

Molecular Leakage Detector



For hydrogen applications

The MLD is a cost effective, long life flammables gas detector, based on MPS technology, that reduces maintenance needs and allows the customer to have highly reliable product with the latest technology.

This hydrogen version has built-in the "gas selectivity" option: the customer can choose to get alarms only for H2 or for any flammables gas leaks in the area. Highly flexible and reliable, this detector combines the Molecular Property Spectrometry technology with a specific electronic to provide the Modbus, the analog 4-20mA and the voltage output.

It is also equipped with two relays (Alarm 1 and Alarm 2/Malfunction) to offer a clean signal that can be managed in an intuitive way. It comes with 1,5 or 3 meters cable, without connector.

Applications

- Fuel cells
- **Electrolizers**
- Storage tanks
- **Piping**
- **Boilers**
- Hydrogen fuelled engines

Part Number Definition

MLD-MN072-3 Part Series Sensors Type S4 = NevadaNano Type S4 MN = NevadaNano Type MINI Gas configuration 7 = Hydrogen Power Supply -1 = 12VDC 2 = 24VDC Cable Lenght -

Blank = 1.5m

3 = 3.0 m

Features & Benefits

- No field calibration needed
- Immunity to poisoning
- No cross sensitivity
- Gas recognition and selectivity
- Fail Safe (built in diagnostic)
- Long life (+15 years without calibration)
- Wide Temperature working range (from -40° to +75°C)
- High accuracy with built-in Temperature, humidity and pressure sensors
- T Rh P values available as signals
- Multiple digital and analog outputs





TECHNICAL FEATURES

Technology	Molecular Property Spectrometry by NevadaNano
Gas detected	Hydrogen
Measurament range	0-100% LEL
Accuracy	±5% LEL
Response Time (T90)	<20 sec.
Resolution	O,1% LEL
Lifetime	15+ years
Detector Operating Features	
Signals Output	Gas concentration, Temperature, Humidity, Pressure, Status Prealarm, Alarm, Fault, Lifetime
Measurament Output	Modbus 4-20mA 0,4-2V Relays
Visual Information	3 x LED (Status, Prealarm, Alarm/Fault)
Supply Voltage	12-24VDC
Power Consumption	35mA average - 50mA peak
Operating Temperature	-40° to +75°C
Operating Humidity	0 - 100% RH
Operating Pressure	80 to 120 kPa
Protection grade	IP65
Dimensions MLD-MN	128 x 89 x 22 mm
Dimensions MLD-S4	128 x 89 x 37 mm
Certifications & Approvals	CE, EMC, Rohs, ATEX, EN60079-0, EN60079-11 Intrinsecally Safe device - Gr.II Cat.3G Ex ic IIC TX Gc





More info here



On running tests for SIL1/SIL2 according to EN50402 / IEC50271