification Sheet

TECHNICAL  
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## 1. BioFire Torch Overview

The BioFire Torch is an automated in vitro diagnostic (IVD) device intended for use with FDA cleared or approved IVD BioFire® FilmArray® Panels. The BioFire Torch is intended for use in combination with assay specific reagent pouches to detect multiple nucleic acid targets contained in clinical specimens. The BioFire Torch interacts with the reagent pouch to both purify nucleic acids and amplify targeted nucleic acid sequences using nested multiplex PCR (nmPCR) in a closed system. The resulting PCR products are evaluated using DNA melting analysis. The BioFire Torch software automatically determines the results and provides a test report.

The BioFire Torch is a modification of BioFire® FilmArray® 2.0 and is composed of two to twelve BioFire® FilmArray® Torch Modules connected to a BioFire® FilmArray® Torch System Base running BioFire® FilmArray® Torch software. The BioFire Torch System Base houses two BioFire Torch Modules. Up to five Duplex Module enclosures, each capable of housing two additional BioFire Torch Modules, may be added on top of the BioFire Torch System Base. Each BioFire Torch Module can be randomly and independently accessed to run a reagent pouch. The BioFire Torch software controls the function of each BioFire Torch Module and collects, analyzes, and stores data generated by each BioFire Torch Module.

## 2. BioFire® FilmArray® System Specifications

|                          |   |
|--------------------------|---|
| Sample Description       | <ul style="list-style-type: none"><li>• One sample capacity per BioFire Torch Module (with up to 12 samples per BioFire Torch)</li></ul>  |
| Run Time                 | <ul style="list-style-type: none"><li>• Sample run time about one hour</li></ul>  |
| User Interface           | <ul style="list-style-type: none"><li>• System Base with touch screen and barcode scanner</li></ul>   |
| Data Output              | <ul style="list-style-type: none"><li>• Automatic analysis with end-of-run interpretive reports</li></ul>   |
| Fluorescence Acquisition | <ul style="list-style-type: none"><li>• Single color optics module: 475nm excitation, 545nm emission, and sensor imaging</li></ul>  |
| Temperature Control      | <ul style="list-style-type: none"><li>• Operating temperature 15°C to 30°C</li><li>• Peltier devices:<ul style="list-style-type: none"><li>• Ambient to 100°C</li><li>• Ramp rate from 0.1–0.5°C /sec on melt</li></ul></li></ul> |
| Operations Specification | <ul style="list-style-type: none"><li>• 15°C to 30°C @ 20 to 80% relative humidity (non-condensing)</li><li>• -16m to 3048m</li><li>• Indoor use only</li></ul>   |

