# Wireless, 12 to 32 Tank Gauging System w/EPA-Compliant Secondary Containment Leak Detection



## **Product Description**

The TMS2000W is a further expansion of the well-established TMS-series Tank Management System product line, targeted for wireless applications where the routing of probe and sensor conduits and associated cabling is either impractical or cost-prohibitive. The TMS2000W can communicate with up to 32 WiDAM Wireless Data Acquisition Modules, each module supporting one tank gauging probe and up to four leak/point level sensors. Communications is over a high-reliability, frequency hopping spread spectrum (FHSS) radio that is extremely tolerant of background electrical noise present in most industrial environments. The standard TMS2000W includes an internal radio and console or near-console-mounted antenna. Enhanced radio performance and flexibility is provided with an optional RS485-linked remote radio module w/antenna that can be located up to 200' (61 m) from the console. This option is ideally suited for sub-basement or other installations where required TMS console placement is incompatible with optimal radio performance. The TMS-series of remote wireless and wired peripherals, including the ETD1000(W) Electronic Tank Display and RA400(W) Remote Annunciator are supported with an optional wireless and wired peripherals expansion module. The TMS2000W provides all of the same enclosure and plug-in card options of the wired TMS2000.



### **Specifications**

Dimensions (W x H x D): 11.8" x 11.5" x 4.75" (300 mm x 292 mm x 121 mm)

Enclosure-Mounted Antenna adds an additional height of 5" (127 mm)

Weight: 14 lb (6.4 kg) (w/ Printer)

Operating Temperature:
-40 °F to 160 °F (-40 °C to 70 °C) w/o Printer
-5 °F to 140 °F (-20 °C to 60 °C) w/ Printer

Humidity: 95% Non-condensing

Enclosure Rating: Locking NEMA 12 (IP52), NEMA 4 (IP56) or NEMA 4X (IP56) (304 SS)
Power Requirements: 115/230 VAC ±15% (w/o Printer) Switchable, 50-60 Hz, 20 W Max.

8-16 VDC or 16-60 VDC Optional

Memory: Configuration / Setup Data – EEPROM, 50 year data retention, no batteries

Log Reports and Real-Time Clock - Lithium Battery-Backed RAM, 5-10 year data retention

• Audible Alarm: 85 db

Display: 9-Character, Super Bright LED Data Display, Readable from 25' (7.6 m)

Ultra-High Intensity Alarm LEDS, Visible from 75' (22.9 m)

WiDAM Communications: 902-928 MHz FHSS, 2.4 GHz FHSS optional
Data Communications: RS-232 Included Standard, RJ-13 Jack

RS-485 Included Standard, RJ-13 Jack (For Pneumercator Peripherals)

Internal, Secured Modem, Fax / Modem, Network Interface or ModBus Optional

• Probe / Sensor Capacities: 12 to 32 Magnetostrictive Probes

48 to 128 Leak/Point-Level Sensors

I/O, Non-Haz.: Standard: 2 Relays, 1 Form C, Rated 10 A@120 VAC, 6 A@240 VAC, w/ 2 Opto-Isolated Inputs

Expansion Options: (1 slot available)

4 Relays, 1 Form C, Rated 10 A@120 VAC, 6 A@240 VAC, w/ 4 Opto-Isolated Inputs 8 Relays, 1 Form A, Rated 5 A@120 VAC, 5 A@240 VAC w/ 8 Opto-Isolated Inputs

16 Relays, 1 Form A, Rated 5 A@120 VAC, 5 A@240 VAC

6 or 12-Ch. Programmable Analog Outputs:

0-1 mA, 0-20 mA, 0-24 mA, 4-20 mA, 0-5 VDC, 1-5 VDC

## **Wireless Remote Peripherals**

• ETD1000W Remote Electronic Tank Display Panel, Addressable (up to 255), FHSS Radio

 RA400W Remote Audible/Visual Alarm with TEST/RESET, Addressable (up to 255), FHSS Radio Note: Wireless remote peripherals require an MPX200 Master Peripheral Expansion Module.

#### Wired Remote Peripherals

ETD1000 Remote Electronic Tank Display Panel, Addressable (up to 16), RS-485 Multi-Drop

• RA400 Remote Audible/Visual Alarm with TEST/RESET, Addressable (up to 16), RS-485 Multi-Drop

• TD1000 Tandem Remote Display

