

# Levelogger Junior Edge

**Model 3001 Data Sheet** 

#### Levelogger Junior Edge

Model 3001

The Levelogger Junior Edge provides an inexpensive alternative for measuring groundwater and surface water levels and temperature. The Levelogger 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 Levelogger Junior Edge records absolute pressure using the same durable Hastelloy pressure sensor as the Levelogger 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 Levelogger 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 Levelogger Edge has the functionality to suit your application (see Model 3001 Data Sheet). For conductivity datalogging, Solinst also offers the LTC Levelogger Junior (see Model 3001 LTC Levelogger Junior Data Sheet).

| 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             |  |



#### **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 Levelogger Junior Edge is the same as with the Levelogger Edge. An Optical Reader or PC Interface Cable connects the Levelogger to a laptop or desktop PC. The intuitive Levelogger Software automatically detects the type of Levelogger 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 Levelogger Junior Edge outputs temperature and temperature compensated water level readings. Using the Data Compensation Wizard in the Levelogger Software, you can barometrically compensation multiple Levelogger Junior Edge files simultaneously, with just one Barologger Edge file.

The Levelogger Junior Edge is compatible with Levelogger Series accessories, including the Leveloader 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

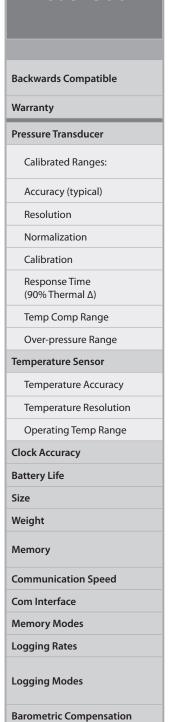
® Delrin, Viton and Kevlar are registered trademarks of DuPont Corp.





## Levelogger Edge Comparison

#### **Model 3001**



| Solinst Levelogger  C   WEEE  Levelogger Edge   | Solinsi Levelogger:  C   WEEE  Levelogger Junior Edge        |
|---|--|
| YES (with limitations) See http://www.solinst.com/Downloads/  | YES (with limitations) See http://www.solinst.com/Downloads/ |
| 3 Years   | 1 Year   |
| Piezoresistive Silicon with Hastelloy Sensor  | Piezoresistive Silicon with Hastelloy Sensor                 |
| 15, 30, 65, 100, 300 ft, Atmospheric Barologger 5, 10, 20, 30, 100 m, Atmospheric Barologger                | 15, 30 ft<br>5, 10 m   |
| ± 0.05% FS (Barologger Edge ±0.05 kPa)  | ± 0.1% FS  |
| 24 Bit Resolution   | 20 Bit Resolution  |
| Automatic Temperature Compensation  | Automatic Temperature Compensation                           |
| Factory – Lifetime calibration  | Factory – Lifetime calibration                               |
| 1 minute/10°C change  | 1 minute/1°C change  |
| 0 to +50°C (Barologger Edge -10 to +50°C)   | 0 to +40°C   |
| 2 X   | 2 X  |
| Platinum RTD  | Platinum RTD   |
| ± 0.05°C  | ± 0.1°C  |
| 0.003°C   | 0.1°C  |
| -20 to +80°C  | -20 to +80°C   |
| ± 1 minute / year (-20°C - +80°C)   | ± 1 minute / year (-20°C - +80°C)                            |
| 10 Years (based on 1 reading/minute)  | 5 Years (based on 1 reading/minute)                          |
| 7/8" x 6.25" (22 mm x 159 mm)   | 7/8" x 5.6" (22 mm x 142 mm)                                 |
| 4.6 oz. (129 grams)   | 4.2 oz. (119 grams)  |
| 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   |
| 9600 bps, 38,400 bps with HS USB Optical Reader   | 9600 bps   |
| Optical infra-red: USB, RS232, SDI-12   | Optical infra-red: USB, RS232, SDI-12                        |
| Continuous or Slate   | Slate  |
| 0.125 sec to 99 hours   | 0.5 sec to 99 hours  |
| Linear, Event & User-Selectable Schedules with<br>Repeat Mode, Future Start, Future Stop,<br>Real Time View | Linear, Real Time View                                       |
| Barologger Edge   | Barologger Edge  |
| Titanium based PVD coating and Hastelloy Sensor   | 316 L Stainless Steel and Hastelloy Sensor                   |
| Delrin, Viton, Hastelloy, 316L Stainless Steel  | Delrin, Viton, Hastelloy, 316L Stainless Steel               |
| Yes   | Yes  |
| Yes (ensure the latest firmware is installed)   | Yes (ensure the latest firmware is installed)                |



Corrosion Resistance
Other Wetted Materials
Direct Read Capability

Leveloader Compatible

Web Site: www.solinst.com E-mail: instruments@solinst.com