

AimSAFETY™

PORTABLE GAS DETECTION SOLUTIONS
by Macurco

AimSafety by Macurco blends over 50 years of gas detection innovation and development into new, advanced gas monitor solutions that help organizations protect workers and the community, and increase safety, compliance and revenue.



PM500 Series

Advanced, easy-to-use, multi-gas monitor with built-in pump for confined space entry and worker protection in hazardous environments

Macurco's newest addition to the AimSafety portable gas solution lineup is the PM500 sampling type monitor. This rugged handheld, combined with a strong internal pump, can measure up to six gases simultaneously to allow for safe entry in confined spaces and hard-to-reach areas.

PM500 monitors are equipped with audible, visual and vibrating alarms to alert the user of unsafe gas concentrations. The large backlit LCD provides sampled gas concentrations in real-time along with configurable alarm setpoints (low, high, STEL and TWA). Standard target gases include carbon monoxide (CO), hydrogen sulfide (H₂S), oxygen (O₂) and combustible gases. Additional gas options include ammonia (NH₃), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), volatile organic compounds (VOCs) and others.



PM500



PM500

Key Features


- Easy-to-read backlit LCD display
- Provides continuous sample-draw capability with an internal pump
- Quick connector for use with standard 3ft. tubing or sampling probe (optional)
- IP67 dust tight & water resistant
- Up to 5 days continuous run time (IR version)
- IR sensor is immune to poisoning and can be used in inert environments
- Intrinsically safe
- Event & data logging
- Additional sensor options for toxics and VOCs

Applications

- Confined Space
- Oil & Gas
- Refineries & Petrochemical
- Personal Monitoring
- Turnarounds & Plant Maintenance
- Fire Services
- Emergency Response
- Construction
- Welding
- Utilities

PM500 Series

Specifications

Size	5.7"(L) x 3.0"(W) x 1.7"(H) 14.6 cm x 7.7 cm x 4.3 cm
Weight	17.3 oz. (490 g.)
Mounting Type	Clip
Battery	Rechargeable Lithium-Ion Nominal Voltage: 3.7V Nominal Capacity: 4000mAh Maximum Charging Voltage: 6.3V
Runtime	PM500-IR: 5 days PM500-P: 30 hours
Event Logging	30 Events
Data Logging	Calibration Log: 30 EA Bump Log: 30 EA Data Log: Two months or longer
IP Rating	IP67 (IP ratings do not imply that the equipment will detect gas during and after exposure to those conditions)
Display	Segment LCD backlight display
Alarms	Backlight LCD alarm display / LED indicator Audible buzzer (90dB at 10cm) Vibrating alarm
Temperature	-4°F to 122°F (-20°C to 50°C)
Humidity	10% to 90% RH (Non-condensing)
Certifications	<p>UL/CSA Ex db ia IIC T4 Gb Class I, Division 1, Groups A, B, C, and/or D, T4 Class I, Zone 1, AEx db ia IIC T4 Gb</p> <p>IECEX Ex db ia IIC T4 Gb or Ex db ia IIB T4 Gb</p> <p>ATEX Ex db ia IIC T4 Gb or Ex db ia IIB T4 Gb</p> <p>INMETRO Ex d ia IIC T4 Gb or Ex d ia IIB T4 Gb</p> <p>EMC Directive 2014/30/EU</p>  <p><i>Certifications are listed for PM500-IR and vary by model. Refer to manual for complete list.</i></p>
Warranty	Two year limited warranty


Gas Options

Gas	Range	Resolution
CO	0 - 500 PPM	1 PPM
H ₂ S	0 - 100 PPM	0.1 PPM
O ₂	0 - 30 %VOL	0.1 %VOL
Combustible	0 - 100 %LEL	1 %LEL
NH ₃	0 - 100 PPM	0.1 PPM
SO ₂	0 - 50 PPM	0.1 PPM
NO ₂	0 - 20 PPM	0.1 PPM
VOCs	0 - 4,000 PPM	0.1 PPM

Alarm Levels / Calibration Gas Defaults

Gas	Low	High	STEL	TWA	CAL	
CO	35	100	200	35	100	PPM
H ₂ S	10	15	15	10	25	PPM
O ₂	19.5	23.5			18	%Vol
LEL	10	20			50	%LEL
NH ₃	25	50	35	50	50	PPM
SO ₂	2	5	5	5	10	PPM
NO ₂	2.5	5	1	1	10	PPM
VOCs	10	20			100	PPM

Accessories

Part Number	Description	
31-0006-4603-2	Gas Regulator (Demand Flow)	PM500-SPK Wand
37-0551-3344-2	Cal-Gas Quad Mix (CO/H ₂ S/O ₂ /LEL)	
70-2900-0572-0	PM500-CSK Confined Space Kit	
70-2900-0536-8	PM Link PC Communicator	
70-2900-0572-7	PM500-SPK Sampling Probe Kit	
70-2900-0534-1	PM500 Vehicle Charger Kit	
70-2900-0573-1	PM500-STN Bump/Cal Station	