3M Molecular Detection System (MDS100) Components
- Instrument
- Instrument Pluggable Heater
- Speed Loader Tray
- Power Cord and USB Cable
- Safety Sheet/Installation Guide

3M Molecular Detection System Accessory Kit — Included with MDS100
- Chill Block Insert
- Cap/Decap Tool — Lysis
- Cap/Decap Tool — Reagent
- Empty Lysis Tube Rack
- Empty Reagent Tube Rack

3M Molecular Detection System — Additional Accessories
- Heat Block Insert (150 x 96 x 58mm/5.9 x 3.8 x 2.3 in.)
  - For use with a 2 block capacity dry block heater

Additional System Requirements — Not Provided by 3M
- Computer workstation* and printer
  - Operating System: Microsoft® Windows® 7 or 8 (32 or 64-bit)
    - CPU: 2.0 GHz, RAM: 2 GB, HDD: 20 GB available disk space, 1024x768 Display, USB 2.0
- 8-channel pipettor (5.0–50µL) and tips
- Single channel pipettor (5.0–50µL) and tips
- Digital or analog dry block heater
  - 2 block capacity

*Operating System: Microsoft® Windows® 7 (32- or 64-bit), Microsoft® Windows® 8 (32- or 64-bit) or Windows® 10 (64-bit);
CPU: 2.0 GHz Intel Pentium 4 or similar processor;
RAM: 2 GB (3 GB recommended); HDD: 20 GB available disk space;
1024 x 768 Display; USB 2.0. Internet connection needed to download Molecular Detection System Software.

### Instrument Specifications

#### Electrical Specifications

<table>
<thead>
<tr>
<th>Model MDS100</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>24 V</td>
</tr>
<tr>
<td>Current</td>
<td>2.5 A</td>
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</table>

#### Power Supply

<table>
<thead>
<tr>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
</tr>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Maximum Input Current</td>
</tr>
<tr>
<td>Output Voltage</td>
</tr>
<tr>
<td>Output Current</td>
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</table>

#### Environmental Operating Conditions

<table>
<thead>
<tr>
<th>Environmental Condition</th>
<th>Operating Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altitude</td>
<td>Max 2000m</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>15°C–35°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-10°C–60°C</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>30–80% non-condensing</td>
</tr>
<tr>
<td>Pollution Degree</td>
<td>2</td>
</tr>
<tr>
<td>Installation (Overvoltage Category)</td>
<td>II</td>
</tr>
<tr>
<td>Indoor use only</td>
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</tr>
</tbody>
</table>

#### Dimensions

- Length: 292mm (11.5 in.)
- Width: 213mm (8.4 in.)
- Height: 96mm (3.8 in.)

- Weight: 4.3kg (9.5 lb.)
- External Connectors
  - USB 2.0 type B connector
  - Male 2.1mm ID 5.5mm OD Jack
A total solution you can trust.

**3M™ Molecular Detection Assays**
- 3M Molecular Detection Assay 2 – *Salmonella*
- 3M Molecular Detection Assay 2 – *E. coli* O157 (including H7)
- 3M Molecular Detection Assay 2 – *Listeria*
- 3M Molecular Detection Assay 2 – *Listeria monocytogenes*
- 3M Molecular Detection Assay 2 – *Cronobacter*
- 3M Molecular Detection Assay 2 – *Campylobacter*
- 3M Molecular Detection Assay 2 – STEC Gene Screen (*stx*)
- 3M Molecular Detection Assay 2 – STEC Gene Screen (*stx and eae*)
- 3M Molecular Detection Matrix Control

**3M™ Enrichment Media**
- 3M Buffered Peptone Water Broth (ISO)
- 3M Demi Fraser Broth Base
- 3M Fraser Broth Base

**3M™ Sample Collection**
- 3M Enviro Swabs
- 3M Hydrated-Sponges, Dry-Sponges and Sponge-Sticks
- 3M Sample Bags

**Ordering Information**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDS100</td>
<td>3M™ Molecular Detection Instrument and Accessory Kit</td>
<td>1</td>
</tr>
<tr>
<td>MDSSLT</td>
<td>3M™ Molecular Detection Speed Loader Tray</td>
<td>1</td>
</tr>
<tr>
<td>MDSCBIN</td>
<td>3M™ Molecular Detection Chill Block Insert</td>
<td>1</td>
</tr>
<tr>
<td>MDSCDL</td>
<td>3M™ Molecular Detection Cap/Decap Tool — Lysis</td>
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<tr>
<td>MDSCDR</td>
<td>3M™ Molecular Detection Cap/Decap Tool — Reagent</td>
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<tr>
<td>MDSHBIN</td>
<td>3M™ Molecular Detection Heat Block Insert</td>
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</tr>
</tbody>
</table>

**Additional Accessories — Included in Accessory Kit**

**Additional Accessories — Not Included in Accessory Kit**

Certifications and Validations

3M Molecular Detection Assays have been validated by internationally-recognized third-party agencies, including AOAC® INTERNATIONAL and AFNOR Certification, in addition to recognitions from government and regulatory organizations in countries around the world. Visit us at 3M.com/foodsafety/MDA2 for detailed information.

**End-to-End Solutions**

With more than 30 years of global experience in the food and beverage industry, 3M Food Safety offers a full line of products that work together for consistent, reliable results.

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