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Model 3250 Data Sheet



LevelVent 5 Water Level Datalogger

Model 3250

The Solinst LevelVent 5 is a vented version of our popular Levelogger[®]. The highly-accurate datalogger is designed to record water level and temperature measurements during shallow groundwater and surface water deployments.

The LevelVent 5 logger contains pressure and temperature sensors, a battery, memory for up to 150,000 data logs, and hydrophobic filter within a $22 \text{ mm} \times 173 \text{ mm}$ (7/8" $\times 6.8$ ") stainless steel housing with a corrosion-resistant coating.

The LevelVent uses a gauged pressure transducer; it is open to the atmosphere via a vented cable to the wellhead. The compact LevelVent wellhead is designed to fit in a Solinst 2" Well Cap Assembly, and provides easy connection for communication accessories.

The vented cable and Solinst LevelVent 5 logger are protected from moisture by permanent, built-in desiccants and hydrophobic filters in the logger and the wellhead.

The vented pressure transducer is made of Hastelloy $^{\$}$, making it extremely durable and accurate in a wide range of temperature and monitoring conditions. The sensor provides an accuracy of 0.05% FS, and can withstand 2 times over-pressure without permanent damage.

LevelVent 5 Applications

- Ideal for shallow deployment: up to 20 m (65 ft) submergence
- Aquifer characterization: pumping tests, slug tests, etc.
- Stream gauging, lake, reservoir and dam management
- Watershed, drainage basin and recharge monitoring
- Stormwater and runoff monitoring
- · Water supply and tank level measurement
- Long-term water level monitoring in wells and surface water

Vented Datalogger Advantages

- Continuous, reliable water level data for longterm monitoring projects
- No barometric compensation required, saving data processing time
- Instant water level data for real-time aquifer test results



LevelVent 5 Programming & Communication

The LevelVent 5 is programmed and data downloaded using Solinst Levelogger Software and a PC Interface Cable. It can also be used with the Solinst Levelogger 5 App Interface and DataGrabber 5. Both accessories and PC Interface Cable conveniently connect directly to the LevelVent 5 wellhead.

Integrate the LevelVent 5 with Solinst Telemetry Systems, which use the latest wireless technologies.

For deeper, hard to access applications, or areas that are prone to flooding, the Levelogger 5 Series of absolute pressure water level dataloggers are also options (see Model 3001 Levelogger 5 Series Data Sheet).

LevelVent Features

- Corrosion and abrasion-resistant coating bakedon using polymerization technology
- Gauged pressure sensor for highly-accurate water level measurements: 0.05% FS
- Compact wellhead makes deployment simple using a Solinst 2" Well Cap Assembly
- Communication cables and accessories connect directly to the wellhead
- Long-lasting battery included in logger
- Built-in hydrophobic filters and desiccants
 no need to replace, reduces maintenance

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LevelVent 5 Logger Specifications

Level Sensor: Piezoresistive Silicon with Hastelloy Sensor

Accuracy: $\pm 0.05\%$ FS Typical Stability of Readings: Superior, low noise

Resolution: 0.001% FS to 0.0006% FS
Units of Measure: m, cm, ft., psi, kPa, bar, °C, °F

Normalization: Automatic Temperature Compensation

Temp. Comp. Range: 0° to 50°C

Temperature Sensor: Platinum Resistance Temperature Detector (RTD)

Operating Temperature: -20°C to 80°C
Temp. Sensor Accuracy:± 0.05°C
Temp. Sensor Resolution: 0.003°C

Battery Life Estimate: 10 Years - based on 1 reading/minute

Clock Accuracy (typical): ± 1 minute/year (-20°C to 80°C)

Maximum # Readings: 150,000 sets of readings

Memory: Slate and Continuous

Communication: 9600 bps Solinst USB

Size: 22 mm x 173 mm (7/8" x 6.8")

Weight: 190 grams (6.7 oz)

Corrosion Resistance: Baked-on coating using polymerization

technology (inside and out)

Wetted Materials: Delrin®, Viton®, Polyurethane (TPU boot)

316L stainless steel, Hastelloy, PFAS-free

PTFE coating

Sampling Modes: Linear, User-Selectable with Repeat Mode,

& Event, Future Start, Future Stop,

Real-Time View

Measurement Rates: 1/8 sec to 99 hrs

Barometric Automatic

Compensation:

Models	Full Scale (FS)	Accuracy	Resolution
M5	5 m (16.4 ft)	± 0.3 cm (0.010 ft)	0.001% FS
M10	10 m (32.8 ft)	± 0.5 cm (0.016 ft)	0.0006% FS
M20	20 m (65.6 ft)	± 1 cm (0.032 ft)	0.0006% FS

LevelVent 5 Wellhead

Materials: Black Delrin, Nickel plated Zinc, Viton

Dimensions: 30 mm x 76 mm (1.2" x 3.0")

Operating Temperature: -20°C to 80°C

IP Rating: IP 64 (dust and splash proof)

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LevelVent 5 Vented Cable Options

Solinst LevelVent 5 vented cable assemblies are available in custom lengths of up to 500 feet.

Vented cables contain communication wires, as well as a vent tube running the length of the cable. Vented cables provide direct read communication from the LevelVent 5 logger to the wellhead. The vent tube and wires are jacketed in polyurethane, providing durability and protection.

The vented cables are easily and securely connected to the LevelVent 5 logger and wellhead, using twist connections. A 2" Well Cap Assembly and hanger bracket are included to support the wellhead and vented cable when deployed.

LevelVent 5 Vented Cable

Wetted Materials: Polyurethane, Nickel plated Brass, Viton

Diameter: Cable: 8 mm (0.32")

Connectors: 20 mm (0.79")

Lengths: 1 to 500 ft

Max. Bend Radius: 25 mm (1")

Operating Temperature: -20°C to 80°C

Telemetry Applications







Integrate the LevelVent 5 with Solinst Telemetry Systems, which use the latest wireless technologies.

Solinst Levelogger 5 App Interface

The Levelogger 5 App Interface uses *Bluetooth®* technology to connect your LevelVent 5 to your smart device. With the Solinst Levelogger App, you can download data, view real-time data, and program your dataloggers (see Model 3001 Levelogger 5 App Interface data sheets).









DataGrabber 5

The DataGrabber 5 is a field-ready data transfer device that allows you to copy data from a LevelVent 5 onto a USB flash drive key, with one push-button. The DataGrabber 5 is compact and very easy to transport.



