

# Molecular Leakage Detector

For hydrogen applications

H<sub>2</sub>

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 H<sub>2</sub> 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

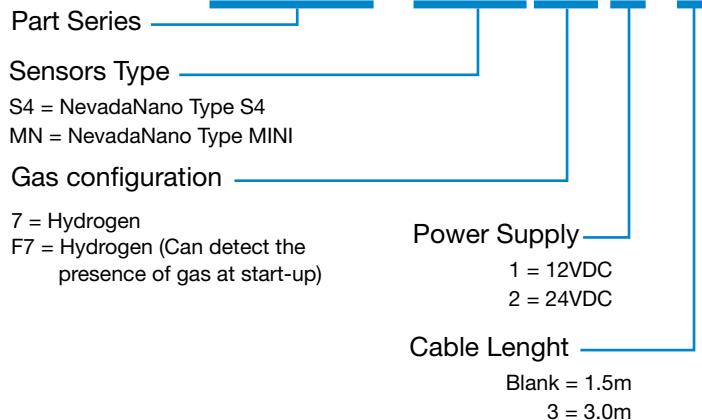


with NevadaNano MPS™ Technology inside



## Part Number Definition

**MLD-MN072-3**



## 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
- High accuracy with built-in Temperature, humidity and pressure sensors
- T - Rh - P values available as signals
- Multiple digital and analog outputs

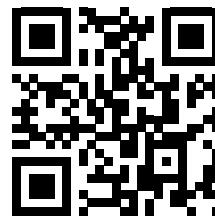
## TECHNICAL FEATURES

### Sensor Performances

Technology	Molecular Property Spectrometry™ by NevadaNano
Gas detected	<b>Hydrogen</b>
Measurement range	0-100% LEL
Accuracy	±5% LEL
Response Time	<12 sec.
Response Time (T90)	<20 sec.
Resolution	0,1% LEL
Lifetime	15+ years

### Detector Operating Features

Signals Output	Gas concentration, Status, Prealarm, Alarm, Fault, Lifetime, Pressure, Humidity, Temperature
Communication Output	Digital: Modbus (RS-485) - Analog: 4-20mA - Analog: 0.4-2V - Dry Contacts: 2x Alarm Relays (LOW conc. - HIGH conc./FAULT)
Visual Information	3 x LED (Status, Prealarm, Alarm/Fault)
Supply Voltage	12-24VDC
Power Consumption	Avg. 50mA - Peak: 60mA (12VDC)   80mA (24VDC)
Operating Temperature	-40° to +70°C (12VDC)   -40° to +60°C (24VDC)
Operating Humidity	0 - 100% RH
Operating Pressure	80 to 120 kPa
Protection grade	IP65
Dimensions MLD-MN	13 x 8 x 2,5 cm
Dimensions MLD-S4	13 x 8 x 4,0 cm
Certifications & Approvals	CE, EMC, Rohs, EN60079-0, EN60079-11, ATEX SIL 2 according to IEC61508 / EN50402 / IEC 50271 / IEC 50270 (pending)



More info here