



# XL SERIES DATA LOGGERS

DATA COLLECTION PLATFORM (DCP)

The WaterLOG® **XL Data Logger** series is an extremely reliable and history proven Data Collection Platform (DCP), consisting of four models. The H-500XL, H-350XL, H-522 and H-522+ accommodate various applications for remote operation. Collect reliable data under extreme environmental conditions, communicate with Satellite, GPRS/GSM modems and other means of communication with the XL Data Logger series.

## APPLICATIONS

Ideal for hydrological applications including irrigation, mining, aquaculture, surface/ground/waste/storm water, industrial control, meteorology and many others.

## KEY FEATURES

- Simple menu driven user interface
- Low standby power
- External button allows simplified means to view current data values
- USB Type A Host and Mini B Device (2.0)
- Three RS-232 Serial Ports for use with local terminals, displays, modems/satellite, etc.
- Four analog inputs
- SDI-12 Master or Slave Mode
- Quadrature shaft encoder input/output
- Event counter input (Tipping Bucket Rain Gauge)
- Frequency input (wind speed)
- Scalable 4-20 mA Output
- Data logging using nonvolatile internal storage
- XL Basic Programming
- Integrated Satellite Transmitter (H-522+ only)



H-522+ XL™ Data logger



a xylem brand

# SPECIFICATIONS

PERFORMANCE		
<b>Pressure Transducer (H-350XL Only)</b>	Accuracy	Less than or equal to 0.02% of full scale output (FSO) over temperature range.
	Range	0 to 15 psi (0 to 34 ft (11 m)) Accuracy = ± 0.007 ft (2.1 mm)
		0 to 30 psi (0 to 69 ft (21 m)) Accuracy = ± 0.014 ft (4.3 mm)
		Custom calibration ranges available to 100 psi
Media Compatibility	Non-corrosive dry gases only	
<b>Analog Inputs</b>	Channels	4 single ended, 1 differential
	Resolution	24-Bit Resolution
	Accuracy	±0.02% FS
	Range	0 to 5 Volts (all channels) 0 to 500 mV (additional on channel1)
<b>+5.0 Volt Excitation</b>	Accuracy	±5.0 mV over load and temperature range
	Current	10mA (max load)
<b>Switched +12.0 Volt Excitation</b>	Type	Unregulated based on battery voltage
	Current	2.5 Amps
<b>Frequency Input</b>	Range	1 to 10 KHz at ± 75mVolts PP or greater 1 to 15 KHz at ± 1 Volt PP or greater
	Amplitude	± 5.0 V Max
	Accuracy	± 0.1%
<b>Counter Input</b>	Type	Switch closure or voltage pulse
	Voltage Input	0-5 Volts
	Frequency Input	100Hz (max)
<b>Digital I/O</b>	Channels	2, Independently configured for Input or Output
	Input Levels	0.0 to 0.5 Volts High = 3.5 Volts or higher Low = 0.8 Volts or less
	Output Levels	High = 3.5 Volts Min sourcing 5mA Low = 0.4 Volts Max sinking 5mA
<b>4-20mA Output</b>	Accuracy	± 0.5% FSO
<b>SDI-12</b>	Supports both Master and Slave modes	
	Connector	3-pin connector
<b>RS-232</b>	Type	3 RS-232 communication ports
	Connector	9-pin D connector, female
	Baud Rate	Programmable
MEMORY		
<b>General</b>	Data Storage Capacity	256 MB, Non-Volatile FLASH
COMMUNICATION		
<b>USB</b>	Type	1 host USB-A connector 1 device Mini-B connector
	Version	USB version 2.0
<b>External Satellite</b>	Type H-350/H-500	GOES/METEOSAT/INSAT H-2221-V2
<b>Keypad Display</b>	Type	1 Line 20 Character Vacuum Florescent LED Display
POWER		
<b>Voltage Input</b>	H-350/H-500	10.0 to 16.0 volts
	H-522+	11.0 to 16.0 volts
<b>Current</b>	H-350/H-500	Standby: 5 mA Max Active:

	H-522/ H-522+	Standby: 12 mA Max Active: Transmitting: <2.75A
ENVIRONMENTAL		
<b>General</b>	Operating Temperature	- 40 to +60°C
	Storage Temperature	- 40 to +80°C
	Humidity	100% non-condensing
PHYSICAL		
<b>Size</b>	Housing H-350/H-500/ H-522	7 in. L x 8.5 in W x 4.3 in H (180 mm L x 220 mm W x 110 mm H)
	Housing H-522+	9.5 in. L x 11 in. W x 6 in. H (241.3 mm L x 279.4 mm W x 152.4 mm H)
<b>Weight</b>	Shipping H-350/H-500/H-522	4.25 lbs (2 kg)
	Shipping H-522+	7.5 lbs (3.4 kg)
<b>Material</b>	Housing	Fiberglass with clear Lexan® window. *H-522 does not have clear Lexan® window.
WARRANTY		
The XL™ series of data loggers are warranted against defects in materials and workmanship for two years from the date of shipment. For complete terms and conditions, visit <a href="http://www.ysi.com/terms-and-conditions.php">http://www.ysi.com/terms-and-conditions.php</a>		
<b>Note</b>	For detailed specifications, see user manual. Specifications subject to change without prior notice due to on-going commitment to product testing and improvements. LR June, 2015. (D17-07 0615)	

## QUICK SPECIFICATION DETAILS

XL MODEL DIFFERENCES	H-500XL	H-350XL	H-522	H-522+
Keyboard Display	X	X		X
Built in Pressure Sensor		X		
Built in GOES/METEO-SAT/INSAT satellite transmitter			X	X