

In-Situ Level TROLL 700H Instrument

The vented Level TROLL 700H Data Logger provides continuous water level, water pressure and temperature measurements. It meets the USGS surface water accuracy specifications of ± 0.01 ft., is made with titanium construction for durability, and offers long-lasting performance in any environment.

FEATURES

- Superior accuracy**
 For accuracy under all operating conditions, instruments are calibrated over the full pressure and temperature range. Each instrument includes a serialized, NIST®-traceable calibration report.
- Real-time measurements**
 Access data when you need it by connecting to a telemetry or SCADA system. No adapters or confusing proprietary protocols are required. Outputs include standard Modbus/RS485, SDI-12, and 4-20 mA.
- Low power consumption**
 Batteries typically last for a minimum of 10 years or 2 million readings. 8-36 VDC input is compatible with external batteries and solar power.
- Intuitive interface**
 Win-Situ® 5 PC and VuSitu Mobile App software simplify data collection and management. Software features setup wizards, fast data download rates, multiple water level reference options, and more.

BENEFITS

- Collect accurate surface-water data with a gauged (vented) instrument – no barometric corrections required.
- Deploy the rugged titanium instrument in freshwater or salt-water and get reliable performance for years.
- Capture multiple peak flow events on one data log by using the Event logging mode.
- Automate data collection and customize logging intervals.
- Select a logging mode that suits your application – Linear, Fast Linear, Linear Average, Event, Step Linear, and True Logarithmic.
- Use with a TROLL® Link Telemetry System, Con TROLL® PRO System, RuggedReader® Handheld PC, or a third-party data logger or sampler.



APPLICATIONS

- Real-time measurement of hydrologic conditions, including peak streamflow and gage height
- Stream and river gaging
- Coastal deployments – tide/harbor levels, storm surge systems, and wetlands research
- Stormwater management

CALL GEOTECH TODAY (800) 833-7958

Geotech Environmental Equipment, Inc.
 2650 East 40th Avenue • Denver, Colorado 80205
 (303) 320-4764 • FAX (303) 322-7242
 email: sales@geotechenv.com • website: www.geotechenv.com

In-Situ Level TROLL 700H Instrument

SPECIFICATIONS

GENERAL

Temperature Ranges ¹	Operational:	-20-80°C (-4-176°F)
	Storage:	-40-80°C (-40-176°F)
	Calibrated:	0-40°C (32-104°F)
Diameter		1.83 cm (0.72 in.)
Length		21.6 cm (8.5 in.)
Weight		124 g (0.27 lb.)
Materials		Titanium body; Delrin nose cone
Output Options		Modbus/RS485, SDI-12, 4-20 mA
Battery Type & Life ²		3.6 Volt lithium; 10 years or 2M readings
External Power		8-36 Volts DC
Memory		4.0 MB
	Data Records ³	260,000
	Data Logs	50
Log Types		Linear, Fast Linear, Linear Average, Event, Step Linear, True Logarithmic
Fastest Logging Rate & Modbus Rate		4 per second
Fastest SDI-12 & 4-20 mA Output Rate		1 per second

PRESSURE SENSOR TYPE/MATERIAL

		Piezoresistive; titanium
Range		Gauged (vented) 15 psig; 11 m (35 ft.)
Burst Pressure		Maximum 2x range; burst > 3x range
Accuracy ⁴		±0.01 foot up to 15 ft. and ±0.1 of reading >15 ft.
Resolution		±0.005% FS or better
Units of Measure	Pressure:	psi, kPa, bar, mbar, mmHg, inHg, cmH ₂ O, inH ₂ O
	Level:	mm, cm, m, in, ft.

TEMPERATURE SENSOR

		Silicon
Accuracy & Resolution		±0.1°C; 0.01°C or better
Units of Measure		Celsius or Fahrenheit

WARRANTY

2 years

¹ Temperature range for non-freezing liquids

² Typical battery life when used within the factory-calibrated temperature range

³ 1 data record = date/time plus 2 parameters logged (no wrapping) from device within the factory-calibrated temp. range

⁴ Across factory-calibrated pressure and temperature ranges

Specifications are subject to change without notice.

Delrin is a registered trademark of E.I. du Pont de Nemours and Company.

NIST is a registered trademark of the National Institute of Standards and Technology, U.S.A.



CALL GEOTECH TODAY **(800) 833-7958**

Geotech Environmental Equipment, Inc.

2650 East 40th Avenue • Denver, Colorado 80205

(303) 320-4764 • FAX (303) 322-7242

email: sales@geotechenv.com • website: www.geotechenv.com