POLI MP400

Multi-Gas Monitors

The POLI MP400 is a basic 4-gas detector for worker safety in hazardous locations, with sensors for oxygen (O_2), combustibles (LEL), carbon monoxide (CO) and hydrogen sulfide (H_2S). A hydrogen cyanide (HCN) version (LEL/O_2/CO/HCN) is a low-cost monitor for firefighters, and a 5-gas version is available for those who need to include sulfur dioxide (SO_2) measurements. The MP400 is designed to be extremely rugged with a robust housing and gas sampling by diffusion for no moving parts. The simple, 2-button operation results in ultimate ease of use and significantly reduced time spent training the user. The rechargeable Li-ion battery pack lasts 16 hours or more in typical use, and the unique Man-Down alarm feature notifies nearby workers if the user becomes incapacitated.

Features, Functions and Benefits

- Diffusion sampling
- Battery operation 16 hours
- Durable double shot outer case
- 360-Degree LED alarm bar
- Man-Down alarm
- USB Micro charger & communications cable
- Flip screen
- Integrated calibration cup
- Smart sensors carry ID and calibration
- 6 Months continuous datalogging
- Modular design

Ver 1.2

POLi Specifications

Detector Specifications

Size	5.74 x 3.31 x 1.65 in (140 x 84 x 42 mm)
Weight	13.5 oz (384 g)
Sensors	• Electrochemical for O_2, CO, H_2S and HCN • Pellistor for LEL
Response time (t90)	• 15 seconds (LEL/CO/H_2S/O_2) • 30 seconds (CO/H_2S combination sensor) • 60 seconds (HCN)
Battery	Rechargeable Li-ion pack: ≥16 hours
Direct Readout	• Real-time reading of gas concentration • visual compliance indicator • battery status • datalogging on/off • STEL, TWA, peak and minimum values • Man-Down alarm on/off
Display	128 x 128 graphical LCD, 1.77 x 1.73 in (45 x 44 mm), with LED backlight for enhanced display readability. Automatic screen "flip" feature
Keypad	2 Operation keys
Calibration	Manual calibration. CaliCase option allows automatic bump test and calibration on up to 4 units simultaneously
Alarms	• Audible (95 dB @ 30 cm) • Visual (flashing bright red LEDs) • Vibration • On-screen indication of alarm conditions • Man-Down alarm
Datalogging	Continuous datalogging (6 months for 4 sensors at 1 minute intervals, 24 hours/day and 7 days/week)
Charging and Communication	Charging, data download, instrument setup and firmware upgrades on PC or laptop via PC comm, cradle, travel charger, or CaliCase
Temperature	-4° to 122°F (-20° to 50°C)
Humidity	0% to 95% Relative humidity (non-condensing)
IP Rating	IP-67
EMC/RFI	EMC directive: 2014/30/EU
Safety Certifications	(UL) Class I, Div 1, Group ABCD T4, $-20°C \le T_{amb} \le +50°C$ **IECEx** Ex ia IIC T4 Ga ATEX II 1G Ex ia IIC T4 Ga (pending) CE European Conformity (pending)
Warranty	2 Years including sensors

Ordering Information

Version	Sensor/Range	Part No.
5-Gas	LEL 0.1 - 100% O_2 0.1 - 30% CO* 1 - 500 ppm / H_2S* 0.1 - 200 ppm SO_2 0.1 - 20 ppm	M004-0028-000 * (combination CO/H_2S sensor)
4-Gas	LEL 0.1 - 100% O_2 0.1 - 30% CO 1 - 1000 ppm H_2S 0.1 - 100 ppm	M004-0001-000
4-Gas	LEL 0.1 - 100% O_2 0.1 - 30% CO 1 - 1000 ppm HCN 1 - 100 ppm	M004-0027-000
3-Gas	LEL 0.1 - 100% O_2 0.1 - 30% H_2S 0.1 - 100 ppm	M004-0002-000
2-Gas	LEL 0.1 - 100% O_2 0.1 - 30%	M004-0005-000
1-Gas	LEL 0.1 - 100%	M004-0009-000

* Due to ongoing research and product improvement, specifications are subject to change without notice *