

DATASHEET

HW5000-FT1



Highlights

- Works with third-party turbine flow meters
- Provides local reading of flow data
 - Instantaneous rate
 - Totalizer
 - Today's totals
 - Yesterday's totals
 - Modbus error count
 - Modbus status
- RS485 Modbus interface
- Device is fully configurable using the LCD display UI, RS485 Modbus, or the H Series Configuration Software
- LCD is always on with auto-scroll convenience
- Self-contained, rugged design
- 9-30 Vdc external power input
- Installs in minutes
- IP66, -40 °C to 70 °C (-40 °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. Real time flow rates and volumes may be accumulated and displayed in barrels, liters, gallons, cubic meters, cubic feet, and 1000 cubic feet per second. Also, may be measured per minute, hour, or day. 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. The HW5000-FT1 provides a 2-pin pickup coil connector and a 1-inch mating union for connecting to a turbine meter.

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 or H Series Configuration Software v3.0.0 or later or Modbus
Inputs	· 15-3300 mV, 0-10 kHz
Power Source	· External 9-30 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 Cnt + 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 16ATEX2229X; Ex ia IIC T4 Ga
	· IECEx: SIR 16.0079X; Ex ia IIC T4 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)

ELECTRICAL SPECIFICATIONS

DC Power Input	· 9-30 Vdc (30 V Max)
Current Consumption	· 25 mA Peak / 1.5 mA Idle
Multi-Drop Max Consumption	· 54 mA Maximum based on 16 Sensors Multi-Dropped
IS Safety Protection	· Barrier Board (See Part Numbers under Ordering Information)

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
IS Barrier Boards	· 12 V Kit: SX1000-B12, RS485 Module (61-6002-001) + 12 V Module (61-6003-001)
	· 24 V Kit: SX1000-B24, RS485 Module (61-6002-001) + 24 V Module (61-6004-001)
Configuration Kit	· H Series Configuration Kit (SX1000-CC8), Optional
	· OleumTech All-in-One Cable (SX1000-CC2), Required for Firmware Upgrade Procedure