



# EWS WELL CAP DATA LOGGER AND TRANSMITTER IN ONE

## Overview

EWS's Groundwater Well Cap leverages the power and reliability of our Switch Data logger family to deliver a cost-effective, self-contained package to monitor groundwater and any other environmental applications.

## Features

The EWS Well Cap Groundwater Monitoring Station makes it easy to automate measurement of groundwater wells. The cap has the following features:

- Mobile or Satellite communications from the same unit
- Tamper-proof packaging securing your wells
- Capable of measuring sensors over SDI-12, 4-20ma, Pulse and Modbus
- Custom housing colours available
- Lithium battery for long term reliable operation (3-5 years)
- FTP/SFTP data to any client database
- Mounts on any diameter pipe
- Built-in EWS logger/transmitter
- IP 66 housing for battery/electronics/antenna with screwless access
- ABS plastic construction UV rated to more than 10 years
- Optional custom coloured covers for extended UV lifespan
- Simple design provides easy access to sensors
- Sensor hanger plate with room to insert electronic tapes or other calibration devices
- Concealed bolts to fasten the cap to the well casing
- Compatible with any sensor with SDI-12, Modbus or analogue output
- Optional solar panel for continuous operation
- Weight including battery & logger (900 grams)
- Dimensions: Diameter: 160mm Height: 180mm
- Internal 12V Lithium Battery (3-5 years life span dependent on transmission rate)



# SPECIFICATIONS

Specifications subject to change without notice.

MEASUREMENT	
Measurement Interval	1 second to 24 hours
Number of Devices	10 devices supported
Number of Stored Measurements	2 years @ 1 hour logging
COMMUNICATIONS / INTERFACE	
<b>Telemetry</b>	
Number Available	Single channel either Iridium SBD or LTE Cat NB1
<b>MODBUS</b>	
Number Available	Single powered bus with up to 10 addressable devices
<b>4-20mA Analogue</b>	
Number Available	Up to 2 (shared with pulse on same port)
Range	0mA to 25mA
Sensitivity	7µA
Accuracy	0.50%
<b>Pulse Input</b>	
Number Available	Up to 2 (shared with 4/20mA on same port)
Pulse Width	5ms to 1 sec
Polarity	Active low
<b>Relay driver output</b>	
Voltage	+12V +/- 10%
Current	0.2A
Polarity	Active low
OTHER FEATURES	
Processor	32 bit Arm Cortex M4 processor
Clock	Internal real-time clock w/battery backup
Reed Switch	Swipe to activate
Connectivity	Blue Tooth / USB
ELECTRICAL	
Input Voltage	+12.5V to +24V
Battery	Rechargeable +7.4V, 1.8A/hr or non-rechargeable +9.2V, 1.4A/hr *Extender pack available
Current Consumption	0.4mA standby type (all sensors unpowered)
Iridium Transmission	0.7A @ +12 Volts
Power Connection	M8 connector
SDI-12 Port	M12 connector or 3 position terminal strip
Modbus	M12 connector or 2 position terminal strip
Red Warning LED	Indicates operation error
Green Heartbeat LED	Indicates unit operating properly
Blue Interface LED	Indicates interface communication
MECHANICAL	
Dimensions	H 230mmmm x W 175mm
Weight	900 grams
ENVIRONMENTAL	
IP Rating	IP66 ABS UV Protected
Temperature	-20°C to +60°C functionality
Humidity	0-95% Non-condensing