

The POLI multi-gas meters offer 4- or 5-gas monitoring of toxic gases, Oxygen (O₂), combustibles (LEL), Carbon Dioxide (CO₂) and volatile organic compounds (VOCs).

The POLI with pump is an advanced model with built-in pump that allows a full selection of sensors for a wide range of applications, including Confined Space Entry, while the POLI is a basic, 4-gas diffusion detector for worker safety at hazardous locations. Smart sensors carry calibration and ID information with them for quick exchange in the field during Hazmat response. The pumped version POLI has rugged construction and easy-to-learn 2-button operation. The unique Man-Down alarm feature notifies nearby workers if the user becomes incapacitated.



Key Features

- Wide selection of "plug-and-play" Smart Sensors
- 16-Hour rechargeable Li-ion battery
- Pump-off switch saves battery for longer operation time
- Automatic flow fault on pump
- 360-Degree LED alarm bar
- Man-Down alarm
- USB Micro charger & communications cable
- Flip screen
- 6 Months continuous datalogging
- Durable double shot outer case

Application Examples

- Confined space entry
- Personal PID detector
- Tank entry
- Multi gas personal monitor in industries such as:
(Petro)chemical
Environmental
Shipping
Oil and Gas

DETECTOR SPECIFICATIONS

Size	140 x 84 x 42 mm (5.74 x 3.31 x 1.65 in)
Weight	435 g (15.5 oz)
Sensor technology	Over 30 interchangeable and field-replaceable sensors including PID for VOCs, EC for Toxic and O ₂ , Pellistor for LEL, and NDIR for LEL, vol% and CO ₂
Temperature	-20°C to 50°C (-4 to 122°F)
Humidity	5% ~ 95% RH (Non-condensing)
Alarm type	High Alarm, Low Alarm, TWA Alarm, STEL Alarm, Man-Down alarm with pre-alarm, On-screen indication of alarm conditions
Alarm signal	Acoustic: 95 dB @ 30 cm Visual: Flashing bright red LEDs Vibration
Panic Alarm	Yes
Display	128 x 128 graphical 45 x 44 mm LCD Display (1.77 x 1.73 in), with LED backlight for enhanced readability. Automatic screen "flip" feature
Calibration	2-point calibration, zero and span. Power-on zero calibration with user confirmation Multi Dock allows automatic bump test and calibration on up to 4 units simultaneously
Data log	Continuous datalogging (6 months for 4 sensors at 1-minute intervals, 24 hours/day and 7 days/week)
Battery	Rechargeable Li-ion pack: 16 hours in diffusion mode, 12 hours with pump
Measurement	Built-in pump (sample from up to 30m) or diffusion
Housing	Polycarbonate and rubber
Response time T⁹⁰	15 seconds (LEL/CO/H ₂ S/O ₂) Others gases vary (technical note 4: Sensor Technical Data Summaries)
IP-Rating	IP-65 (pump versions); IP-67 (diffusion versions)
EMI/RFI	Compliant with EMC 2014/30/EU
Safety certifications	UL: Class I, Div 1, Group ABCD, T4, -20°C ≤ Tamb ≤ +50°C IECEX: Ex ia IIC T4 Ga ATEX: II 1G Ex ia IIC T4 Ga CE: Conformité Européenne
Warranty	2 Years on instruments 2 Years on sensors for pellistor LEL, and O ₂ , CO, H ₂ S, SO ₂ , HCN, NO, NO ₂ , and PH ₃ EC sensors 1 Year on other sensors

SENSOR SPECIFICATIONS

Model		Detectable Gas Ranges	Resolution
PID		0-200 ppm 0-2000 ppm	0.01 ppm 0.1 ppm
O ₂ Oxygen	Lead-Free O ₂	0-30 %vol	0.1 %vol
LEL% Combustibles		0-100%LEL	1%LEL
Hydrocarbons (vol%)		0-100 %vol	0.1 %vol
Dual-Range LEL%/vol%		0-100 %vol	1%LEL
CO ₂ (ATEX Zone 1) Carbon Dioxide		0-50000 ppm	100 ppm
CO Carbon Monoxide		0-1000 ppm	1 ppm
H ₂ S Hydrogen Sulfide		0-100 ppm 0-1000 ppm	0.1 ppm 1 ppm
CO + H ₂ S	CO	0-500 ppm	1 ppm
	H ₂ S	0-200 ppm	0.1 ppm
SO ₂ + H ₂ S	SO ₂	0-20 ppm	0.1 ppm
	H ₂ S	0-100 ppm	0.1 ppm
SO ₂ Sulfur Dioxide		0-20 ppm 0-100 ppm	0.1 ppm 0.1 ppm
Cl ₂ Chlorine		0-50 ppm	0.1 ppm
ClO ₂ Chlorine Dioxide		0-1 ppm	0.01 ppm
NO Nitric Oxide		0-250 ppm	1 ppm
NO ₂ Nitrogen Dioxide		0-20 ppm	0.1 ppm
H ₂ Hydrogen		0-1000 ppm	10 ppm
PH ₃ Phosphine		0-20 ppm 0-1000 ppm	0.01 ppm 1 ppm
ETO Ethylene Oxide		0-100 ppm	0.1 ppm
NH ₃ Ammonia		0-100 ppm 0-500 ppm	1 ppm 1 ppm
HF (Diffusion only) Hydrogen Fluoride		0-20 ppm	0.1 ppm
HCl Hydrogen Chloride		0-15 ppm	0.1 ppm
HCN Hydrogen Cyanide		0-100 ppm	1 ppm
CH ₃ SH Methyl Mercaptan		0-10 ppm	0.1 ppm
C ₂ H ₄ O Acetaldehyde		0-20 ppm	0.1 ppm

