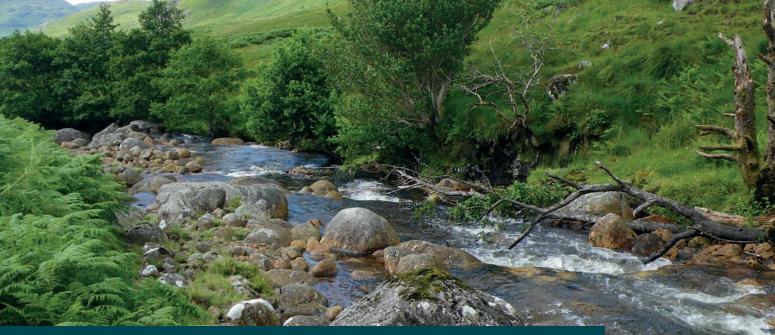


# Smart Monitoring Hydro-Logic<sup>®</sup> Flexi Loggers





Hydro-Logic<sup>®</sup> Flexi Logger 100



Hydro-Logic<sup>®</sup> Flexi Logger 200



Hydro-Logic<sup>®</sup> Flexi Logger 300Ex



# Hydro-Logic<sup>®</sup> Smart Monitoring

# Hydro-Logic<sup>®</sup> Smart Monitoring products and services help you to make better water management decisions.

Whether you need to react to flood events, monitor climate change or forecast network supply and demand, whether you're looking at today or the next ten years, whether you're saving lives or saving money—we can help you to improve the way you plan, act and react.

Our range of Hydro-Logic<sup>®</sup> Smart Monitoring Flexi Loggers work with any compatible sensor to provide businesses and public organisations with data required to inform effective event monitoring and early warning, long-term monitoring, analysis and forecasting.

The loggers can operate as a single monitor or as part of a networked data gathering system. They can be paired with a range of sensors to monitor and measure a variety of hydrometric, environmental and weather parameters even in remote and hostile environments.

### Applications

- Hydrometry and flood warning in rivers and channels.
- Drain and trash screen blockage alarms.
- Rainfall monitoring and intensity alarms.
- Water quality monitoring.
- Groundwater logging.
- Consent discharge monitoring and alarms.

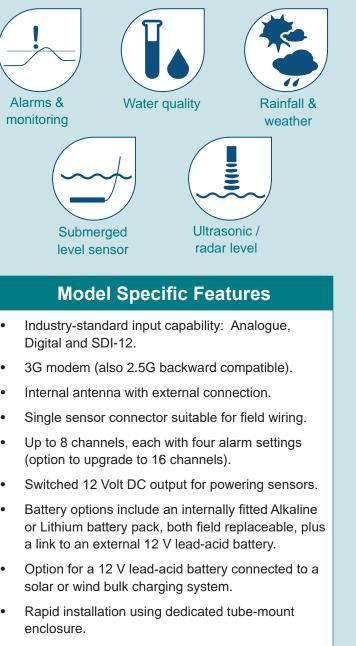
# Hydro-Logic<sup>®</sup> Flexi Logger 100

Robust to IP68 standard, the Hydro-Logic<sup>®</sup> Flexi Logger 100 is ideal for installation into remote or space constricted applications.

# Hydro-Logic<sup>®</sup> Flexi Logger 200

The Hydro-Logic<sup>®</sup> Flexi Logger 200 has an integral display panel and is ideal for installation into control panel cabinets of permanent installations.

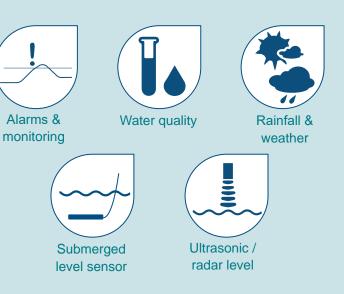




Rugged, environmental protection to IP68 (at 1.2 m submersion for 48 hours without significant ingress).







### **Model Specific Features**

Industry-standard input capability: Analogue, Digital and SDI-12.

