

WL16 Water Level Logger

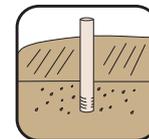
Pressure Transducer and Datalogger Combination

The WL16, Water Level Logger, is a datalogger and submersible pressure transducer combination designed for remote monitoring and recording of water level or pressure data. The water level logger can record over 81,000 readings and has four unique recording options, fast (10 samples per second), programmable interval (1 second to multiple years), logarithmic, and exception. Multiple depth ranges are available from 0.9m to 152m of water level change. A 7.6m vented cable is standard, and optional cable lengths are available from the factory up to 610m.

The WL16, Water Level Logger, is housed in a weather-resistant cylindrical enclosure, which slips inside a standard 2-inch PVC pipe. The WL16 is easily adapted with standard hardware for wellhead mounting, stream, or other installations. Two internal 9 VDC alkaline batteries will typically power the WL16 for approximately one year even if one of the batteries fails. A third onboard battery ensures your data in the event both 9V batteries fail. The WL16 includes software for Windows computers and CE/Mobile based PDAs, allowing easy data transfer to a laptop, desktop or PDA.



- Easy to operate and install
- Four sample modes: 10 times per second, interval, logarithmic, and exception
- PDA software simpli.es .eld data collection
- USB and Serial communication options available
- Serial version is telemetry compatible
- No need to remove sensor for data collection or battery change
- Highly accurate water level measurements
- User programmable start and stop alarms, engineering units, and .eld calibration setup
- Unique 0.9m range for shallow water
- Wet-wet transducer eliminates vent tube concerns
- Automatic barometric pressure and temperature compensation



Groundwater. Pumping & Slug Tests. Recharge Analysis. Site Investigations. Supply Monitoring.



Storm water. Flood Analyses. Wetlands & Ponds. Storm water Run-Off. Agricultural Run-Off.



Surface water. Irrigation Canals. Stream & River Gauging. Lakes & Reservoirs. Tidal Fluctuation.



The WL16 Water Level Logger supports USB cable interface for laptop and desktop downloading OR a serial communication port for use with most popular PDA and telemetry solutions.

Specifications

Datalogger

Memory	Non-volatile flash memory
Power	Two 9 VDC alkaline batteries (inc.)
Battery Life	Up to 1 year (depending on recording intervals)
Moisture Protection	Protective coating (helps prevent damage to electronics from condensation)
Temperature	-40° to +185°F (-40° to +85°C)
Humidity	0-95% non-condensing
Storage Capacity	81,759 time/date stamped datapoints (including battery voltage)
Recording Rate	High Speed (10 samples per second), Fixed Interval (programmable from 1 second to >1 year), Logarithmic, Exception
Data Overwrite	Select memory wrap or unwrap (unwrap will stop logging once memory is full)
Clock	Synchronizes to user's computer; accuracy of 0.0025% or 1 minute in 1 month; format is m/d/yr and hr/min/sec
Enclosure	1-7/8 inch dia. x 11-1/2 inch long (4.8 cm dia. x 29.2 cm long) Stainless steel UV protected PVC, vented for barometric pressure compensation
Weight	1.6 lbs, with battery and 25 ft cable (0.7 kg)
Communication	WL16S: RS-232 4-pin circular conn. WL16U: USB Type B Selectable Baud Rates: 9600, 19200, 28800, 38400, 57600, 115200
Certificates	CE Compliance

Global Logger II Software

Compatibility	Microsoft's Windows™ 98, ME, 2000, NT, XP, Vista, and 7
Features	Tabular Display/Printout; data in standard spreadsheet format (CSV); programmable alarm start and stop times; field calibration and help files included

Cable

Conductors	4 each 22 AWG
Material	Marine grade polyether jacket, polyethylene vent tube, full foil shield
Shield	Aluminum Mylar
Outside Diameter	0.306 inch (0.78 cm)
Length	Standard 25 ft (7.62 m) (up to 2000 ft (609.6 m) from factory) (for cable lengths over 500 ft (152.4 m) please call for availability)

Sensor

Sensor Element	Silicone Diaphragm, Wet/Wet Transducer
Ranges (ft)	0-3, 0-15, 0-30, 0-60, 0-120, 0-250, 0-500
Linearity and Hysteresis	±0.1% full scale
Accuracy	±0.1% full scale at constant temperature, ±0.2% over 35°F to 70°F (1.37° to +21.1°C) range
Overpressure	Not to exceed 2x full scale range
Warm-Up Time	3 seconds recommended
Compensation	Uses dynamic temperature compensation 30 to 70°F (-1.1 to 21.1°C), automatic barometric pressure compensation
Housing Material	304L stainless steel, stainless steel microscreen with hundreds of holes to prevent fouling, electronics are fully encapsulated in marine grade epoxy, guaranteed not to leak
Housing Size	Up to 13/16 inch dia. X 5-1/2 inch L (2cm dia. X 14 cm L), small enough for a 1 inch well. Titanium option has 1 inch diameter.

Bluetooth Adapter

Format	Bluetooth 2.0 SPP (Serial Port Protocol)
Baud Rate	Auto Detect up to 115K Baud
Power	9V Alkaline. 20 hrs continuous use
Current	30mA Average
Range	20 ft (6.1 m) maximum
Operating Temp	-40° to +185°F (-40° to +85°C)
Compatible Software	Global Logger II version 2.1.5 or higher; Global Logger II PDA software version 2.0.1; Flow Monitor version 2.3.2