

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



Hydro-Logic<sup>®</sup> Flexi  
Logger 105



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



## Hydro-Logic® Smart Monitoring

Hydro-Logic® 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® 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

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- 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® Flexi Logger 105

The Hydro-Logic® Flexi Logger 105 delivers faster ARM-based processing, Wi-Fi connection and large data storage capacity, but is still small enough to fit into a standard pole top installation.



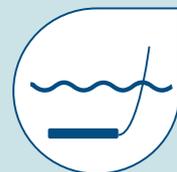
Alarms & monitoring



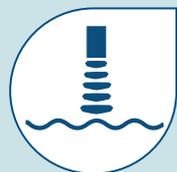
Water quality



Rainfall & weather



Submerged level sensor



Ultrasonic / radar level

### Model Specific Features

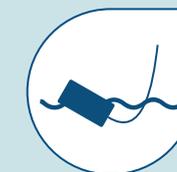
- ARM based logger provides faster processing
- 32 channels as standard.
- Uses a 4G modem that supports Long-Term Evolution technology (NB-IoT and CAT M1). 2G fallback included.
- Protected Wi-Fi configuration without ever removing the unit from its installation casing.
- Compatible with Hydro International standard pole top casings so upgrades to existing sites are straightforward.
- 119,700 data storage capacity.
- Switched 12 Volt DC output for powering sensors.
- External power-source capability.
- Configurable sample rate, 10 seconds to 12 hours.
- Industry-standard input capability Analogue, Digital and SDI-12.
- Rugged, environmental protection to IP68.

## Hydro-Logic® Flexi Logger 300Ex

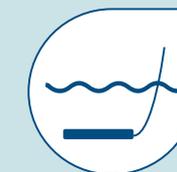
ATEX certified, the Hydro-Logic® Flexi Logger 300Ex is ideal for installation in chambers or tanks where a potentially explosive atmosphere may be present.



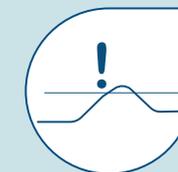
Explosive atmospheres



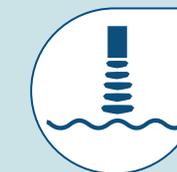
Float switches



Submerged level sensor



Alarms & monitoring



Ultrasonic level

### Model Specific Features

- ATEX and IECEx compliant (to Zone 0).
- 3 sensor connectors suitable for field wiring.
- Up to 8 logged channels total, including derived channels.
- GSM, GPRS or 3G networks.
- Remote monitoring of up to 3 HART or float switch sensors and one 4-20mA input.
- Storage capacity 29,768 16-bit readings; oldest data is overwritten when full.
- 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).
- Configurable logging interval: 1m, 2m, 5m, 10m, 15m, 30m, 1h, 2h, 3h, 4h, 6h, 8h, 12h (10s and 30s available for testing).

# Key features of the 105 and 300Ex

<ul style="list-style-type: none"><li>• Wide variety of user-configurable applications including; level, flow, weather, water quality, etc.</li></ul>
<ul style="list-style-type: none"><li>• Pre-configured for instant connection to web-browser-based telemetry.</li></ul>
<ul style="list-style-type: none"><li>• Easy set up, local or remote, using Harvest software or via browser-based telemetry.</li></ul>
<ul style="list-style-type: none"><li>• On-board diagnostics (signal, battery and sensor monitoring).</li></ul>
<ul style="list-style-type: none"><li>• User-replaceable SIM card for mobile data modem.</li></ul>
<ul style="list-style-type: none"><li>• Long term secure data retention. Secure data storage in flash memory prevents data loss if the battery fails.</li></ul>
<ul style="list-style-type: none"><li>• Data is stored at 'cardinal points' as per specified interval (eg. 15 minutes logging at 00:00, 00:15, 00:30, 00:45 etc).</li></ul>
<ul style="list-style-type: none"><li>• 16-bit resolution and accuracy available with selected high quality sensors.</li></ul>
<ul style="list-style-type: none"><li>• Logging strategies can be periodic, frequency pulse count or event.</li></ul>
<ul style="list-style-type: none"><li>• Intelligent alarms, 4 per channel.</li></ul>
<ul style="list-style-type: none"><li>• Pre-wiring and configuration service available.</li></ul>
<ul style="list-style-type: none"><li>• Simple and quick to install, suitable for temporary or permanent installations.</li></ul>
<ul style="list-style-type: none"><li>• Telemetry service option (factory supplied SIM and telemetry subscription)</li></ul>
<ul style="list-style-type: none"><li>• Connects to Timeview or (optional) DNP3 Masters.</li></ul>
<ul style="list-style-type: none"><li>• 2 year warranty.</li></ul>
<ul style="list-style-type: none"><li>• Range of external antenna available.</li></ul>

# Harvest configuration software

All our Hydro-Logic® Flexi Loggers are supplied with our Windows Harvest logger control software package which enables users to configure all loggers, sensor and telemetry settings via serial port communications, and inspect collected data and trends. 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: [www.hydro-int.com/smart-monitoring-support](http://www.hydro-int.com/smart-monitoring-support).

