

MIL-RAM TECHNOLOGY

no false alarms

Gas Detection Systems



I₂ Iodine

FEATURES: 2-Wire

2-Wire *smarter* Transmitter

Self-Calibration = Cost Reduction

- ***no false alarms*** - does not react with changes in temperature/humidity/pressure
- **Does Not Drift** - no autozeroing or adjustments required
- **Rapid Warm-up** - ready to calibrate 3 minutes after power applied - does not require bias voltage to stay ready - no need to wait hours for stabilization
- **Not Affected by Humidity** - 5% to 95% relative humidity - continuous
0% to 99% relative humidity - intermittent
- **Not Affected by Temperature** - -40° C to +50° C is not temperature compensated
- **Self-Calibration** - microcontroller electronics automatically adjusts span calibration over time based on typical life curve for sensor - sensors not routinely calibrated stay much closer to proper calibration - reduces calibration frequency - actual field calibration data re-adjusts life curve
- **Sensor Life Remaining** - determined based on sensor life curve, calibration history and electrical characteristics of sensor - shown on LCD display
- **Non-Intrusive One-Man Calibration** - use magnet to actuate zero and span calibration switches behind enclosure glass window - no manual adjustments required - no need to open enclosure
- **Off-site Sensor Calibration** - calibrate sensor in lab and install on any same type *smarter* Transmitter with no further calibration required - calibration data automatically uploads to transmitter to ensure precise calibration
- **Peak Value** - 15 min. TWA/No. days since last gas calibrated
- **Diagnostics** - continuous analysis of transmitter system to report any fault conditions, including replace sensor and sensor disconnected
- **Loop Test** - transmitter outputs 4/8/12/16/20mA signal to verify readings and alarms at controller electronics
- **Maintenance Free** - no replenishment of electrolyte or water during 3+ years of normal life
- **Long Life** - over 3 years continuous operation
- **Fast Response** - 90% of reading in less than 45 seconds
- **Fast Recovery** - 90% recovery in less than 30 seconds
- **Not Saturated** by occasional high concentrations of gas in the work environment (continuous gas exposure reduces service life)
- **Stays Awake** - does not go to sleep when gas is absent for long periods of time
- **Chemically Selective**

SENSORS:

Detection Principle:	Electrochemical
Detection Method:	Diffusion (Sample-Draw Available, Nema 4X)
Detection Range:	0.0-5.0 ppm; 0.0-200 ppm
Output Signal:	Linear
Resolution:	0.1 ppm
Response Time:	<45 sec. to 90% of final reading
Recovery Time:	<30 sec. to 90% recovery
Humidity Range:	5% - 95% RH, non-condensing - continuous 0% - 99% RH, non-condensing - intermittent
Temperature Range:	-40°C to +50°C -40°F to +122°F
Pressure Range:	Atmospheric ±15%
Zero Drift:	<0.1 ppm
Position Sensitivity:	Install vertically
Storage Life:	>18 months in container
Life Expectancy:	>3 years in clean air - factory rechargeable many times



TRANSMITTER SPECIFICATIONS:

Operating Voltage:	10-30VDC, 2-Wire Loop Powered
Transmitter Output:	4-20 mA
Sampling Method:	Diffusion (Sample-Draw Available)
Calibration Method:	Non-Intrusive, magnetic switches
Enclosure:	CSA/FM/UL/CENELEC/KEMA Class I, Div. I, Groups B/C/D Class II, Groups E/F/G Class III, Type 4X
Weight:	3.5lbs/1.589kg.
Part No.:	01-2228SMTR

Note: Specifications subject to change without notice



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