# **OleumTech®**

DATASHEET **HMVSxxxx** 







LCD module rotation: 350°

Housing rotation: 180° left or right

# **Highlights**

- Seamless integration with popular third-party flow computers
- Pressure types: differential (DP) and static absolute (SP)
- Measurement range: DP: 25 to 4000 in H2O SP (high side): 400 to 6000 psia Temperature<sup>1</sup> (PT100): -50 to 400 °C (-58 to 752 °F)
- Reference accuracy: DP: ± 0.075 % F.S. SP: ± 0.05 % F.S. Temperature<sup>1</sup>:  $\pm 0.5$  °C ( $\pm 0.9$  °F)
- Stability: ± 0.2 % URL / 5 years
- Output signal: Serial RS485
- Backlit LCD provided with external control buttons and internal status toggle button
- Operating temperature: -40 to 60 °C (-40 to 140 °F) LCD: -20 to 60 °C (-4 to 140 °F)
- Diaphragm option: Hastelloy C or 316L SS
- Dual diaphragm high overload pressure protection
- Dual seal certified per CSA C22.2 No. 30-20
- Accurate filling fluid technology eliminates effects of temperature and static pressure
- Explosion-proof (standard on all models)
- NACE MR0175/ISO 15156-1 Compliant







## Accurately Measure DP, SP, and Temperature from a Single Device

The OleumTech H Series Multivariable Transmitter is a versatile 3-in-1 instrument designed to deliver precise measurements of both differential and static absolute pressure (high side) along with process temperature through an external PT100 RTD sensor (4-wire). Well-suited for demanding applications, the Multivariable Transmitter finds its excellence in mission-critical flow applications across industries such as oil and gas, water and wastewater, and other challenging industrial settings.

interface and is easy to install and operate since it effortlessly integrates with popular third-party flow computers. It can be ordered with a variety of options to fit your specific needs. The Multivariable Transmitter is the perfect choice for users seeking high precision and reliability to perform multiple measurements using a single device, resulting in substantial cost savings.

The OleumTech H Series MVS Transmitter supports RS485 serial

### Differential Pressure Range and Overload

Nominal Range	Lower Range Limit (LRL)	Upper Range Limit (URL)	High & Low Pressure Side Overload Limit
25 inH2O	-25 inH2O	25 inH2O	3600 psi
250 inH2O	-250 inH2O	250 inH2O	3600 psi
1000 inH2O	-1000 inH2O	1000 inH2O	3600 psi
4000 inH2O	-4000 inH2O	4000 inH2O	3600 psi

### Static Pressure Range and Overload

Nominal Range	Lower Range Limit (LRL)	Upper Range Limit (URL)	Overload Limit
400 psia	0 psia	435 psia	2175 psia
1500 psia	0 psia	1450 psia	2900 psia
3000 psia	0 psia	3000 psia	8700 psia
6000 psia	0 psia	6000 psia	8700 psia

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## **Technical Specifications**

HARDWARE FEATURES	
Device Functionality	· Multivariable Transmitter (DP, SP, and External Temperature PT100 RTD 4-wire Input)
Accuracy	· DP: ±0.075 % F.S. / SP: ±0.05 % F.S. / Temp: ± 0.5 °C (± 0.9 °F)
Stability	· ±0.2 % URL / 5 years
Output Signal / Baud Rate	· RS485 Modbus / 4800 to 115,200 bps
Units	· PSI, psf, OSI, Pa, kPa, MPa, BAR, mbar, mmHg, INHg, mmH2O, cm H2O, mH2O, INH2O, FTH2O, TORR, g/cm2, kg/cm2, ATM, mm, m
Temperature Units	· Celsius, Fahrenheit, Kelvin, Rankine
Damping Time	· Amplifier: 0-60 Seconds (Adj), Diaphragm Capsule and Silicone Oil Filling: $\leq$ 0.2 S, Start After Power Off: $\leq$ 6 S, Normal Service After Data Recovery: $\leq$ 2 S

MECHANICAL SPECIFICATIONS			
Dimensions (LCD)	· 3.7" (W) x 8.7" (H) x 5.2" (D) / 93 mm (W) x 219.4 mm (H) x 130 mm (D)		
Weight	· Net: 8.8 lbs. (4 kg) / Gross: 9.8 lbs. (4.4 kg)		
Package Dimensions	· 9.5" (W) x 8" (H) x 8.25" (D) / 241 mm (W) x 203 mm (H) x 210 mm (D)		
Enclosure Casing Material	· Type 4X Aluminum		
Cable Entry Ports	· (2) 1/2" NPT (F)		
Process Connection	· 1/4"-18 NPT (F) 316 SS		
Ingress Protection	·1P66		
ELECTRICAL SPECIFICATIONS			
Power Supply	· 12 to 32 Vdc Max		

#### Power Consumption **GENERAL SPECIFICATIONS**

· -40 to 85 °C (-40 to 185 °F) / LCD -20 to 70 °C (-4 to 158 °F) Operating Temperature · -40 to 110 °C / -40 to 230 °F / LCD -20 to 70 °C (-4 to 158 °F) Storage Temperature Humidity · 5 to 100 % RH @ 40 °C (104 °F) · Silicone Oil Filling: -45 to 250 °C (-49 to 482 °F) Media Temperature Warranty · 2-Year Parts and Labor

#### **CERTIFICATION & COMPLIANCE**

Safety · Explosion-proof (Standard) All Models

· Class I, Division 1, Groups A, B, C, D T6; Class I, Division 2, Groups A, B, C, D T4

· Class II, Division 1, Groups E, F, G T80 °C; Class III · Ambient Temperature: Ta = -40 to 60 °C (-40 to 140 °F)

· Multivariable Transmitters, approved for hazardous locations, are dual seal certified per CSA C22.2 No. 30-20.

NACE · NACE MR0175/ISO 1515 Compliant

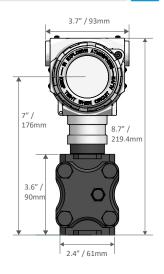
### **ACCESSORIES**

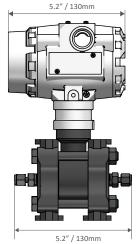
RTD Temperature Probe Assembly · HW5000-RTD: PT100, 10 ft Braided Stainless Steel Cable

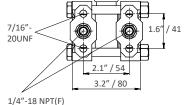
· ≤ 720 mW @ 24 Vdc, 30 mA

· SX1000-MK10: Vertical 2" Pipe Mounting Type Mounting Kits

Manifold Bolt Kit · SX1000-MK11: (4) 7/16-20x1" Stainless Steel Hex Bolts, (4) SS Flat Washers, (4) SS Split Lock Washers

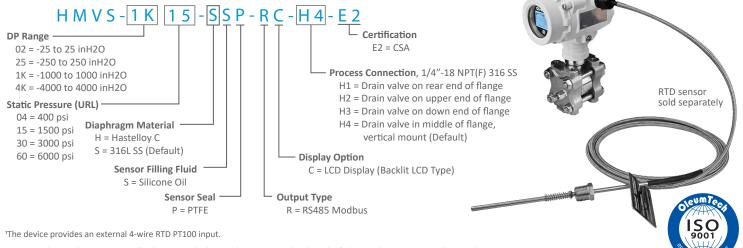






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## Ordering Information



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