# Upgrading from the 100 to the new 105

**Get nearly four times the readings storage, double the available channels, 4G network connectivity, lower power usage and a faster processor with the Hydro-Logic® Flexi Logger 105.**

The Hydro-Logic® Flexi Logger 105 has been designed to enable an easy upgrade to the Hydro-Logic® Flexi Logger 100 in most situations.

The new design will fit easily into our standard pole-top enclosure so upgrades to existing sites are straightforward.

If you would like advice on upgrading your existing Hydro-Logic® Flexi Logger 100, please contact us on: [smartmonitoring@hydro-int.com](mailto:smartmonitoring@hydro-int.com) or call: +44 (0)1275 878371



# Support for legacy models

## Hydro-Logic® Flexi Logger 100 and Hydro-Logic® Flexi Logger 200

If you are happy with your current logger, whether it's a Hydro-Logic® Flexi Logger 100 or a Hydro-Logic® Flexi Logger 200, rest assured we will happily continue to support both these models whilst under warranty.

If you have any queries, or would like technical support for either of the 100 or 200 Hydro-Logic® Flexi Loggers, please visit our support pages at:

<https://www.hydro-int.com/en-gb/smart-monitoring-support>

or call: +44 (0)1275 878371

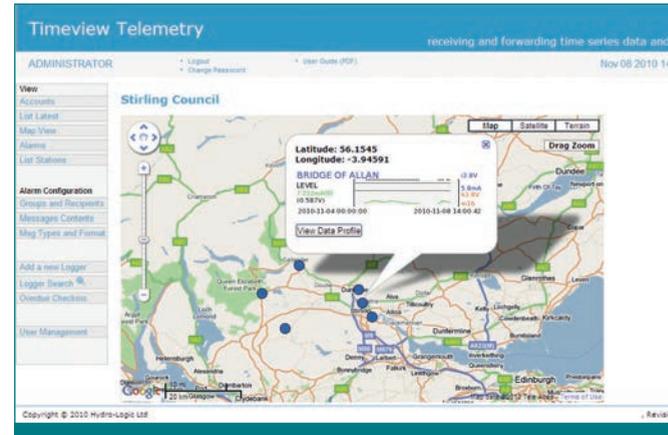


# Data visualisation software

## Hydro-Logic® Timeview

Hydro-Logic® Timeview provides an online platform for basic data visualisation, inspection and early warning on an annual subscription. The software enables you to:

- 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.
- Easily manage users and device features.



Hydro-Logic® Timeview automatically receives data from remote Hydro-Logic® data loggers, and 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® Timeview also manages 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® Timeview DBi

Hydro-Logic® 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.

## Hydro-Logic® Aquator water resources modelling software

Hydro-Logic® Aquator 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.

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

## Aquarius Time-Series™ software

Hydro-Logic® Services is the approved distributor in the UK and Ireland for Aquarius software products.

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.

# 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® 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® Services consultants can help you to address your most complex, critical and urgent Smart Monitoring challenges.

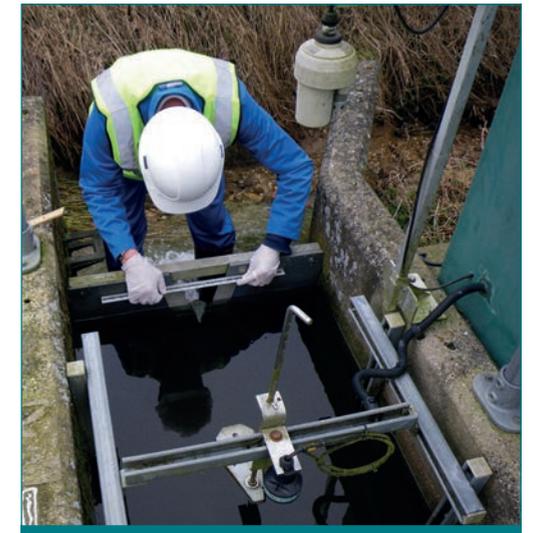
## Services

### Field Hydrometry

Smart Monitoring network design, management and operation.

### Consulting Hydrometry

Specialist hydrometry guidance, advisory support and training.



## 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® Services team already operates the largest Smart Monitoring network in the UK and will be happy to provide a managed service on your behalf.



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

Contact us to talk to an expert:

### Products

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

Tel: +44 (0)1275 878371  
Email: [enquiries@hydro-int.com](mailto:enquiries@hydro-int.com)

### Consultancy services

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

Tel: +44 (0)118 933 1325  
Email: [enquiries@hydro-int.com](mailto:enquiries@hydro-int.com)

Make better water management decisions