2.5G modem.

Dual input plug with up to 8 input channels, each with four alarm settings (option to upgrade to 16 channels).

Switched 12 Volt DC output for powering sensors.

Powered by six alkaline D cells with the option to link to an external 12 V lead-acid battery.

Option for a 12 V lead-acid battery connected to a solar or wind bulk charging system.

On-board relay output for local event-warning systems.

User configurable via a plug-in sensor card.

PSTN connection option available.

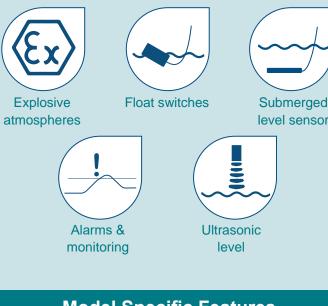
Environmental protection to IP65.

# Hydro-Logic<sup>®</sup> Flexi Logger 300Ex

ATEX certified, the Hydro-Logic® Flexi Logger 300Ex is ideal for installation in chambers or tanks where a potentially explosive atmosphere may be present.







### **Model Specific Features**

- ATEX and IECEx compliant (to Zone 0).
- 3 sensor connectors suitable for field wiring.
- Remote monitoring of up to 3 HART or float switch sensors and one 4-20mA input.
- 18V sensor power supply.
- User-replaceable battery 96Ah battery.
- Internal antenna with external connection.
- Rugged, environmental protection to IP68 (at 1.2 m submersion for 48 hours without significant ingress).

# Key features across the range

- Wide variety of user-configurable applications including; level, flow, weather, water quality, etc. Pre-configured for instant connection to web-browser-based telemetry. • Easy set up, local or remote, using Harvest software or via browser-based telemetry. On-board diagnostics (signal, battery and sensor monitoring). GSM, GPRS or 3G networks. User-replaceable SIM card for mobile data modem. Up to 8 logged channels total, including derived channels. Storage capacity 29,768 16-bit readings; oldest data is overwritten when full. Long term secure data retention. Secure data storage in flash memory prevents data loss if the battery fails. Configurable logging interval: 1m, 2m, 5m, 10m, 15m, 30m, 1h, 2h, 3h, 4h, 6h, 8h, 12h (10s and 30s available for testing). Data is stored at 'cardinal points' as per specified interval (eg. 15 minutes logging at 00:00, 00:15, 00:30, 00:45 etc). 16-bit resolution and accuracy available with selected high quality sensors. Logging strategies can be periodic, frequency pulse count or event. Intelligent alarms, 4 per channel.
- Pre-wiring and configuration service available.
- Simple and quick to install, suitable for temporary or permanent installations.
- Telemetry service option (factory supplied SIM and telemetry subscription)
- Connects to Timeview or (optional) DNP3 Masters.
- 2 year warranty.
- Range of external antenna available.

# **Software options**

### Harvest software

All our Hydro-Logic<sup>®</sup> Flexi Loggers are supplied with our Windows Harvest logger control software package. This enables users to configure all loggers, sensor and telemetry settings via serial port communications. The package also enables collected data and trends to be inspected. It is also used to export and manage data retrieved from these devices.

Harvest software is available in two versions:

- · Harvest for Windows based PCs.
- Pocket Harvest for Windows Mobile based devices including the rugged Juniper Archer 2.

You can download Harvest Windows software free of charge from our Support website.

### **Telemetry**

Hydro-Logic<sup>®</sup> telemetry systems provide an online platform for basic data visualisation, inspection and early warning on an annual subscription.

Automatically receiving data from remote Hydro-Logic<sup>®</sup> data loggers, Hydro-Logic<sup>®</sup> telemetry systems provide an interface to enable you to inspect data outputs, helping you to identify potential system blockages and alerting you to changes in environmental conditions that could indicate an imminent flood event.

Hydro-Logic<sup>®</sup> telemetry systems also manage any automated alerts that have been configured, distributing them via e-mail or SMS to designated recipients to provide early warning of flood events or other environmental risks.

