Technical Specification

Hydro-Logic® Flexi Logger 105

The Hydro-Logic® Flexi Logger 105 is the latest, upgraded version of the 100 model.

Still the smallest of Hydro International's loggers, but robust to IP68 standard, the 105 model is ideal for installation in remote or space constricted applications.

Key Features

- Wide variety of user-configurable applications including; level, flow, weather, water quality, etc.
- ARM based logger provides faster processing
- 32 channels as standard - double that of the 100 model.
- Four alarm thresholds on each channel.
- Uses a 4G modem that supports Long-Term Evolution technology (NB-IoT and CAT M1). 2G fallback included.
- Improved user interface allows for 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 - nearly four times the memory capacity of the 100 model.
- Pre-configured for instant connection to web-browser-based telemetry.
- Easy set up, local or remote, using Harvest software or via browser-based telemetry.
- Switched 12 Volt DC output for powering sensors.
- On-board diagnostics (signal, battery and sensor monitoring).
- Long battery life, field-replaceable, typically 5 years service.
- 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.
- Rapid installation using pole top (PT) enclosure.

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Technical Data

	Maximum Analogue	1 x 4-20mA input: 0.1% accuracy
	Maximum SDI-12	32 channels total, up to 8 sensor addresses.
	Digital Input 1	2 second tip timing resolution, 65000 event counts, 650Hz frequency.
	Digital Input 2	2 second tip timing resolution, 65000 event counts, 10Hz frequency.
Power	Power Output	12VDC sensor power at 120mA, configurable warm-up time of up to 50 seconds.
	Power Supply	Internal 96Wh Alkaline pack or Internal 187Wh Lithium pack External 12V lead-acid or 6-24V DC supply
Data Storage	Storage Capacity	119,700 16-bit readings total for up to 32 channels.
	Storage Intervals	• 10s, 30s, 1m, 2m, 5m, 10m, 15m, 30m, 1h, 2h, 3h, 4h, 6h, 8h, 12h • Storage interval for each channel can be set independently. • Data recorded at cardinal points.
Communications	Telemetry Modem Protocol	Internal 4G modem (NB-IoT and Cat M1) with 2G fallback
	Automatic Telemetry Data Transmission (in communications)	Yes
	Local Communication	USB data cable or Wi-Fi
	FTP Transfer	Yes
	Manual Data Download	Yes
	DNP3 Communications Open Protocol Capability	Yes
Connectors and Switches		1 Sensor connector plug with 4 screw terminals, 1 external power and local comms connector (combined), 1 sensor vent with Gore protective patch, 1 external mobile data antenna with SMA socket, 1 dial-out magnetic reed switch / internal button
Dimensions (mm)		W 87 D 63 L 259 (270 with connectors).
Construction		Polycarbonate/ABS 3-part injection moulded enclosure. O-ring seals on all external mating surfaces, DIN rail clip for surface mounting.
Protection Notes	Standard	IP68: will withstand 1.2m immersion for 48 hours without significant ingress (all connectors must be tightened or have sealing caps fitted). Data communications may not function when immersed. Gauge-pressure based level sensors are not accurate when logger enclosure is submerged.
	Mounting Recommendations	Dedicated tube mount enclosure option. DIN rail.
Operating Limits		-40 to 70°C, 0 - 100 % Relative Humidity (RH)

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Supported Sensors		
Application	**Category**	**Manufacturer and Model**
Level	Contact	Cynergy3 IMSL/S12C/S12S/LMP 307
		In-Situ Level Troll 500
	Non-contact	VegaPuls WL61Radar Sensor
		Pulsar DBi Range
Flow / Velocity	Contact	Nivus POA Wedge (or CS2)
	Non-contact	Sommer RQ
Water Quality	Sediment/Sludge Level	Vega VegaVib 63
	Turbidity/TSS	Analite NEP 5000
		In-Situ Aqua Troll 600
	Dissolved Oxygen	In-Situ RDO Pro-x
		Ponsel OPTOD
	Redox/ORP	In-Situ Aqua Troll 400
		Ponsel PHEHT
	pH	In-Situ Aqua Troll 400
		Ponsel PHEHT
	Conductivity	In-Situ Aqua Troll 100
		Ponsel C4E
	Nitrate	In-Situ Aqua Troll 600
	Chloride	In-Situ Aqua Troll 600
	Salinity	In-Situ Aqua Troll 600
	Ammonium	In-Situ Aqua Troll 600
	Chlorophyll a	AquaRead AP-LITE
	Chlorophyll a	AquaRead AP2000
	Blue Green Algae	AquaRead AP-LITE
	Rhodamine	AquaRead AP-LITE

Supported Sensors		
Application	**Category**	**Manufacturer and Model**
Water Quality	Fluoresceine	AquaRead AP-LITE
	Refined Oil	AquaRead AP-LITE
	CDOM/FDOM	AquaRead AP2000
	PAH	AquaRead AP2000
	TOC	AquaRead AP2000
	Soil Moisture	TekBox TBSMP02 Soil Moisture Probe
		Adcon SM1 Soil Moisture Probe
	Multiparameter WQ	In-Situ Aqua Troll 600
		AquaRead AP2000
Weather	Tipping Bucket Raingauge	Casella TBR
		EML Arg100
	Weather	Gill MetPak PRO
	Remote Cameras	iDefigo Mi5 Security RedEye Camera
		Meteor Communications Nexus Camera

* All listed sensors are supported and are compatible with our loggers. Pre-configured templates for all supported sensors are located with Harvest configuration software.

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