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|---------------------------|---|-------------|-----------|---------------------|---------------------|--|
| Shipping Specifications   | <ul style="list-style-type: none"> <li>• -30°C to 38°C @ 5 to 85% relative humidity (non-condensing)</li> <li>• -16m to 10,600m</li> </ul>  |             |           |                     |                     |  |
| Power Requirements        | Qty. of Modules   | Voltage     | Frequency | AC Current at 120 V | AC Current at 240 V |  |
|                           | 2   | 100-240 VAC | 50-60 Hz  | 3.2 A               | 1.7 A               |  |
|                           | 4   |             |           | 5.0 A               | 2.8 A               |  |
|                           | 6   |             |           | 6.9 A               | 3.8 A               |  |
|                           | 8   |             |           | 8.8 A               | 4.8 A               |  |
|                           | 10  |             |           | 10.6 A              | 5.8 A               |  |
|                           | 12  |             |           | 12.5 A              | 6.9 A               |  |
| Fuse                      | <ul style="list-style-type: none"> <li>• 250V 3.15A Type T (Modules)</li> <li>• 250V 10A Type T (System Base)</li> </ul>  |             |           |                     |                     |  |
| Dimensions and Weight     | <ul style="list-style-type: none"> <li>• 18 x 29 x 11.5 in (45.8 x 73.7 x 29.2 cm) (W x D x H; System Base only) <ul style="list-style-type: none"> <li>• 4.5 in (11.4 cm) (H; Modules only)</li> <li>• 34 in (86.4 cm) max height (12 Modules)</li> </ul> </li> <li>• Weight: Approximately 268 lbs (121.6 kg) maximum: <ul style="list-style-type: none"> <li>• System Base – 36 lbs (16.3 kg)</li> <li>• Modules – 15 lbs (6.8 kg) each</li> <li>• Duplex (Module enclosure) – 6.5 lbs (~3 kg) each</li> </ul> </li> </ul> |             |           |                     |                     |  |
| EMC Requirements          | <ul style="list-style-type: none"> <li>• The BioFire® FilmArray® Torch complies with the emission and immunity requirements in IEC 61326: Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements.</li> </ul>  |             |           |                     |                     |  |
| Safety Requirements       | <ul style="list-style-type: none"> <li>• The BioFire Torch complies with IEC 61010-2-101: Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-101: Particular requirements for in vitro diagnostic (IVD) medical equipment.</li> </ul>  |             |           |                     |                     |  |
| CPU                       | <ul style="list-style-type: none"> <li>• Intel®</li> </ul>  |             |           |                     |                     |  |
| Storage and Memory        | <ul style="list-style-type: none"> <li>• 512 GB hard drive or greater • 16 GB RAM or greater</li> </ul>   |             |           |                     |                     |  |
| Interface and Peripherals | <p>System Base</p> <ul style="list-style-type: none"> <li>• 12+1 Ethernet network interfaces</li> <li>• 4 USB connections or more</li> </ul> <p>Module</p> <ul style="list-style-type: none"> <li>• One Ethernet network interface</li> </ul>   |             |           |                     |                     |  |
| Display                   | <ul style="list-style-type: none"> <li>• LCD</li> <li>• 10.6" diagonal (26.9 cm)</li> <li>• 1280 x 768 resolution</li> <li>• Capacitive touch screen interface</li> </ul>   |             |           |                     |                     |  |
| Operating System          | <ul style="list-style-type: none"> <li>• Microsoft® Windows® OS as released with the BioFire® FilmArray® System</li> </ul>  |             |           |                     |                     |  |

### 3. BioFire® FilmArray® System Specifications

Select a clean, well-ventilated area that is large enough to fit the BioFire® FilmArray® Torch.

- There must be at least 1 inch (2.6 cm) between the rear panels and any other surface (such as the wall) to allow for proper air flow.
- The depth of the bench-top space should be at least 30 in (77 cm).
- The width of the bench-top space should be at least 19 in (49 cm).
- The height of the space required depends on the number of Modules installed:
  - System Base – 11.5 in (30 cm)
  - System Base + 1 Duplex – 16 in (41 cm)
  - System Base + 2 Duplexes – 20.5 in (53 cm)
  - System Base + 3 Duplexes – 25 in (64 cm)
  - System Base + 4 Duplexes – 29.5 in (75 cm)
  - System Base + 5 Duplexes – 34 in (87 cm)

The BioFire Torch complies with the emission and immunity requirements in IEC 61326. It is advisable to evaluate the electromagnetic environment prior to operating the device. **CAUTION:** Do not use this device in close proximity to sources of strong electromagnetic radiation (unshielded intentional radio frequency sources, for example) because these may interfere with the operation of the BioFire Torch.



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## Technical Support Contact Information

BioFire is dedicated to providing the best customer support available. If you have any questions or concerns about this process, please contact the FilmArray Technical Support team for assistance.

| Customer and Technical Support for U.S. Customers   |  |
|---|--|
| <b>Reach Us on the Web</b><br>www.biofiredx.com   | <b>Reach Us by Phone</b><br>1-800-735-6544 –Toll Free<br>(801) 736-6354, select<br>Option 5 - Utah |
| <b>Reach Us by E-mail</b><br>support@biofiredx.com  | <b>Reach Us by Fax</b><br>(801) 588-0507   |
| <b>Reach Us by Mail</b><br>515 Colorow Drive<br>Salt Lake City, UT 84108<br>USA   |  |
| Customer and Technical Support Outside of the U.S.  |  |
| <b>For International FilmArray technical assistance and support, please contact your local bioMérieux representative or authorized distributor.</b> |  |

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