



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 inH2O
  - SP (high side): 400 to 6000 psia
  - Temperature<sup>1</sup> (PT100): -200 to 600 °C (-328 to 1112 °F)
- Reference accuracy:
  - DP: ± 0.075 % F.S.
  - SP: ± 0.05 % F.S.
  - Temperature<sup>1</sup>: ± 0.5 °C (± 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.

The OleumTech H Series MVS Transmitter supports RS485 serial 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.

### 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

### 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 (3095 Serial Communications Emulation) / 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	· 0-5 Seconds, Diaphragm Capsule and Silicone Oil Filling: ≤ 0.2 S, Start After Power Off: ≤ 6 S, Normal Service After Data Recovery: ≤ 2 S

#### MECHANICAL SPECIFICATIONS

Dimensions (LCD)	· 5.2" (W) x 8.7" (H) x 5.2" (D) / 130 mm (W) x 220 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	· IP66

#### ELECTRICAL SPECIFICATIONS

Power Supply	· 12 to 32 Vdc Max
Power Consumption	· ≤ 720 mW @ 24 Vdc, 30 mA

#### GENERAL SPECIFICATIONS

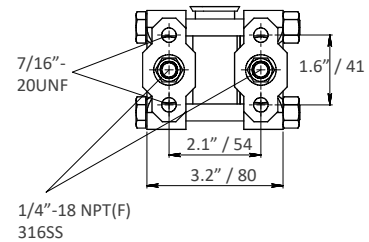
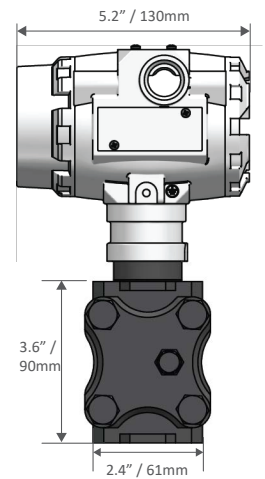
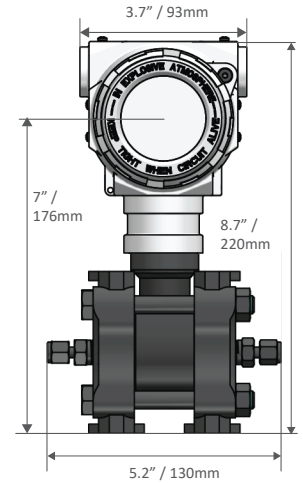
Operating Temperature	· -40 to 85 °C (-40 to 185 °F) / LCD -20 to 70 °C (-4 to 158 °F)
Storage Temperature	· -40 to 110 °C / -40 to 230 °F / LCD -20 to 70 °C (-4 to 158 °F)
Humidity	· 5 to 100 % RH @ 40 °C (104 °F)
Media Temperature	· Silicone Oil Filling: -45 to 250 °C (-49 to 482 °F)
Warranty	· 2-Year 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
Mounting Kits	· SX1000-MK10: Vertical 2" Pipe Mounting Type
Manifold Bolt Kit	· SX1000-MK11: (4) 7/16-20x1" Stainless Steel Hex Bolts, (4) SS Flat Washers, (4) SS Split Lock Washers



### Ordering Information

**HMVS-1K15-SSP-RC-H4-E2**

#### DP Range

- 02 = -25 to 25 inH2O
- 25 = -250 to 250 inH2O
- 1K = -1000 to 1000 inH2O
- 4K = -4000 to 4000 inH2O

#### Static Pressure (URL)

- 04 = 400 psi
- 15 = 1500 psi
- 30 = 3000 psi
- 60 = 6000 psi

#### Diaphragm Material

- H = Hastelloy C
- S = 316L SS (Default)

#### Sensor Filling Fluid

- S = Silicone Oil

#### Sensor Seal

- P = PTFE

#### Certification

- E2 = CSA

#### Process Connection, 1/4"-18 NPT(F) 316 SS

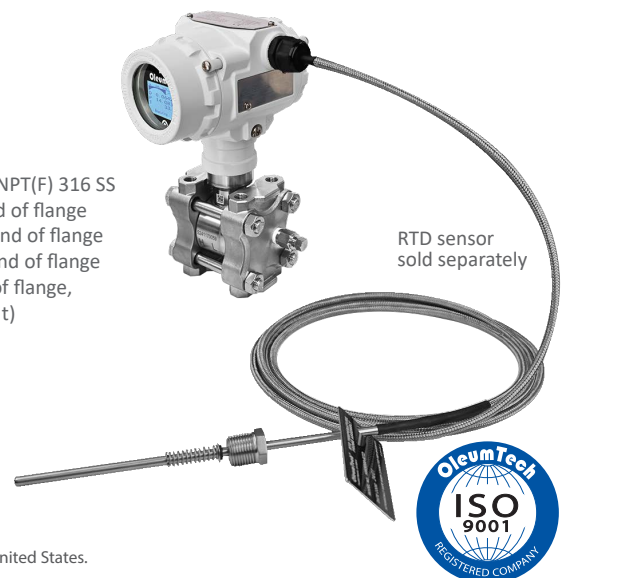
- H1 = Drain valve on rear end of flange
- H2 = Drain valve on upper end of flange
- H3 = Drain valve on down end of flange
- H4 = Drain valve in middle of flange, vertical mount (Default)

#### Display Option

- C = LCD Display (Backlit LCD Type)

#### Output Type

- R = RS485 (3095 Serial Communications Emulation)



\*The device provides an external 4-wire RTD PT100 input.

