

# EWS OVWT

Octo Vibrating Wire Telemetry.



Environment • Water • Geotechnical • Data



# EWS OVWT Vibrating Wire Telemetry.

## Overview.

The **EWS OVWT (Octo Vibrating Wire Telemetry)** presents a versatile multi-channel option, multi-communication enabled IoT device designed specifically for remote Geotechnical and Structural monitoring applications. Connect to any Vibrating Wire sensor such as VWP's, Strain Gauges and Crack Meters, and transmit data from anywhere utilising either 4GLTE or Satellite connectivity.

The device is four channel which makes it ideal for sites with up to 8 VW instruments such as nested piezometer bores.



## Features.

- Multi-communications option; Send data via satellite (Iridium, or CatM1 LTE).
- Reads all Vibrating Wire Sensors.
- Dual Channel, 8 x VW Sensors
- Adjustable sweep range to suit different VW Sensor types.
- Internal rechargeable battery pack or long-life non rechargeable options.
- Clip on Solar option.
- Ultra-Low power draw with internal battery backup.
- Configure using Bluetooth mobile app (available on Apple and Android).
- Remotely change settings with two way comms including over Iridium.
- Rugged and robust for harsh environments.
- Encoding scheme for compression of data packet size.
- Automatic upload to Orion Cloud.
- Internal storage of up to 260,000 events.



## Benefits.

- Connects to all standard VW sensors commonly used in geotechnical and structural monitoring.
- 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.
- No risk of Single-Point-Failure - Each device transmits independently.
- Ideal for tailings dam monitoring.
- Perfect for new and retrofit instrumentation projects.



# Specifications.

## Physical property

**Dimensions ( W x H x D )** 8ch VWT -Approx 112 x 177 X 83 mm

**Body weight** without battery 18650 approx 49g each  
D cell approx. 111g each

**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)** 2x Rechargeable 18650 battery / Suggested model: ICR18650-26JM

2x Non-rechargeable (D cell) battery / Suggested model: ER34615M

**External power** DC 12 ... 24 V / 1 A

Battery or Solar power with M8 connector

## Output Option

**Channel** 8 VWP's and 8 Temperature

**Measurement of Vibrating wire** Measurement Excitation Automatically set 5V to 12 V

Sweeping frequency range 450...Hz

Accuracy +/-0.1% Full Scale

**Measurement of Temperature** Accuracy +/-0.1°C

## 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

<b>Internal battery voltage</b>	Yes
<b>External voltage supply</b>	Yes
<b>Temperature</b>	Yes
<b>Radio signal</b>	Yes
<b>GPS tracking</b>	Only cellular modem
<b>Barometer</b>	No

## Network communication

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

## Antenna type

<b>Built-in antenna</b>	Yes
<b>External antenna</b>	Optional

# Contact us

## EWS Monitoring.

Australia: Perth | Sydney

Americas

Sales enquires: [sales@ewsaustralia.com](mailto:sales@ewsaustralia.com)

Support enquires: [support@ewsaustralia.com](mailto:support@ewsaustralia.com)

Other: [info@ewsaustralia.com](mailto:info@ewsaustralia.com)

**[ewsmonitoring.com](http://ewsmonitoring.com)**



Environment • Water • Geotechnical • Data