

Levelogger 5 Junior

Model 3001

The Levelogger 5 Junior provides an inexpensive alternative for measuring groundwater and surface water levels and temperature. The Levelogger 5 Junior combines a pressure sensor, temperature detector, a datalogger, and 5-year battery (based on a 1-minute sampling rate) in one compact 22 mm x 160 mm (7/8" x 6.3") stainless steel housing.

The Levelogger 5 Junior records absolute pressure using the same durable Hastelloy® pressure sensor as the Levelogger 5. The Hastelloy sensor has excellent performance in harsh environments and can withstand 2 times overpressure without permanent damage.

Features

- Low cost
- Accuracy of 0.1% FS
- Memory for 75,000 data points
- Robust Hastelloy pressure sensor
- Single-eye optical for fast, reliable communication



Level Sensor:	Piezoresistive Silicon with Hastelloy Sensor
Ranges:	5,10 m
Accuracy:	± 0.1% FS
Resolution:	0.02% FS to 0.01% FS
Units of Measure:	cm, m, ft, psi, kPa, bar, (°C, °F)
Normalization:	Automatic Temp Compensation
Temp Comp. Range:	0°C to 40°C
Temperature Sensor:	Platinum Resistance Temperature Detector
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 (typical):	± 1 minute/year (- 20°C to 80°C)
Memory Modes:	Continuous or Slate
Maximum Readings:	75,000 sets of readings
Communication:	Optical high-speed: 57,600 bps with USB
Size:	22 mm x 160 mm (7/8" x 6.3")
Weight:	145 grams (5.1 oz)
Wetted Materials:	316L 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 5

LT Models	Full Scale (FS)	Accuracy	Resolution
M5	5 m (16.4 ft)	± 0.5 cm, 0.020 ft.	0.02% FS
M10	10 m (32.8 ft)	± 1.0 cm, 0.032 ft.	0.01% FS

The Levelogger 5 Junior features a memory with a capacity of 75,000 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 Levelogger 5 has the functionality to suit your application (see Model 3001 Levelogger 5 data sheet). For conductivity datalogging, Solinst also offers the Levelogger 5 LTC (see Model 3001 Levelogger 5 LTC data sheet).

Operation

Programming the Levelogger 5 Junior is the same as with the Levelogger 5. A Desktop Reader 5, Field Reader 5 or PC Interface Cable connects the Levelogger to a laptop or desktop PC. Levelogger Software automatically detects the type of datalogger 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 5 Junior outputs temperature and temperature compensated water level readings. Using the Data Wizard in the Solinst Levelogger Software, you can barometrically compensate multiple Levelogger 5 Junior files simultaneously, with just one Barologger 5 file.

The Levelogger 5 Junior is compatible with Levelogger 5 Series accessories, including the Solinst Levelogger 5 App Interface, DataGrabber 5 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



Levellogger 5 App Interface

A smart alternative for programming, data collection, viewing and sharing, is the Levellogger 5 App Interface that uses *Bluetooth®* wireless technology to connect all Levellogger Series products to your smart device running the Solinst Levellogger App (see Model 3001 Solinst Levellogger 5 App Interface data sheets).



Model 3001	 Levellogger 5 CE WEEE	 Levellogger 5 Junior 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 5 ±0.05 kPa)	± 0.1% FS
Resolution	0.002% FS to 0.0006% FS	0.02% FS to 0.01% 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 5 -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 (typical)	± 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	22 mm x 160 mm (7/8" x 6.3")	22 mm x 160 mm (7/8" x 6.3")
Weight	146 grams (5.2 oz)	145 grams (5.1 oz)
Memory	150,000 sets of readings	75,000 sets of readings
Communication Speed	57,600 bps with USB	57,600 bps with USB
Com Interface	Optical high-speed: USB, SDI-12	Optical high-speed: USB, 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 5	Data Wizard and Barologger 5
Corrosion Resistance	Baked-on coating using polymerization technology (inside and out) and Hastelloy Sensor	316L Stainless Steel and Hastelloy Sensor
Wetted Materials	Delrin, Viton, Hastelloy, 316L Stainless Steel, PFAS-free PTFE	Delrin, Viton, Hastelloy, 316L Stainless Steel

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