



EWS SWITCH™ DATALOGGER

Overview

EWS's Australian made Switch Datalogger is a multi-communications data transmitter in one compact unit.

- Switch between Iridium satellite, cellular, easily and quickly
- Easy plug and play;
 1. Power : 12-25V input
 2. Sensor A : 4-20mA, SDI-12, Pulse, Sensor Power, Relay out
 3. Sensor B : Modbus 485, 4-20mA, Pulse, Sensor Power
 4. Optional terminal block : 4-20mA, SDI-12, Modbus 485, Pulse, Sensor Power, Relay out
- Switch sensors connection between plugs and terminal blocks
- Switch batteries; rechargeable or non-rechargeable
- Bluetooth enabled for wireless connection, app or software
- Remotely change settings via two way communications
- No external housing required, just mount and activate
- Internal solar regulator for direct connect of panel
- Made from 10% recycled plastic

Features

- Interchangeable comms options; send data via Iridium and LTE Cellular
- Low power draw with internal battery back up
- Internal rechargeable or non-rechargeable battery
- 12-24V external power or direct Solar panel input
- Internal solar regulator
- IP66 rated
- M12 flying leads for waterproof input connections
- Optional terminal block for multiple applications
- Supports Modbus RTU, SDI-12, 4-20mA and Counters
- Relay out for switching control from anywhere, either by sensor alarm/scheduled or remotely (manual) by user
- Send data to your email/server to be decoded
- Max/min/average logging
- Alarm measurement detection on any input

- LED's for external verification/diagnostics
- Bluetooth and USB connections for programming
- Small compact form factor (L 115mm x W 54mm x D 43mm)
- UV rated casing can be mounted directly with no secondary enclosure
- Lightweight (200g)
- Easy to use app making it simple to program
- Out of cycle alarm transmissions
- Australian made
- NFC connectivity

Applications

- Surface Water Level, Flow & Quality
- Groundwater Level & Quality
- Mining/Geotechnical
- Weather Conditions Warning
- Oceanic Conditions Warning
- Oil & Gas Production
- Agricultural sensor monitoring
- Any Low-Power, Remote Data Acquisition System



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	
Telemetry	
Number Available	Single channel either Iridium SBD or LTE Cat NB1
MODBUS	
Number Available	Single powered bus with up to 10 addressable devices
Type	RTU
SDI-12	
Number available	Single powered bus with up to 10 addressable devices
4-20mA Analogue	
Number Available	Up to 2 (shared with pulse on same port)
Range	0mA to 25mA
Sensitivity	7µA
Accuracy	0.50%
Pulse Input	
Number Available	Up to 2 (shared with 4/20mA on same port)
Pulse Width	5ms to 1 sec
Polarity	Active low
Relay driver output	
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	USB/Blue Tooth
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 / Transport Mode
Green Heartbeat LED	Indicates unit operating properly / TX mode
Blue Interface LED	Indicates interface communication
MECHANICAL	
Dimensions	L 115mm x W 54mm x D 43mm
Weight	205 grams
ENVIRONMENTAL	
IP Rating	IP66
Temperature	-20°C to +60°C functionality
Humidity	0-95% Non-condensing