

Cryo-Stic

Level Sensor



All Cryo-Stics are backed by CSM's renowned customer service, offering comprehensive support from conceptual design to implementation and includes a

3 months Defect Warranty.

Cryo-Stic serves as a direct replacement for mechanical float gauges, delivering continuous, high-accuracy level measurement ($\pm 1\%$ full scale) — superior to traditional mechanical or pressure-based devices. Its integrated thermal barrier ensures reliable performance by shielding electronics from extreme coldness.

Cryo-Stic

The Cryo-Stic is a robust level meter designed for liquefied gases including nitrogen, oxygen, argon, carbon dioxide, and nitrous oxide. It provides easy installation and reliable digital level measurement with high accuracy. The level meter measures capacitance through the dielectric properties of the liquid between its stainless-steel electrodes. These electrodes generate a signal that the sensor head converts to digital level data, available either on a directly mounted gauge or remotely via cable connection.

Special designs are available for LNG, cryofreezers, and LPG applications. The gauge can be removed during container transport, reducing damage risk and extending product life.

Typical Applications

- Cryogenic Liquid Storage Tanks
- Liquid Natural Gas (LNG)
- Liquid Petroleum Gas (LPG)
- Cryofreezer



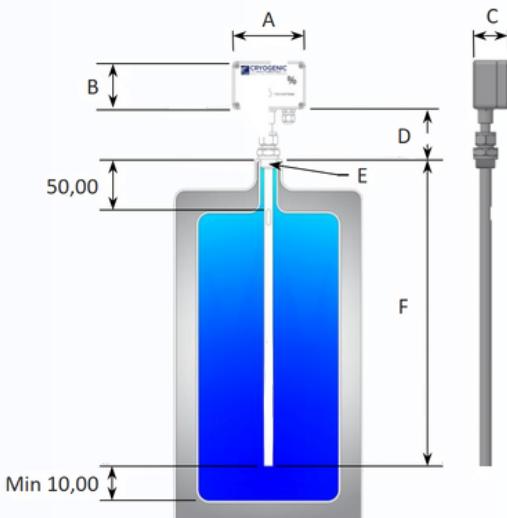
Features and Benefits

- Accurate measurements improves overall system accuracy and efficiency
- Higher flexibility than a thermal device, enables continuous measurement of liquid level
- Remote monitoring options are available for data acquisition
- No moving parts enhance reliability and durability, thus preventing unnecessary damage to the Cryo-Stic
- Flexible gauge mounting options allow it to be mounted directly on the sensor or remotely attached via cable

Cryo-Stic Specifications

Model	CLG1	CLG2
Enclosure Material	Polycarbonate (PC)	Aluminum
Sensor Probe Material	Stainless Steel Series 300	Stainless Steel Series 300
Display	3-Digit Red LED (In % Full)	3-Digit White LED (In % Full) Always On With External Power Supply
Power Source	9 V Battery / 4-20 mA Loop	AAA Battery / 9-30 VDC
External Connection	4 - 20 mA Loop	9-pin Sub-D Connector
Output Signal	4 - 20 mA Loop	4 - 20 mA Loop / 3-Wire Ratiometrical Voltage Output
Communication	Continuous Reading Optical and Acoustic Alarms LED Status Indicators	Continuous Reading Optical and Acoustic Alarms LED Status Indicators
Operating Temperature	Level Gauge: -20 to 60 °C Sensor Probe: -200 to 100 °C	Level Gauge: -20 to 60 °C Sensor Probe: -200 to 100 °C
Level Gauge Mounting	Directly On Sensor Only	Directly On Sensor / Detachable For Mounting On Wall
Standard Testing	Functional Test	

Cryo-Stic Models



Part No.	Probe Length (F)*	Connection Size (E)*	Probe Length (D)	Display Dimension (A x B x C)	Minimum Tank Depth	Enclosure Material
CLG-1-530	530 mm	1/2" BSP	77 mm	98 x 64 x 38 mm	540 mm	PC
CLG-1-610	610 mm				620 mm	
CLG-1-860	860 mm				670 mm	
CLG-1-1243	1243 mm				1253 mm	
CLG-2-1000	1000 mm	3/4" - 16 UNF	150 mm	115 x 65 x 30 mm	1010 mm	Aluminium

*Other connection sizes (1/2" NPT & 7/8-14 UNF) and probe length are available upon request.