#### Hydro-Logic<sup>®</sup> Timeview

Hydro-Logic<sup>®</sup> Timeview provides automatic wireless receipt of data from remote sensors, triggering automated flood event alarms, providing short-term data storage and enabling data visualisation and initial analysis.

- Capture latest data and trends.
- Reduce site visits to save cost of data collection.
- Use near real-time alarms to alert emergency staff ie. to clear blockages.
- Get warnings of events or licence compliance failure.

#### Hydro-Logic® Timeview DBi

Hydro-Logic<sup>®</sup> Timeview DBi is a streamlined online database for long-term data warehousing of hydrometric, climate and environmental data, equipping you with analysis tools to help you derive meaningful, actionable insights from that data.



# **Consultancy projects and managed services**

Many organisations don't have the time, resources or expertise to design, install or operate a Smart Monitoring system, and many face similar difficulties in collating, manipulating and interpreting hydrometric data.

Our Hydro-Logic<sup>®</sup> Services team is hugely experienced in all aspects of Smart Monitoring, and is able to provide expert system design, installation and operation services, or to deliver stand-alone hydrometry consultancy projects such as MCERTS inspections.

Our Hydro-Logic<sup>®</sup> Services consultants can help you to address your most complex, critical and urgent Smart Monitoring challenges.

### Services

#### **Field Hydrometry**

Smart Monitoring network design, management and operation.

#### **Consulting Hydrometry**

Specialist hydrometry guidance, advisory support and training.

### Software

#### Aquarius Time-Series<sup>™</sup> software

Hydro-Logic<sup>®</sup> Services are the only people who offer and support AQUARIUS in the United Kingdom and Ireland.

AQUARIUS is the leading software for water time series data management. The world's most advanced environmental monitoring agencies trust AQUARIUS to achieve higher data integrity, defensibility, and timeliness. Its simple design delivers the latest hydrological science and techniques in an intuitive interface.

AQUARIUS allows water resource managers to correct and quality control time series data, build better rating curves, and derive and publish hydrological data in real-time to meet stakeholder expectations.

#### Aquator<sup>™</sup> water resources modelling software

Aquator<sup>™</sup> software enables engineers and analysts to create and run complex models of water resources systems, providing insight into system performance under current and future supply, demand and environmental conditions in order to make better planning, development and resourcing decisions.

Aquator<sup>™</sup> is the only water resources/supply software in the world with the right to use Microsoft Visual Basic<sup>®</sup> for Applications (VBA) to customise its models - making it uniquely capable of helping water providers to overcome their most important challenges.



## Why Hydro International

We've been developing, installing and operating Smart Monitoring technologies for over 30 years, so we make sure you get the right data, at the right time, in the right way.

Selecting the right data logger and the right sensor for a particular Smart Monitoring application takes understanding and expertise, and getting it wrong can cost you time and money. Our Smart Monitoring experts know better than anyone what's required for effective data collection, transmission, storage and analysis, and they'll work with you to ensure that the solution meets your needs from day one.

Or, if you'd prefer to have someone take on your Smart Monitoring challenges for you, our Hydro-Logic<sup>®</sup> Services team already operates the largest Smart Monitoring network in the UK and will be happy to provide a managed service on your behalf.





E



To learn more about how our Hydro-Logic<sup>®</sup> Smart Monitoring products and services can help you make better water management decisions visit **hydro-int.com/smartmonitoring** or search **hydro-logic smart monitoring** online.

### Contact us to talk to an expert:

### Products

Hydro-Logic<sup>®</sup> Smart Monitoring Shearwater House Clevedon Hall Estate Victoria Road Clevedon BS21 7RD

Tel: +44 (0)1275 878371 Email: <u>enquiries@hydro-int.com</u>

### **Consultancy services**

Hydro-Logic<sup>®</sup> Services Unit 6, Commerce Park Brunel Way Theale RG7 4AB

Tel: +44 (0)118 933 1325 Email: <u>enquiries@hydro-int.com</u>

# Make better water management decisions