

Levellogger Junior Edge

Model 3001

The Levellogger Junior Edge provides an inexpensive alternative for measuring groundwater and surface water levels and temperature. The Levellogger Junior Edge combines a pressure sensor, temperature detector, a datalogger, and 5-year battery (based on a 1-minute sampling rate) in one compact 7/8" x 5.6" (22 mm x 142 mm) stainless steel housing.

The Levellogger Junior Edge records absolute pressure using the same durable Hastelloy® pressure sensor as the Levellogger Edge. The Hastelloy sensor has excellent performance in harsh environments with better temperature compensation and thermal response time, and can withstand 2 times overpressure without permanent damage.

The Levellogger Junior Edge features FRAM memory, with a capacity of 40,000 sets of temperature and water level data points. Readings are linear at a user-defined interval between 0.5 second to 99 hours. Accuracy is 0.1% FS, with lifetime factory calibration.

If greater accuracy, more sampling options, or wider depth ranges are required, the Solinst Levellogger Edge has the functionality to suit your application (see Model 3001 Edge data sheet). For conductivity datalogging, Solinst also offers the LTC Levellogger Edge (see Model 3001 LTC Levellogger Edge data sheet).



Features

- Low cost
- Accuracy of 0.1% FS
- Memory for 40,000 data points
- Robust Hastelloy pressure sensor
- Basic and advanced data compensation options

Operation

Programming the Levellogger Junior Edge is the same as with the Levellogger Edge. An Optical Reader or PC Interface Cable connects the Levellogger to a laptop or desktop PC. The intuitive Levellogger Software automatically detects the type of Levellogger that is connected. Programming, downloading, data management and export are intuitive tasks. The Real Time View option allows immediate viewing of live water level and temperature readings, independent of the scheduled programming intervals.

The Levellogger Junior Edge outputs temperature and temperature compensated water level readings. Using the Data Wizard in the Levellogger Software, you can barometrically compensate multiple Levellogger Junior Edge files simultaneously, with just one Barologger Edge file.

The Levellogger Junior Edge is compatible with Levellogger Series accessories, including the Solinst Levellogger App and Interface, the DataGrabber data transfer device, SDI-12 Interface Cable, and Solinst Telemetry Systems.

These compact dataloggers are straightforward to deploy. Installation can be with direct read cables, by stainless steel wireline or Kevlar® cord suspension, with the option of using Solinst 2" Locking Well Caps.

Applications

- Monitoring water levels in wells and surface water
- Pump and slug tests
- Reservoir and stormwater runoff management
- Watershed and drainage basin monitoring
- Stream gauging, lake and wetland monitoring
- Tank level measurement

Level Sensor:	Piezoresistive Silicon with Hastelloy Sensor
Ranges:	5,10 m
Accuracy:	± 0.1% FS
Units of Measure:	cm, m, ft, psi, kPa, bar, (°C, °F)
Normalization:	Automatic Temp Compensation
Temp Compensation Range:	0°C to 40°C
Temperature Sensor:	Platinum Resistance Temperature Detector (RTD)
Accuracy:	± 0.1°C
Resolution:	0.1°C
Battery Life:	5 Years (based on 1 reading/minute)
Operating Temperature:	- 20°C to 80°C
Clock Accuracy:	± 1 minute/year (- 20°C to 80°C)
Memory:	FRAM
Maximum Readings:	40,000 sets of readings
Communication:	Optical Infrared to USB, RS232, or SDI-12
Size:	7/8" x 5.6" (22 mm x 142 mm)
Weight:	4.2 oz. (119 grams)
Wetted Materials:	316 Stainless Steel, Delrin®, Viton®, Hastelloy
Sampling Mode:	Linear, Real Time View, Future Start
Measurement Rates:	0.5 sec to 99 hours
Barometric Compensation:	Data Wizard and Barologger Edge

LT Models	Full Scale (FS)	Accuracy
M5	5 m (16.4 ft.)	± 0.6 cm, 0.020 ft.
M10	10 m (32.8 ft.)	± 1.0 cm, 0.032 ft.

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Levelogger App & Interface

A smart alternative for programming, data collection, viewing and sharing, is the Levelogger App Interface that uses Bluetooth® wireless technology to connect all Levelogger Series products to your smart device running the Solinst Levelogger App (see Model 3001 Solinst Levelogger App & Interface data sheets).



Model 3001	 Levelogger Edge CE WEEE	 Levelogger Junior Edge CE WEEE
Warranty	3 Years	1 Year
Pressure Transducer	Piezoresistive Silicon with Hastelloy Sensor	Piezoresistive Silicon with Hastelloy Sensor
Calibrated Ranges:	5, 10, 20, 30, 100, 200 m, Atm. Barologger	5, 10 m
Accuracy	± 0.05% FS (Barologger Edge ±0.05 kPa)	± 0.1% FS
Normalization	Automatic Temperature Compensation	Automatic Temperature Compensation
Calibration	Factory – Lifetime calibration	Factory – Lifetime calibration
Response Time (90% Thermal Δ)	1 minute/10°C change	1 minute/1°C change
Temp Comp Range	0 to +50°C (Barologger Edge -10 to +50°C)	0 to +40°C
Over-pressure Range	2 X	2 X
Temperature Sensor	Platinum Resistance Temperature Detector (RTD)	Platinum Resistance Temperature Detector (RTD)
Temperature Accuracy	± 0.05°C	± 0.1°C
Temperature Resolution	0.003°C	0.1°C
Operating Temp Range	-20 to +80°C	-20 to +80°C
Clock Accuracy	± 1 minute / year (-20°C - +80°C)	± 1 minute / year (-20°C - +80°C)
Battery Life	10 Years (based on 1 reading/minute)	5 Years (based on 1 reading/minute)
Size	7/8" x 6.25" (22 mm x 159 mm)	7/8" x 5.6" (22 mm x 142 mm)
Weight	4.6 oz. (129 grams)	4.2 oz. (119 grams)
Memory	40,000 readings in FRAM memory, or up to 120,000 readings using data compression option	40,000 readings in FRAM memory, no data compression option
Communication Speed	9600 bps, 38,400 bps with HS USB Optical Reader	9600 bps
Com Interface	Optical infra-red: USB, RS232, SDI-12	Optical infra-red: USB, RS232, SDI-12
Memory Modes	Continuous or Slate	Continuous or Slate
Logging Rates	0.125 sec to 99 hours	0.5 sec to 99 hours
Logging Modes	Linear, Event & User-Selectable Schedules with Repeat Mode, Future Start, Future Stop, Real Time View	Linear, Real Time View, Future Start
Barometric Compensation	Data Wizard and Barologger Edge	Data Wizard and Barologger Edge
Corrosion Resistance	Titanium based PVD coating and Hastelloy Sensor	316 L Stainless Steel and Hastelloy Sensor
Other Wetted Materials	Delrin, Viton, Hastelloy, 316L Stainless Steel	Delrin, Viton, Hastelloy, 316L Stainless Steel
Direct Read Capability	Yes	Yes

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