

# MIL-RAM TECHNOLOGY

Since 1990

## Gas Detection Controller

Digital Modbus RTU *smarter* Transmitter Network

Occupational Health & Safety  
2009 New Product of the Year Award

### TA-2048MB Controller Features

- ◆ Use with any Mil-Ram Model TA-2100MB *smarter* Transmitter. Toxic/LEL/VOC/Oxygen: hundreds of different gases and vapors.
- ◆ 48-Channel system consists of three (3) separate 16-channel Modbus Networks. Local or remote power supply options.
- ◆ Multi-drop *smarter* Transmitter (Sensor) Networks. Eliminates separate (costly) wiring to each Transmitter.
- ◆ RS-485 digital Modbus RTU; half or full-duplex configuration.
- ◆ Four relays (SPDT), 10 Amp. common to all channels on each Network. Select energized/non-energized, latching/non-latching function. Low, Mid, High and Fault relays. LED alarm indicators. Audible buzzer alarm and external alarm stations optional.
- ◆ *Optional*: Remote Relay Modules, Modbus enabled, can be installed at any point on RS-485 network. Up to 16 modules per network. Up to 48 different zones. Conveniently install relays at point of use. Eliminates long wiring runs between relays and field installed alarms.
- ◆ *Optional*: Remote Analog Output Module. Provides discrete analog 4-20mA output (16 bit resolution) per channel.
- ◆ *Optional*: Remote Digital Output Module. Provides RS-485 Modbus RTU interface to Centralized System (e.g. PLC)
- ◆ Backlit 16 characters x 2 lines LCD display. Auto-scrolls to provide channel data and fault conditions. Indicates alarm status.
- ◆ Simple front panel, push button channel setup. Auto-Configuration wizard provides rapid channel setup without special knowledge.
- ◆ Rack mount or wall mount enclosures. Explosion proof available.
- ◆ Continuous Diagnostics. *Wireless* Options (consult factory).

### Sensors *patented* by Mil-Ram

- ◆ *no false alarms* Mil-Ram electrochemical sensor technology
- ◆ No *zero drift* with changes in temperature/humidity/pressure
- ◆ No LEL, methane, hydrocarbons, CO, CO<sub>2</sub>, VOCs gas interference
- ◆ Do not saturate with occasional exposure to high gas levels
- ◆ Do not *go to sleep* after long periods in gas-free air
- ◆ Chemically selective based on unique electrolyte chemistry
- ◆ Long life: >3 years typical under normal operating conditions

### Digital Modbus

19" Rack-Mount Control System



#### Model TA-2048MB

**48 Channel System**  
3 Modbus Networks  
Each Network

-up to 16 Gas Detectors  
-up to 16 Relay Modules  
-up to 16 Alarm Zones

Modbus RTU Network #1

Modbus RTU Network #2

Relay Module

Modbus RTU Network #3

Gas  
Detectors

Model TA-2100MB *smarter* Transmitters  
(LEL, Toxic, VOC, Infrared, MOS, more)



MIL-RAM TECHNOLOGY, INC.  
REGISTERED TO ISO 9001:2008  
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**MIL-RAM**  
Patented Technology  
*no false alarms*  
Gas Detection Systems  
ISO 9001:2008 Registered

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