MIL-RAM TECHNOLOGY



Single Gas Portable Instrument Toxic/O₂/VOC Gases

The TOX-BOX Single Gas Portable Instrument provides high resolution measurement (16-bit analog-to-digital conversion) of any Mil-Ram Toxic, Oxygen₂ or VOC sensor with corresponding meter indication (16 character x 2 line LCD display) and local/external alarm function. The TOX-BOX is housed in a rugged, weather-proof plastic instrument case for dependable service under demanding field conditions. The instrument is easily configured through the operator interface consisting of front panel push button switches and a large backlit LCD display (no dip switches). Low, mid, high and fault relays can be used to activate external alarms and/or switch equipment on/off. The alarm relays are easily configured for non-latching/latching, non-energized/energized and 0-255 sec. time delay. The alarm relays can be configured to trigger with increasing or decreasing meter readings. Software filtering can be



enabled at various levels to offer increased stability in noisy electrical environments. A regenerated 4-20mA signal and/or Modbus serial interface (optional) provides reliable connection to a data logger. Continuous diagnostics further ensures system integrity and long-term stable operation and performance.

F e a t u r

- no false alarms patented sensor technology
- ◆ Available with any Mil-Ram Toxic/O₂/VOC Gas Sensor
- On-board pump continuously draws gas sample past sensor
- ◆ Rechargeable 12 VDC sealed lead-acid battery
- Rugged, weather-proof, portable instrument enclosure
- Backlit LCD display and push button switches

- ♦ Alarm Relays: Fully programmable
- Local Alarms: Buzzer and LED indicators
- ◆ Regenerated 4-20mA Output
- ♦ Modbus RTU (optional)
- ♦ Low Battery Indicator
- ◆ Buzzer Silence Mode
- ♦ Alarm Disable Mode
- ◆ Digital Filter
- ♦ Continuous Diagnostics
- ◆ Flash Programming

Specifications

Instrument Type Single Gas Portable

Part No. 01-2001TBS-XX

Input Any Mil-Ram Toxic/Oxygen/VOC gas sensor

Sensors More than 400: Toxic, Oxygen, VOC

Range Many ranges available-depends on gas type

Flow Rate Up to 2 SCFH

Power Source Rechargeable lead-acid battery, 12 VDC

Power Rating 12 VDC @ 2.1W

Battery Charger 110 VAC operation

Battery Life >24 hours continuous/charge (most sensors)

Operator Interface Back-lit LCD display (16 character x 2 lines)

4 push button switches (no dip switches) All parameters front panel programmable

Alarm Levels Low, mid, high, and fault

Local Alarms Integral Buzzer, LED's, LCD messages

Low Alarm: buzzer pulses, green LED Mid Alarm: buzzer pulses faster, yellow LED High Alarm: buzzer continuous, red LED Fault Alarm: buzzer continuous, red LED

All alarm conditions accompanied by LCD messages

Alarm Relays Low, mid, high and fault

SPST, 10 A @ 28 VDC, resistive 12 A @ 120 VAC, resistive

Relay Function Front-Panel programmable for non-

latching/latching, non-energized/energized, 0-255 sec. time delay and alarm on increasing/decreasing reading. Fault relay factory set: non-latching, normally non-energized and 0 sec. time delay

Digital Filter Selectable levels of digital filtering for increased

stability in noisy electrical environments

Analog Output Regenerated 4-20mA output (16-bit resolution)

for connection to data logger or chart recorder

Serial Interface Modbus RTU protocol

(optional)

Operating Temp. -20°C to +50°C

-4°F to +122°F

Rel. Humidity 5-95% non-condensing

Enclosure Type Plastic-ultra high impact structural copolymer,

neoprene o-ring, dust/water/chemical/corrosion

resistant. Colors: yellow, orange, or black

Enclosure 10 5/8 in. W x 9 3/4 in. H x 6 7/8 in. D

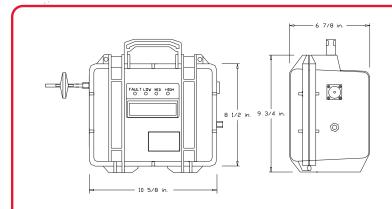
Dimensions

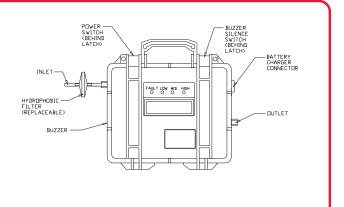
Options RS-485 Modbus RTU, 2 or 4-wire

External Alarm Station 4-20mA Data Logger Calibration Kits Battery Charger

Continuous Operation Adapter

Specifications subject to change without notice







Mil-Ram Technology, Inc.

Patented Technology

no false alarms

Toll Free: (888) 4MILRAM • (888) 464-5726 48009 Fremont Blvd • Fremont, CA 94538 Tel: (510) 656-2001 • Fax: (510) 656-2004