

Sentinel[®] MH

COMPACT, HIGH-RESOLUTION INDUSTRIAL LEAK TESTER



Highlights

- ✓ 32 test programs
- ✓ High-resolution
- ✓ CTSnet PC application interface
- ✓ Live data streaming
- ✓ Stores up to 5000 test results
- ✓ Cost-effective
- ✓ High Speed Option

Description

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

Sentinel MH Specifications

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

Pressure Decay Test Capabilities

- Differential Pressure/Vacuum Decay - ΔP
- 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

Measurement Accuracy*	± 0.006 % FS
Measurement Resolution	0.000001 Δ psi
Leak Rate Resolution	0.00005 sccm

*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.XXXXXX 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

High Speed Test Capabilities

- Absolute Pressure/Vacuum Decay - ΔP
- Absolute Pressure/Vacuum Decay - Leak Standard
- Sample Rate:
 - Reduced from 50ms standard to 10ms
- Certain Features are disabled to get faster sample rate
 - Monitor 1 screen summary: Disabled
 - Data Streaming (RS232/TELNET/USB): Disabled
 - No storage for results. Only 2000 stored in RAM and lost on power cycle
 - Pneumatic code A only
 - No log storage on SD card

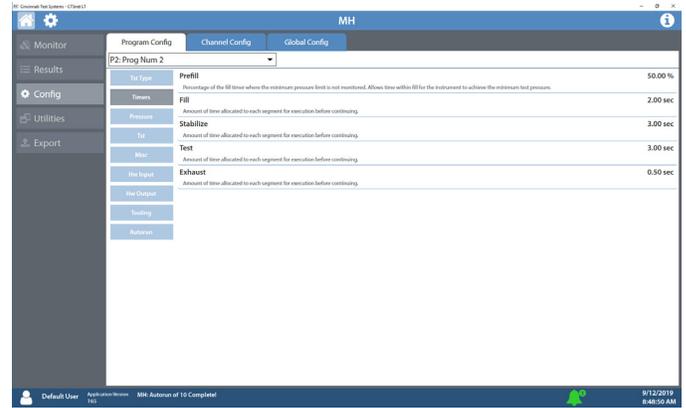
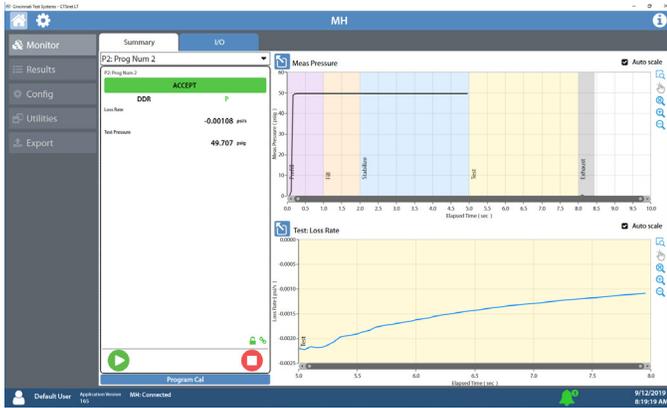
Accessories

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

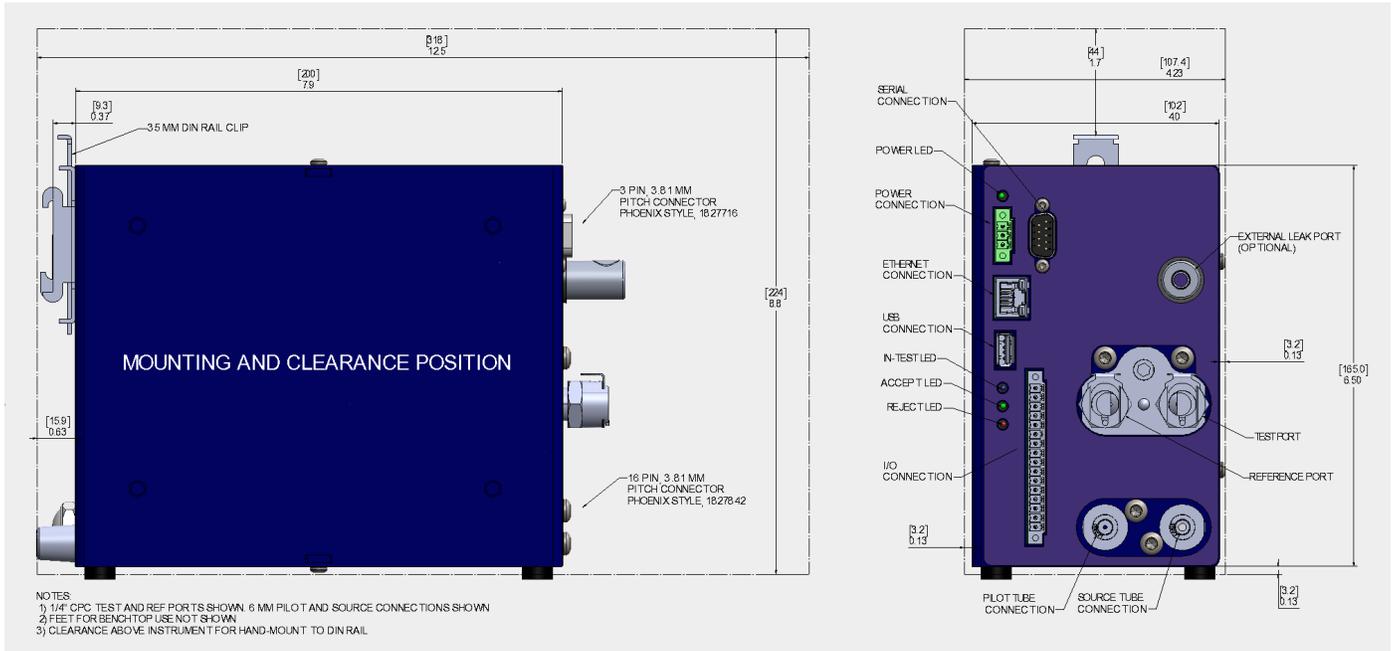
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CTSnet

