

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 pressure and temperature sensors, a datalogger, and 5-year battery 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 an increased 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 20 bit resolution and 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 Data Sheet). For conductivity datalogging, Solinst also offers the LTC Levellogger Junior (see Model 3001 LTC Levellogger Junior Data Sheet).



Features

- Low cost
- 5 year battery life
- Accuracy of 0.1% FS
- Increased memory to 40,000 data points
- New robust Hastelloy pressure sensor
- Compatible with Solinst Telemetry Systems and SDI-12

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 Compensation Wizard in the Levellogger Software, you can barometrically compensation multiple Levellogger Junior Edge files simultaneously, with just one Barologger Edge file.

The Levellogger Junior Edge is compatible with Levellogger Series accessories, including the Levellogger Gold data transfer device, SDI-12 Interface Cable, and Solinst Telemetry Systems (see Model 9100/9200 Data Sheet).





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

Technical Specifications

Level Sensor:	Piezoresistive Silicon with Hastelloy Sensor
Ranges:	F15/M5, F30/M10
Accuracy (typical):	0.1% FS
Units of Measure:	cm, m, ft, psi, kPa, mBar, °C, °F
Resolution:	20 Bit Resolution
Normalization:	Automatic Temp Compensation
Temp Compensation Range:	0°C to 40°C
Temperature Sensor:	Platinum RTD
Accuracy:	± 0.1°C
Resolution:	0.1°C
Battery Life:	5 Years
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 and Real Time View
Measurement Rates:	0.5 sec to 99 hours
Barometric Compensation:	Software Wizard and Barologger Edge

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	Levelogger Edge	Levelogger Junior Edge
Backwards Compatible	YES (with limitations) See http://www.solinst.com/Downloads/	YES (with limitations) See http://www.solinst.com/Downloads/
Warranty	3 Years	1 Year
Pressure Transducer	Piezoresistive Silicon with Hastelloy Sensor	Piezoresistive Silicon with Hastelloy Sensor
Calibrated Ranges:	15, 30, 65, 100, 300 ft, Atmospheric Barologger 5, 10, 20, 30, 100 m, Atmospheric Barologger	15, 30 ft 5, 10 m
Accuracy (typical)	± 0.05% FS (Barologger Edge ±0.05 kPa)	± 0.1% FS
Resolution	24 Bit Resolution	20 Bit Resolution
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 RTD	Platinum 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	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
Barometric Compensation	Barologger Edge	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
Leveloader Compatible	Yes (ensure the latest firmware is installed)	Yes (ensure the latest firmware is installed)