WiDAM Wireless Data Acquisition Module

Wireless, Battery-Powered, Tank Gauging Module including 4 Sensor Inputs for EPA-Compliant Secondary Containment Leak Detection

Product Description

The WiDAM Wireless Data Acquisition Module provides accurate and reliable magnetostrictive tank gauging and secondary containment leak detection for above and below-ground liquid storage tanks without the high cost of running wiring conduits between the tanks, sensors and the monitoring TMS console. Instead, the WiDAM transmits data wirelessly using a high reliability, frequency hopping spread spectrum (FHSS) radio that is extremely tolerant of background electrical noise present in most industrial environments. The WiDAM is self-contained, including ultra-low power microprocessor, radio transceiver, antenna and long-life lithium battery module, all housed in a NEMA 4X weatherproof and corrosionproof enclosure suitable for installation within a hazardous-classified area. Safety interlock feature allows battery replacement without removing WiDAM from the hazardous location. Several mounting bracket kits are available for AST and UST installations.

Specifications

- **Radio:** 902-928 MHz FHSS, 2.4 GHz optional
- **Probe / Sensor Capacities:** 1 Magnetostrictive Probe for Product and Water Level, Product Temperature
  4 Leak or Point-Level Sensors (maximum 3 discriminating), Supervised Wiring Ready
- **Compatible Systems:** TMS2000W console, 12 tank, 40 sensor capacity
  TMS4000W console, 32 tank, 128 sensor capacity
- **Power Requirements:** Pneumercator Ultra-High Capacity Lithium Battery Pack P/N 900621-1-4 w/Safety Interlock
- **Battery Life:** Up to 4 years, depending on update rate and power save mode. Continuous battery status reported to TMS.
- **Construction:** Epoxy Powder Coat Aluminum Alloy Housing, HDPE Cover
- **Dimensions:** 12.4” (315 mm) H x 4.5” (114 mm) Dia (5.5” (140 mm) W across hubs)
- **Weight:** 6 lb (2.7 kg) (w/Battery Pack)
- **Location Approval:** UL Class I, Div 1, Groups C and D; cUL Class I, Zone 0, Group IIB
- **Operating Temperature:** -40 °F to 160 °F (-40 °C to 70 °C)
- **Enclosure Rating:** NEMA 4X (IP56), UV-rated
- **Conduit/Hub Connections:** 2 x 3/4” Female NPT
- **Supplied Hubs:** Two Non-Metallic, 3/4” Compression Hubs
  Probe: Single Cable Entry
  Sensors: Four Cable Entries
WiDAM Wireless Data Acquisition Module Specifications

Probe

- Technology: Magnetostrictive, Dual Float, w/ reflection resolution doubling
- Accuracy (Minimum): MP55xS: Product Level: 0.0005” (0.013 mm) Water Level: 0.001” (0.025 mm) Temperature: 0.1 ºF (0.06 ºC)
  MP56x: Product Level: 0.01” (0.25 mm) Water Level: 0.01” (0.25 mm) Temperature: 0.1º F (0.06 ºC)
- Materials: Shaft: 316 SS or PVDF
  Floats: Urethane, 316 SS, Buna-N, or PVDF
- Mounting: Inventory Only: 2” minimum riser (4” preferred) or direct bushing / flange mount
- Temperature Sensing: Single sensor standard. Five sensor array available
- Location Approval: UL Class I, Div 1, Groups C and D; cUL Class I, Zone 0, Group IIIB
- Operating Temperature: -40 ºF to 175 ºF (-40 ºC to 80 ºC)
- Operating Pressure: 150 PSIG (1034 kPa) 316 SS, 50 PSIG (345 kPa) PVDF
- Field Wiring: 22AWG, 3-Conductor w/ shield and drain wire Belden 6501FE or equiv., maximum length 50’ (15.2 m)
- Models: MP55xS Series rigid SS max. length 24’ (7.3 m) MP56x Series flex. PVDF max. length 70’ (21.3 m)

Sensors

- ES825-400FL Electronic, Discriminating - Containment, Manway and Piping Sumps, Dispenser Pan, Dry Annular
- ES825-300FL Electronic, Non-Discriminating - Containment, Manway and Piping Sumps, Dispenser Pan, Dry Annular
- 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
- HS100NDL Polymer – Dry Containment, 1’ (305 mm) to 6’ (1829 mm) length

Most sensors are available with Fault-Detect Supervised sensor and wiring option. Add “FL” Suffix to Model Number

Note: Specifications subject to change without notice. 01-12-2018

Pneumercator Company, Inc. Tel: 631-293-8450
1785 Expressway Drive North Fax: 631-293-8533
Hauppauge, New York 11788 http://www.pneumercator.com