UNI

mPower Electronics
Making Powerful Senses
1-866-mPower7

Single Gas Detectors



The UNI MP100 offers a simple, personal protection for a wide array of toxic gas and oxygen (O_2) measurement applications. In addition to common sensors such as carbon monoxide (CO), hydrogen sulfide (H_2S), nitrogen dioxide (NO_2), ammonia (NH_3) and sulfur dioxide (SO_2), we offer less-common sensors including chlorine (Cl_2), chlorine dioxide (ClO_2), phosgene ($COCl_2$), hydrogen chloride (HCl), arsine (AsH_3), phosphine (PH_3), ozone (O_3), methyl mercaptan and ethylene oxide. Special oxygen monitors are available with long-life lead-free sensors or with inverted alarms for inert gas applications. The monitors have a large LCD providing maximum readability in the field and are made with six bright red LEDs allowing for quick alarm notification. Constructed of strong and durable material, the UNI is designed to be comfortable, yet drop-resistant. The UNI series can easily be bump tested and calibrated with the mPower CaliCase System.

Features, Functions and Benefits

- 50% larger (AA versus 2/3 AA) Lithium Battery
- Widest choice of sensors on the market
- Large display
- 50 Event datalogging
- Low cost of ownership
- Smart sensors
- Solid stainless-steel alligator clip
- Durable housing
- Fast calibration & download using docking station
- UL Classification Class I, II, III, Groups ABCDEFG



UNI Docking Box



CaliCase Docking Station

UNi Specifications

Detector Specifications

Size	3.46 x 2.44 x 1.3 in (88 x 62 x 33 mm)
Weight	4.4 oz (125 g)
Sensors	Electrochemical
Response time (t90)	15 seconds ($CO/H_2S/O_2$) Others vary, see individual sensor specifications in TA Note 4
Battery	Replaceable AA size Lithium battery, 3 years typical operation
Temperature	-4°F to 122°F (-20°C to 50°C)
Humidity	5 to 95% relative humidity (non-condensing)
Alarm Type	• High, Low, STEL & TWA alarms adjustable • Over range alarm • Low battery alarm
Alarm Signal	• 95 dB @ 30 cm • Bright red LEDs • Built in vibrator
Calibration	2-point calibration, zero and span, power on zero (user-selectable)
Event Log	Up to 50 alarm events
IP Rating	IP-67
EMI/RFI	EMC directive: 2014/30/EU
Safety Certifications	c UL us Class I, Div 1, Group ABCD Class II, Div 1, Group EFG Class III, Div 1 T4, -20°C ≤ T_{amb} ≤ +50°C **IECEx** Ex ia IIC T4 Ga **ATEX** CE Ex II 1G Ex ia IIC T4 Ga
Sensor Life	CO & H_2S expected operating life 5 years or longer, others 1 to 2 years as per warranty
Warranty	1 year

Sensor Specifications

Gas	Range/ Resolution (ppm)	Detector P/N
CO (Carbon Monoxide)	500/1	M001-0002-000
	1000/1	M001-0023-000
	2000/1	M001-0026-000
H_2S (Hydrogen Sulfide)	50.0/0.1	M001-0003-000
	100.0/0.1	M001-0054-000
	200.0/0.1	M001-0057-000
	1000/1	M001-0060-000
O_2 (Oxygen)	25/0.1%	M001-0032-000
	30/0.1%	M001-0001-000
O_2 (Oxygen) Lead-Free	25/0.1%	M001-0094-000
	30/0.1%	M001-0095-000
O_2 Inerting Alarms	25/0.1%	M001-0093-000
NH_3 (Ammonia)	100/1	M001-0006-000
	500/1	M001-0090-000
AsH_3 (Arsine)	1.00/0.01	M001-0092-000
Cl_2 (Chlorine)	50.0/0.1	M001-0004-000
ClO_2 (Chlorine Dioxide)	1.00/0.01	M001-0072-000
$COCl_2$ (Phosgene)	1.00/0.01	M001-0020-000
H_2 (Hydrogen)	1000/1	M001-0018-000
	2000/1	M001-0019-000
HCl (Hydrogen Chloride)	15.0/0.1	M001-0008-000
HF (Hydrogen Fluoride)	20.0/0.1	M001-0014-000
HCN (Hydrogen Cyanide)	100/0.1	M001-0005-000
NO (Nitric Oxide)	250/1	M001-0015-000
NO_2 (Nitrogen Dioxide)	20.0/0.1	M001-0011-000
O_3 (Ozone)	5.00/0.01	M001-0009-000
PH_3 (Phosphine)	20.00/0.01	M001-0016-000
SO_2 (Sulfur Dioxide)	20.0/0.1	M001-0007-000
	100.0/0.1	M001-0091-000
C_2H_4O (Acetaldehyde)	20.0/0.1	M001-0080-000
ETO (Ethylene Oxide)	100.0/0.1	M001-0012-000
	200.0/0.1	M001-0069-000
CH_3SH (Methyl Mercaptan)	10.0/0.1	M001-0077-000
THT (Tetrahydrothiophene)	40.0/0.1	M001-0085-000

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