The Sentinel® MH is an advanced high-speed multi-function pressure decay or mass flow leak test instrument. It provides high-resolution leak test measurements with fast and repeatable results in a compact modular design allowing placement closer to the part.

**Applications**
- Automotive
- Powertrain
- Consumer Goods
- Energy
- HVAC/R
- Medical
- Consumer Electronics
- Other Transportation

**Highlights**
- 32 test programs
- High-resolution
- CTSnet LT PC application interface
- Live data streaming
- Stores up to 5000 test results
- Cost-effective

**Sentinel MH Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing (HxWxD)</td>
<td>6.5 x 3.5 x 8.5 in (165 x 90 x 215 mm)</td>
</tr>
<tr>
<td></td>
<td>See mounting and clearance diagrams</td>
</tr>
<tr>
<td>Electrical</td>
<td>24 VDC +/- 1% 1.5 Amps</td>
</tr>
<tr>
<td>Air Quality</td>
<td>ISO 8573-1:2010 [2:2:2] Compressed air or nitrogen only</td>
</tr>
<tr>
<td>Pressure Regulation</td>
<td>External (customer supplied) or Internal Electronic regulator</td>
</tr>
<tr>
<td>Test Pressure</td>
<td>Vac – 200 psig</td>
</tr>
<tr>
<td>Pilot Pressure</td>
<td>55 - 70 psig (3.8 – 4.8 bar)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>41-104° F (5-40° C)</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>90% non-condensing</td>
</tr>
<tr>
<td>I/O</td>
<td>7 Inputs / 5 Outputs</td>
</tr>
<tr>
<td>Instrument Weight</td>
<td>4.9 lbs (2.2 kg)</td>
</tr>
</tbody>
</table>
Pressure Decay Test Capabilities

- Differential Pressure/Vacuum Decay - $\Delta P$
- Differential Pressure/Vacuum Decay - $\Delta P/\Delta T$
- Differential Pressure/Vacuum Decay - Leak Standard
- Differential Pressure/Vacuum Decay - Leak Rate
- Occlusion (Back Pressure)

Interfaces

- Communication via RS232, TCP/IP (Telnet), and EtherNet/IP™
- Tooling control for simple applications
- I/O: 7 inputs / 5 outputs independently set per test program

Measurement Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Accuracy*</td>
<td>±0.006 % FS</td>
</tr>
<tr>
<td>Measurement Resolution</td>
<td>0.000001 Δpsi</td>
</tr>
<tr>
<td>Leak Rate Resolution</td>
<td>0.00005 sccm</td>
</tr>
</tbody>
</table>

*Consult factory for details

Mass Flow Test Capabilities

- Mass Flow Test Types
  - Mass Flow
  - Mass Flow - Leak Standard
- Flow rate
  - Displayed resolution: Range is selectable X - X.XXXXX displayed units
- Flow Transducer Options:
  - 0.5-50 scc/min
  - 2-250 scc/min
  - 5-500 scc/min
  - 10-1,000 scc/min
  - 30-3,000 scc/min
  - 100-10,000 scc/min

Options

- Electronic regulator (pressure decay only)
- Multiple pressure ranges
- External leak standard port

Accessories

- Calibrated leak standard
- CTS Connects
- Calibrated adjustable leak simulator
- Filter kit

CTSnet LT

- Intuitive user interface that allows easy control right from your PC
- Connect → Configure → Run a test (Start/Stop) → Read results
- Monitor test in real-time
- Export configuration, calibrations, and results
- Available in English, German and Chinese
Pressure Decay Mounting and Clearance Position

Mass Flow Mounting and Clearance Position