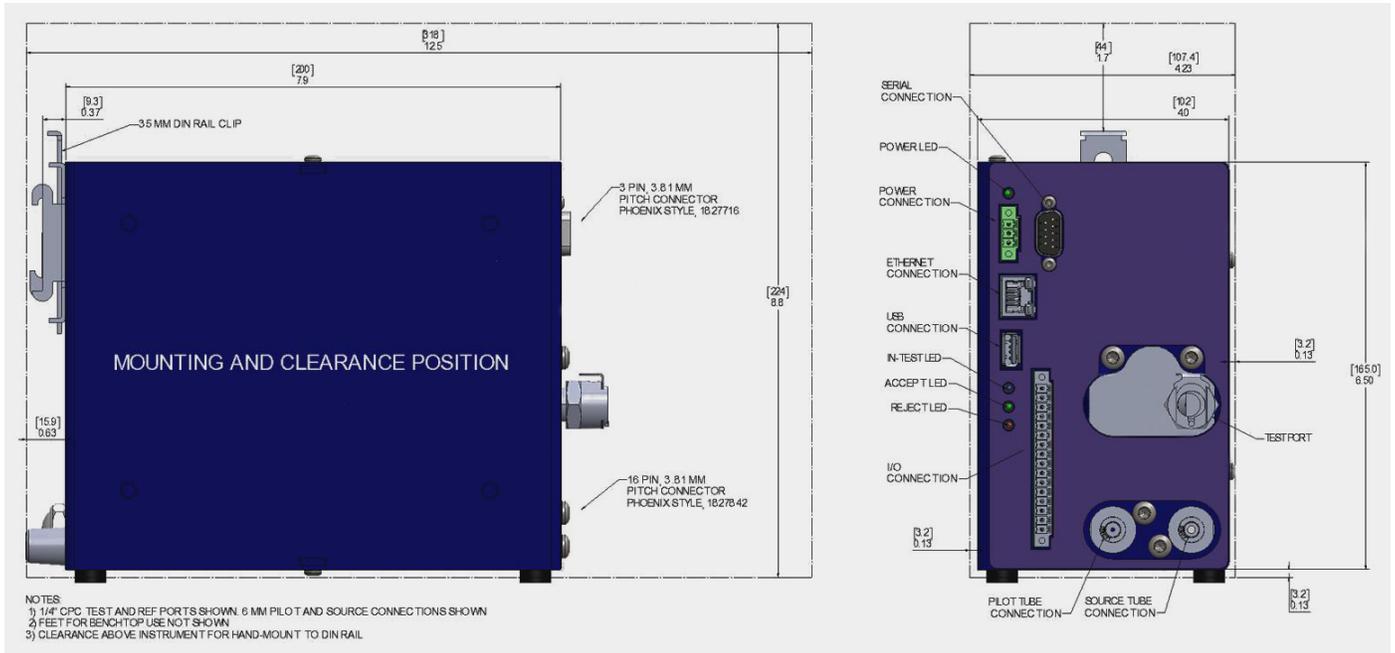
- Intuitive user interface that allows easy control right from your PC
- Connect → Configure → Run a test (Start/Stop) → Read results
- Monitor test in real-time
- Export configuration, calibrations, and results
- Available in English, German and Chinese



Pressure Decay Mounting and Clearance Position



Mass Flow Mounting and Clearance Position



High Speed Mounting and Clearance Position

