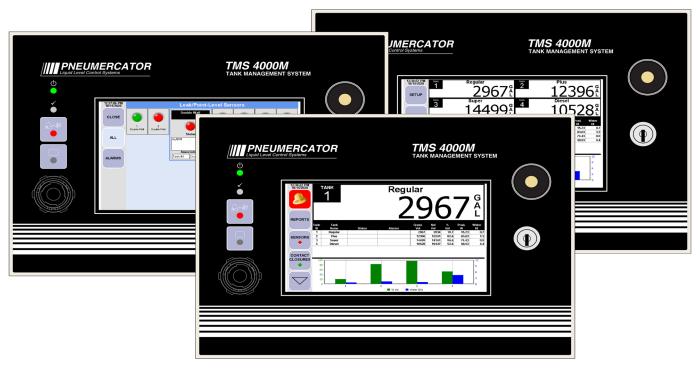
Multi-Tank Gauging System w/Color Touch Screen Suitable for Indoor and Outdoor Applications,

EPA-Compliant In-Tank and Secondary Containment Leak Detection



Product Description

The TMS4000M Tank Management System is the latest generation of the TMS family, and the first touchscreen-based system in the industry available for both indoor and outdoor use without requiring a secondary enclosure, supplemental heating or cooling. The 7" color, SVGA display provides an extremely easy-to-use graphical interface with real-time tank measurement data presented in three distinct formats; easy-to-read meters, detailed spreadsheet and quick-view bar graphs. Each format is user-configurable, and the spreadsheet display prioritizes active or alarming tanks to the top of the window. Standard communications interfaces include Ethernet TCP/IP (e-mail/SMS alerts included), USB host and client, RS232(2) and RS485. Cellular communications, single or dual ModBus, 4-20ma and other industrial protocols are supported. Web-ready for PCO Cloudview access via Ethernet or internal cellular modem. Hardcopy reports are provided via Ethernet-connected printer, or PDF to flash drive via internal or front-panel weatherproof USB port. Extensive system security settings allow the administrator to assign users with widely varying degrees of accessibility. Localization features include operation in English, Spanish or French, with Metric (LT/mm) or English (Gal/in) units of measure, and an auto-switching universal power supply that will operate with any line voltage between 95-250VAC, 50/60Hz.

Console

• Dimensions (W x H x D): 10.9" x 9.1" x 4.7" (277 mm x 230 mm x 118 mm), depth increases by 1" (25mm) with external USB

• Weight: 12 lb (5.5 kg)

• Operating Temperature: -22 °F to 160 °F (-30 °C to 70 °C) (Consult factory for applications below -22 °F)

Humidity: 95% Non-condensing

Enclosure Rating: Locking NEMA 12 (IP52) or NEMA 4X (IP66) (304 SS)
 Power Requirements: 115/230 VAC ±15% Autoswitching, 50-60 Hz, 30 W Max.

10-50 VDC Optional

Memory: Configuration/Setup Data – SD Card, 50-year data retention, no batteries

Log Reports - Removable SD Card, 50-year data retention, no batteries

Real-Time Clock - Ultra Cap-Backed, no battery required

Audible Alarm: 85 db

 Display: 7" (178 mm) Diagonal SVGA LCD w/Integral 7H Hardness Touch Panel – Glove Touchable Dedicated High Brightness POWER, NORMAL, ALARM LEDS, Visible from 75' (23 m)



Communications: Two (2) RS-232 Included Standard, RJ-13 Jack

Single RS485 Included Standard, RJ-13 Jack (For Pneumercator Peripherals)

Ethernet TCP/IP Port Included Standard USB Host and Client Included Standard

Internal, Secured Modem, Cellular Modem, Single/Dual-Channel ModBus Optional

Probe/Sensor Capacities: 4 Magnetostrictive Probes, 8 Leak or 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 Slot Options:

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

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

4-Ch. Programmable Analog Outputs: 0-1 mA, 0-20 mA, 0-24 mA, 4-20 mA, 0-5 VDC, 1-5 VDC

Probes

Technology: Magnetostrictive, Dual Float, w/ reflection resolution doubling

• Accuracy (Minimum): MP45xS: MP46x:

 Product Level:
 0.0005" (0.013 mm)
 Product Level:
 0.01" (0.25 mm)

 Water Level:
 0.001" (0.025 mm)
 Water Level:
 0.01" (0.25 mm)

 Temperature:
 0.001 °F (0.0006 °C)
 Temperature:
 0.001 °F (0.0006 °C)

Materials: Shaft: 316 SS or PVDF

Floats: 316 SS, Buna-N, Urethane, or PVDF

• Mounting: In-Tank Leak Testing: 4" (102mm) diameter riser

Inventory Only: 2" (51 mm) minimum riser or direct bushing / flange mount

• Temperature Sensing: 5 Thermistors in shaft, 1 in probe head

Location Approval: UL Class I, Div 1, Groups C and D; cUL Class I, Zone 0, Group IIB

• Operating Temperature: -40 °F to 175 °F (-40 °C to 80 °C)

Operating Pressure: 150 PSIG (1034 kPa) 316SS, 50 PSIG (345 kPa) PVDF

• Field Wiring: 22AWG, 2-Conductor twisted pair w/ shield

Belden 8441, 8761, Alpha 1736C or equiv., max. length 3000' to 4600' (914 m to 1402 m)

• Models: MP45xS Series rigid SS max. length 24' (7.3 m)

MP46xS Series flex. PVDF max. length 70' (21.3 m)

Sensors

• ES825-200F Electronic, Discriminating - Containment, Manway and Piping Sumps,

Dispenser Pan, Dry Annular, Includes Fault Detection Feature as Standard

ES825-100F Electronic, Non-Discriminating - Containment, Manway and Piping Sumps,

Dispenser Pan, Dry Annular, Includes Fault Detection Feature as Standard

LS600LD Float, Containment, Manway and Piping Sumps, Dispenser Pan
 LS600xx Multi-Float, High / Low Level and Pump Control

• RSU800 Float, Wet Annular / Reservoir

• LS610 Float, Dry Annular

HS100D2 Polymer / Float – Wet Well, up to 45' (3.1 m to 6.1 m) depth
 HS100ND Polymer – Dry Containment, 1' to 45' (0.3 m to 13.7 m) length

LLP203 3 GPH Catastrophic Line Leak Detector

Most sensors are available with Fault-Detect Supervised sensor and wiring option. Add "F" Suffix to Model Number

Remote Displays

• ETD1000 Addressable, Multi-Drop, Remote Electronic Tank Display Panel

ETD1000T Addressable, Multi-Drop, Remote Electronic Tank Display Panel with Color Touchscreen

RA400 Addressable, Multi-Drop, Programmable Remote Audible/Visual Alarm Panel

• ETD1000W Wireless Remote Electronic Tank Display Panel*

RA400W Wireless Programmable Remote Audible/Visual Alarm Panel*
 *Note: MPX200 Master Peripheral Expansion Module required.

Certifications / Approvals

• UL/cUL Approved, UL File E129464

