EWS Well-Cap

Environmental IoT Device.

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Overview.

The **EWS Well-Cap** leverage the power and reliability of our Switch Data logger family to deliver a cost-effective, self contained package for simplifying **Groundwater Monitoring**. Made from extremely robust glass filled nylon with a lockable hasp, the Switch device sits safely within the top section and can be easily configured via our Bluetooth mobile app.

The Well-Cap offers hassle-free and quick installation, simply connect to the sensor, place over the monitoring bore and fix in place with lock screws. Different adapters allow it flexibility to fit to any bore diameter and the flip back lid provides easy access to the bore after install for pump sampling events or calibration dips.

Features.

- Multi-Communications options; Send data via Satellite (Iridium) or 4G L TE.
- Reads SDI12, Modbus485, 4-20mA, Pulse sensor protocols.
- Robust Glass-filled nylon material.
- Lockable hasp for added security
- External battery pack or solar options.
- Flip top lid for easy access to the bore.
- Sensor hanger to support the weight of the sensor cable.
- Fits standard 50mm or 120mm diameter bores.
- Adapters available for all bore sizes.
- Ultra-Low power draw with internal battery backup.
- Configure using Bluetooth mobile app (available on Apple and Android).
- Remotely change settings with two-way communications including via Iridium.
- Compact form factor, entire package: diameter 160mmx180mm.
- Rugged and robust for harsh environments.

Benefits.

- Simplifies remote groundwater monitoring.
- Connects to all standard environmental sensors.
- Secure and lockable for deployments in public areas.
- Maintain easy access to the borehole.
- Compact and discreet, reducing installation time and footprint.
- Designed and Manufactured in Australia.
- Rugged and robust - deigned for harsh remote environments.
- Plug and play setup on-site.
- Very straightforward and scalable for fast deployments and large monitoring roll outs.
- Perfect for new and retrofit instrumentation projects.

Specifications.

Physical Property		
Dimensions (W x H x D)	Approx 220 x 180 x 255 mm	
Body weight	Solar power	Approx 1,765 g
	Battery	Approx 2,064 g
Waterproof level	IP67 rating	

Operating environment		
Temperature (1, 2)	-20 ... 65 °C	Storage (Without battery) -40 ... 65 °C
Humidity	5 ... 60% RH	

Power source		
Internal power (3)	Optional	1x Built 2W solar panel 1x ER34615M 14.4V 14.5 Ah
External power	No	

Output Option			
Function / interface	RS485 Modbus RTU x1	Baud rate 300 - 230400 / Parity (N, E, O)	
		12 V / 0.26 A supply with adjustable ON period	
	4-20 mA Current loop x2*	+/- 0.5% Full Scale	
	Pulse counter x2*	Dry contact	
		Frequency	1 ... 500 Hz
	SDI-12 x1	ASCII	
	Relay contact x1*	12V / 0.26 A	

Connectivity		
USB	1x Micro USB	
Wireless	Bluetooth 5	

System		
Clock	RTC	Accuracy 70 ppm (20 ppm at 25 °C)
	Network time Sync support	
Display	LEDs indicating status	
Configuration	Remotely change setting with two-way communications established via an application gateway	

Logging			
Number of channels	20		
Reading interval	sec/min/hr	Max. 24:00:00	
Memory	4MB / 256,000 Events (Non-volatile-Log)		
Software	EWS Logger V00.01.137 or higher		Compatible with Window 10
File format	.csv		

Specifications.

Built-in sensor / function

Internal battery voltage	Yes		
External voltage supply	Yes		
Temperature	Yes		
Radio signal	Yes		
GPS tracking	Only cellular modem.		
Barometer	Optional		
	Pressure	Range	10 ... 1200 mbar
		Accuracy 25 C, 750 mbar	-1.5 ... +1.5 mbar
	Temperature	Range	- 40 ... 85 °C
		Accuracy	-0.8 ... +0.8 °C

Network communication

Iridium	Protocols	Short Burst Data
	Coverage	Worldwide
4G Cellular LTE-M/NB-IOT	Protocols	MQTT
	Network support	Telstra (Australia)
		Most major networks globally
	Coverage	4 million Sqr km

Antenna type

Built-in antenna	Yes
External antenna	No

Contact us

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