

DATASHEET

## HW5000-FT1



## Highlights

- Works with third-party turbine flow meters
- Provides local reading of flow data
  - Instantaneous rate
  - Totals
  - Today's totals
  - Yesterday's totals
  - Modbus error count
  - Modbus status
- High accuracy of  $\pm 0.01\%$  / 0 Hz - 10 KHz
- RS485 Modbus interface
- Device is fully configurable using LCD display UI
- LCD is always on with auto-scroll convenience
- Self-contained, rugged design
- 6-30 Vdc external power input
- Installs in minutes
- IP66, -20 °C to 70 °C (-4 °F to 158 °F)
- Class I, Division 1 (Zone 0), Intrinsically Safe



## Self-Contained Flow Totalizer with Modbus Interface

### Works with a Third-Party Turbine Flow Meter

The OleumTech® HW5000-FT1 Flow Totalizer (Modbus) is designed to work with virtually any third-party turbine flow meter, measuring accumulated flow rates and volume with an accuracy of  $\pm 0.01\%$ . Real time flow rates and volumes may be accumulated and displayed in barrels, liters, gallons, or cubic meters per second, minute, hour, or day. The HW5000-FT1 provides a 2-pin pickup coil connector and a 1-inch mating union for connecting to a turbine meter. The push button LCD interface allows for device configuration and instant access to process data, which is updated every second.

### Durable Construction / Class I, Division 1, IS






The HW5000-FT1 Flow Totalizer is certified for use in Class I, Division 1 (Zone 0) hazardous locations. It is Intrinsically Safe and can be serviced without being removed from the process.

## Technical Specifications

### HARDWARE FEATURES

Device Functionality	· Liquid Flow Totalizer (RS485 Modbus)
Embedded Controller	· Ultra-Low Power RISC Microcontroller with Internal FLASH (Field Upgradeable)
Configuration	· Integral LCD with Push Button Interface
Inputs	· High-Speed Pulse Counter Input: 0 Hz to 10 KHz · Up to 10 K Cycles per Second
Input Voltage Range	· 15 mV to 3300 mV
Accuracy and Stability	· Flow Rate Accurate to $\pm 0.01\%$ of Reading · Excluding Turbine Meter and Magnetic Pickup
Power Source	· External 6-30 Vdc Max
Interface	· RS485 Modbus
Baud Rate	· 1200-57,600 bps
Local LCD Display	· 32-Character Display (16x2 Lines) with 4 Function Keys, Always On
Instant Displayable Read	· Flow Rate / Totals / Today's Totals / Yesterday's Totals / Modbus Error Count + Status

### CERTIFICATIONS & COMPLIANCE

Safety     	· Class I, Division 1, Groups A, B, C, D T4; Ex ia IIC T4 Ga
	· Class I, Zone 0, AEx ia IIC T4 Ga
	· ATEX: Sira 13ATEX2142X; Ex ia IIC T3 Ga; II 1 G
	· IECEx: SIR 13.0054X; Ex ia IIC T3 Ga

### MECHANICAL SPECIFICATIONS

Dimensions	· 5.5" (W) x 13.1" (H) x 4.4" (D) / 140 mm (W) x 333 mm (H) x 112 mm (D)
Package Dimensions	· 10.25" (W) x 14" (H) x 6.5" (D) / 260 mm (W) x 356 mm (H) x 165 mm (D)
Package Weight	· ~7 lbs / 3.2 kg
Connection Fitting	· 1" NPT Female, 1" Mating Union to Flow Turbine Included
Enclosure Casing Material	· Type 4X Aluminum; IP66
Mating Assembly	· 304 Stainless Steel
Magnetic Pickup Coil Connection	· 2-Pin Circular Connector (Part # MS3106A-10SL-4S)

### GENERAL SPECIFICATIONS

Operating Conditions	· Ambient Temperature (Class I, Division 1): -40 °C to 70 °C (-40 °F to 158 °F)
	· LCD Screen -20 °C to 70 °C (-4 °F to 158 °F)
	· Humidity: 0 to 99 %, Non-Condensing
Warranty	· 2-Year Parts and Labor
Country of Origin	· USA

### ORDERING INFORMATION

Model Number	· HW5000-FT1
--------------	--------------