SPOHR
Wasserstandsmessgeräte
Hydrometric Instruments
Instruments hydrométriques

Levelogger 5 LTC

Level, Temperature, Conductivity

The Levelogger® 5 LTC logs water level, temperature, and conductivity. It combines a datalogger, 8-year battery, Hastelloy® pressure sensor, temperature detector, and conductivity sensor within a small waterproof housing, 22 mm x 208 mm (7/" x 8.2"). A baked-on coating using polymerization technology protects the body against corrosion, abrasion and high temperatures. The conductivity sensor is a 4-electrode platinum sensor, with autoranging capabilities. The minimal-maintenance, sealed Levelogger 5 LTC is simple to clean and calibrate, even in the field.

User-Friendly Operation

Software Calibration and Data Wizards guide you through conductivity calibration and barometric compensation, ensuring accurate data sets. The Data Wizard also converts conductivity readings to Specific Conductance (@ 25ºC).

Levelogger Software allows you to easily program your preferences, download data, and display data in a graph or table format or export to other programs. Real Time View allows immediate viewing of live water level, conductivity, and temperature readings.

Leveloggers are easy to deploy; install with direct read cables or wireline/cord suspension. The Levelogger 5 LTC is SDI-12 compatible using the Solinst SDI-12 Interface Cable.

Download data in the field using the new Field Reader 5, DataGrabber 5 USB data transfer device, or through *Bluetooth*® using the Levelogger 5 App Interface and your smart device. Integrate the Levelogger 5 LTC with Solinst Telemetry Systems, which use the latest wireless technologies.

LTC Models	Full Scale (FS)	Accuracy
M5, C80	5 m (16.4 ft.)	± 0.3 cm (0.010 ft.)
M10, C80	10 m (32.8 ft.)	± 0.5 cm (0.016 ft.)
M20, C80	20 m (65.6 ft.)	± 1 cm (0.032 ft.)
M30, C80	30 m (98.4 ft.)	± 1.5 cm (0.064 ft.)
M100, C80	100 m (328.1 ft.)	± 5 cm (0.164 ft.)
M200, C80	200 m (656.2 ft.)	± 10 cm (0.328 ft.)

Upgraded Features

- Increased memory: 100,000 sets of data

- More stable communication: single-eye optical, easy to clean, more scratch resistant

- Stronger, robust design: double o-ring seals for two times over pressurization rating

- Better thermistor and conductivity sensitivity: upgraded platinum RTD and conductivity sensor

- Superior protection in harsh conditions: baked-on coating using polymerization—inside and out

Applications

- Salt water intrusion and soil salination monitoring

- Plume remediation monitoring and studies

- Leachate monitoring at landfills, mine tailings, waste disposal storage sites, and more

- Agricultural and stormwater runoff monitoring

- Create a historical database for potable water supply monitoring

- Tracer tests

Spohr Messtechnik is the Exclusive Distributor of *Solinst* Products in Germany
Solinst® and Levelogger are registered trademarks of Solinst Canada Ltd.
PAGE 1 OF 2

An optional Biofoul Screen provides extra protection for the Levelogger 5 LTC pressure and conductivity sensors in harsh environments.

Biofoul Screen

When a Levelogger 5 LTC is deployed for an extended period, there is the risk of biofouling on the pressure sensor and/or conductivity cell, which can compromise their readings.

The Biofoul Screen is designed to reduce the unwanted buildup of microorganisms, plants, algae, or organisms such as barnacles and mussels, on the sensors. The Biofoul Screen consists of a Delrin sleeve wrapped with copper wire. Slip onto the sensor end of a Levelogger 5 LTC, where it is held in place by compression fit.

Using the natural anti-fouling characteristics of copper, the Biofoul Screen is an affordable option to lengthen the time a Levelogger 5 LTC can be deployed. It reduces site visits and time spent cleaning Leveloggers, and improves long-term performance by ensuring accurate sensor measurements.

LevelSender 5 Telemetry System

Instantly add cellular telemetry to your Levelogger 5 LTC by connecting to a Model 9500 LevelSender 5. Send data by email or SMS from your remote stations to your desired location. The LevelSender 5 simplifies your telemetry setup, by working with Solinst direct read cables and is compatible with the full Levelogger Series product line (see Model 9500 LevelSender 5 data sheet).

Level Sensor:	Piezoresistive Silicon with Hastelloy Sensor
Ranges:	5, 10, 20, 30, 100, and 200 m
Accuracy:	±0.05% FS
Units of Measure:	cm, m, ft, psi, kPa, bar (ºC, ºF)
Normalization:	Automatic Temperature Compensation
Temp Compensation Range	0ºC to 50ºC
Temperature Sensor	Platinum Resistance Temperature Detector (RTD)
Accuracy	± 0.05°C
Resolution	0.003°C
Conductivity Sensor:	4-Electrode Platinum
Full Range:	0 to 100,000 µS/cm
Calibrated Range:	50 to 80,000 µS/cm
Accuracy:	±1%: 5,000 µS/cm – 80,000 µS/cm; greater of ±2% or 15 µS/cm: 50 µS/cm –5,000 µS/cm
Resolution:	±0.1 µS/cm
Temp Compensation Range:	0ºC to 50ºC
Normalization:	Specific Conductance @ 25°C
Battery Life:	8 Years (1 reading every 5 minutes)
Clock Accuracy (typical):	±1 minute/year (-20ºC to 80ºC)
Operating Temperature:	-20ºC to 80ºC
Maximum Readings:	100,000 sets of readings
Memory:	Slate or Continuous
Communication:	Optical high-speed: 57,600 bps with USB
Size:	22 mm x 208 mm (7/8" x 8.2")
Weight:	197 grams (6.95 oz)
Corrosion Resistance:	Baked-on coating using polymerization
Wetted Materials:	Platinum, Delrin®, Viton®, 316L Stainless Steel, Hastelloy, PFAS-free PTFE coating (inside and out)
Sampling Mode:	Linear, Event & User-Selectable with Repeat Mode, Future Start, Future Stop, Real-Time View
Measurement Rates:	2 seconds to 99 hours
Barometric Compensation:	Software Wizard and Barologger 5

Levelogger 5 App Interface

The Solinst Levelogger App is designed to communicate to Solinst dataloggers via your smart device. Programming options include start/stop, data downloading, linear and real-time sampling, future start/stop, and GPS coordinates.

The Levelogger 5 App Interface uses Bluetooth wireless technology to connect with your smart device running the Solinst Levelogger App. Use our Levelogger 5 App Interface and a Solinst direct read cable to communicate to a downhole Levelogger and email data files right from the field (see Model 3001 Solinst Levelogger 5 App Interface data sheets).

Convenient and Intuitive

- App is available for free
- Download data in the field
- Linear & real-time sampling options

Spohr Messtechnik GmbH

Länderweg 37 60599 Frankfurt Telefone: 069/622860
Fax: 069/620455 E-Mail: info@spohr-messtechnik.de

www.spohr-messtechnik.de