

# EWS-EMT

Environmental Monitoring Telemetry Device.



Environment • Water • Geotechnical • Data

# EWS-EMT

## Environmental Monitoring Telemetry

### Overview.

The **EWS - EMT** Maximises the power and reliability of our Switch Data logger family to deliver a cost-effective, compact and self-contained datalogger and cellular or Iridium Satellite transmitter which includes a uniquely designed optional clip-on 3 or 6 watt solar panel to monitor a wide range of remote environmental applications.

The Australian manufactured Environmental Monitoring Telemetry Device is ideal for remote deployments that require long term monitoring, higher power sensor types and higher transmission rates.

Applications include:

- Surface Water
- Flood Warning
- Weather
- Groundwater
- Geotechnical



## Features.

- Multi-Communications options; Send data via Iridium Satellite or 4GLTE/NBLoT.
- Reads SDI12, Modbus485, 4-20mA, Pulse Sensors.
- Ultra-Low power draw with internal battery backup.
- 3 or 6 watt solar panel attachment neatly clips on for long-term unattended monitoring.
- Bluetooth embedded for local app connection and programming.
- Remotely change settings with two-way communications including via Iridium.
- Compact form factor 175 x 110 x 80mm
- 4 physical inputs - up to 60 channels
- Panel Mount Plugs for easy on-site sensor connection.
- Automatic data upload directly to Orion web portal.
- UV Protected housing.



## Benefits.



- Connects to most standard environmental and geotechnical sensors.
- No bulky cabinets or external batteries required.
- Extremely compact and discreet, reducing installation footprint.
- Designed and Manufactured in Australia.
- Rugged and robust - deigned for harsh remote environments.
- Plug and play setup on site.
- Ideal for long-term, unattended deployments.
- Easy to relocate.
- Quick and easy to install.
- Perfect for new and retrofit instrumentation projects.

# Specifications.

## Measurement

Measurement Interval	1 second to 24 hours
Number of Stored Measurements logging	2 years @ 1 hour

## Communications / Interface

### Telemetry

Number Available	Either Iridium SBD or LTE Cat or NB1
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<b>Modbus</b>	ModbusRS485
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### SDI12

#### 4-20mA Analogue

Number Available	Up to 2 (shared with pulse on same port)
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Range	0mA to 25mA
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Sensitivity	7 $\mu$ A
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Accuracy	0.50%
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### Pulse Input

Number Available	Up to 2 (shared with 4/20mA on same port)
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Pulse Width	0-500Hz
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### Relay driver output

Voltage	+12V +/- 10%
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Current	0.265A
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## Electrical

Input Voltage	+12V to +24V
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Internal Power Supply	4 x Rechargeable Molicel 21700 high temp charge battery 4aHr
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Current Consumption	0.05mA standby type (all sensors unpowered)
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Power Connection	MB connector
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SDI-12 Port	M12 connector
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Modbus	M12 connector
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Red Warning LED	Indicates operation error
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Green Heartbeat LED	Indicates unit operating properly
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Blue Interface LED	Indicates interface communication
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# Specifications.

## Other features

Processor	32 bit Arm Cortex M4 processor
Clock	Internal real-time clock w/battery backup
Push Button Activate	
Connectivity	Blue Tooth / USB

## Mechanical

Dimensions	110mm x 175mm x 80mm
Weight	660 grams without battery

## Environmental

IP Rating	Up to IP67
Temperature	-20°C to +60°C functionality

Specifications subject to change without notice.

# Contact us

## EWS Monitoring.

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