

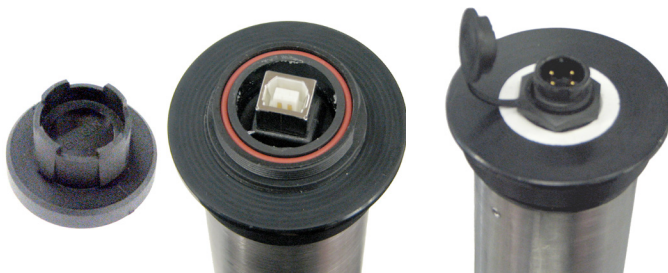
## Water Flow and Temperature Logger

The FL16 Water Flow Logger revolutionizes flow data collection for applications such as inflow & infiltration studies, stormwater and wastewater collection systems, open channels and a host of other gravity flow systems. The FL16 Water Flow Loggers will record over 81,000 depth, temperature, water flow and velocity readings in sewer and drainage pipes, as well as other open channel applications such as flumes, weirs and square channels. The specially engineered, non-fouling, water level sensor works in depths as little as ½ inch and allows for deployment in manholes and other difficult to access areas without the need to enter the confined space.

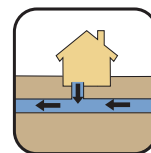
The FL16 Water Flow Logger's vented water flow sensor is fully encapsulated with marinegrade epoxy. The water flow sensor's electronics are encapsulated so moisture will never leak in through O-ring seals or work its way into the vent tube and cause drift or sensor failure. The vent tube is sealed directly to the wet-wet sensing element.

FL16 Water Flow Logger's user-friendly Windows-based software is tailored specifically for calculating water flows in partially filled sewer and drainage pipes using the Manning's Equation, with pull-down menus for selecting and entering the necessary information. The Water Flow Logger software has a unique calibration feature which allows users to view calculated water velocity, compare this to actual measured data, and adjust the water flow parameters to calibrate for the water flow conditions of a specific application. Water flow equations for over 40 standard flumes and weirs are provided, as well as user-definable custom lookup tables which can be used to convert water level to flow for virtually any application.

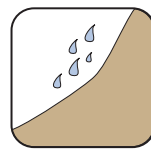
- Compact, self-powered and easy to use
- USB and Serial communication options available
- User programmable start and stop alarms, engineering units, and field calibration setup
- No confined space entry required for sensor deployment
- User friendly Windows and PDA software included-simplifies field data collection
- Wet-wet transducer eliminates vent tube concerns
- Automatic barometric pressure and temperature compensation



The FL16 Water Flow Logger supports USB cable interface for laptop and desktop downloading OR a serial communication port for use with most popular PDA and telemetry solutions.



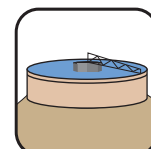
Sewer and drainage pipes



Stormwater



Surface water



Wastewater

## Specifications

### Datalogger

Memory	Non-volatile flash memory
Power	Two 9 VDC alkaline batteries
Battery Life	Up to 1 year (depending on recording intervals)
Moisture Protection	Silicon 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	FL16S: RS-232 4-pin circular conn. FL16U: 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	0.307 inch (7.8 mm)
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
Linearity and Hysteresis	±0.1% full scale
Accuracy	±0.1% full scale at constant temperature, ±0.2% over 32°F to 70°F (0° to +21.1°C) range
Overpressure	Not to exceed 2x full scale range
Warm-Up Time	3 seconds recommended
Compensation	Uses dynamic temperature compensation 32 to 70°F (0 to 21.1°C), submerged, automatic barometric pressure compensation
Housing Material	316 stainless steel outer sleeve, PVC diffuser and strain relief
Housing Size	9 inch long x 1 inch dia. (22.9 cm long x 2.54 cm dia.)

### 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

**For Ordering information and Options; please visit [www.globalw.com/products/fl16.html](http://www.globalw.com/products/fl16.html)**