EWS Quick-Start

EMT Device.

Your EWS EMT Device

Your **EWS EMT (Environmental Monitoring Telemetry) Device** is an ultra powerful, yet low power draw and compact multi-communication enabled IoT Device designed specifically for remote environmental monitoring applications. The EWS EMT Device is a self-contained datalogger and cellular or Iridium Satellite transmitter which includes a uniquely designed optional clip-on solar panel (3W and 6W options) to monitor a wide range of remote environmental and geotechnical applications.
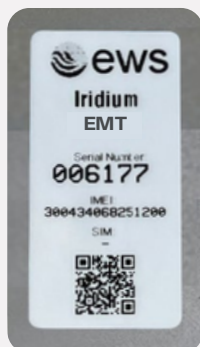
Your Device will be either Iridium Satellite or 4G LTE transmission type.

Iridium transmission type can be visually identified by the presence of a sticker indicating Iridium with the Device IMEI number on the side of the EMT opposite the push button. EMT Devices that are 4G LTE transmission type have a sticker indicating Cellular with the Device IMEI number on the side.
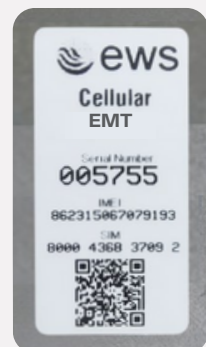
EWS EMT Devices are fitted with high powered rechargeable internal batteries and come with a specially designed clip on 3W or 6W solar panel allowing for ongoing recharge and long term deployments.

Iridium Satellite transmission type

4GLTE transmission type

ews Iridium EMT — Serial Number 006177 — IMEI 300434068251200 — SIM

ews Cellular EMT — Serial Number 005755 — IMEI 862315067079193 — SIM 8900 4368 3709 2

Wiring and Sensor inputs.

The **EWS EMT** Device has four sensor input plugs labelled **S1 - S4** and one power input plug .
S1 and S2 inputs differ in sensor protocol options than S3 and S4 inputs. The wiring also differs
and are differentiated as indicated below in the pinout tables.

The four sensor plugs S1 to S4 at the device end are standard female 5-Pin M12 plugs. The
power input plug is a standard male end 3-Pin M8 plug.
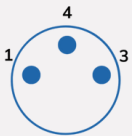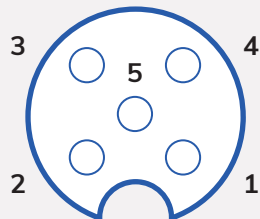
Device Power Plug Wiring

PIN	Function
PIN 1	Power 12-24v DC+
PIN 3	-
PIN 4	GND

⚡Device Pwr

S1 S2 S3 S4
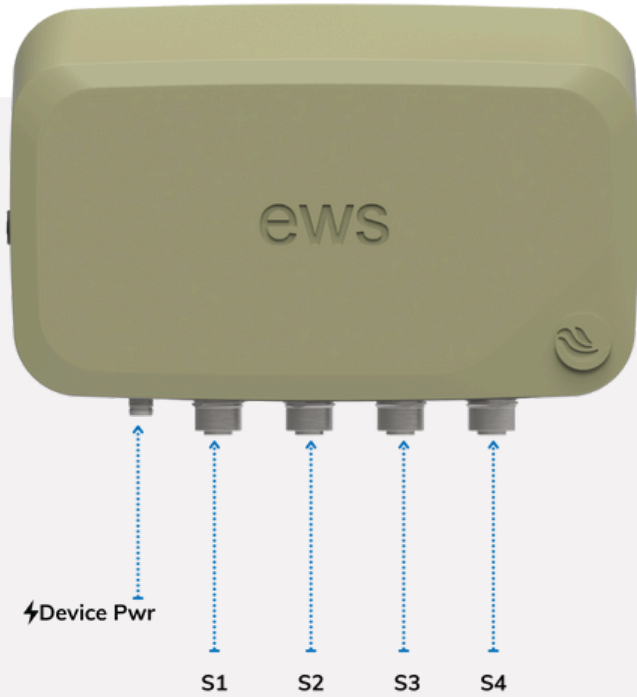
PIN	Function
PIN 1	Modbus 485 A+
PIN 2	Modbus 485 B-
PIN 3	Power 12V+
PIN 4	GND
PIN 5	4-20mA /Pulse1

PIN	Function
PIN 1	4-20mA /Pulse1
PIN 2	SDI12
PIN 3	Power 12V+
PIN 4	GND
PIN 5	Relay Out

**Sensor 1 &
Sensor 2 Plug
Diagram**

**Sensor 3 &
Sensor 4 Plug
Diagram**
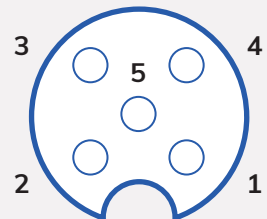
Getting started.

1

Press button **once** to wake up the Device

Your **EWS EMT** Device comes delivered in **Transportation Mode** to conserve battery life until installation. To wake up your Device, simply press button once.

2

Press button **twice** to activate Bluetooth

To activate **Bluetooth**, press twice - your Device LED's should be blinking Blue and Green indicating it is ready to be paired with **EWS Lynx** mobile configuration App.

If you wish to place the Device back into **Transportation Mode**, simply press and **hold button for 10 seconds**, once button is released, LED's will blink fast red then stop, indicating Device has successfully re-entered Transportation Mode. The Device will cease all functions until taken out of this mode - this is used for transport or when Devices are in storage and not being used.

EWS Lynx Mobile App.

The **EWS Lynx App** is the freely available on both IOS and Android App stores. The App is an easy on-site tool for configuring your Device and checking for successful sensor connection.

Ensure mobile phone Bluetooth is on and Device Bluetooth is active, open the App and your Device will connect automatically.

LED's show solid blue when Lynx App is connected to Bluetooth

Connect EWS Device

Syncing...

Wait
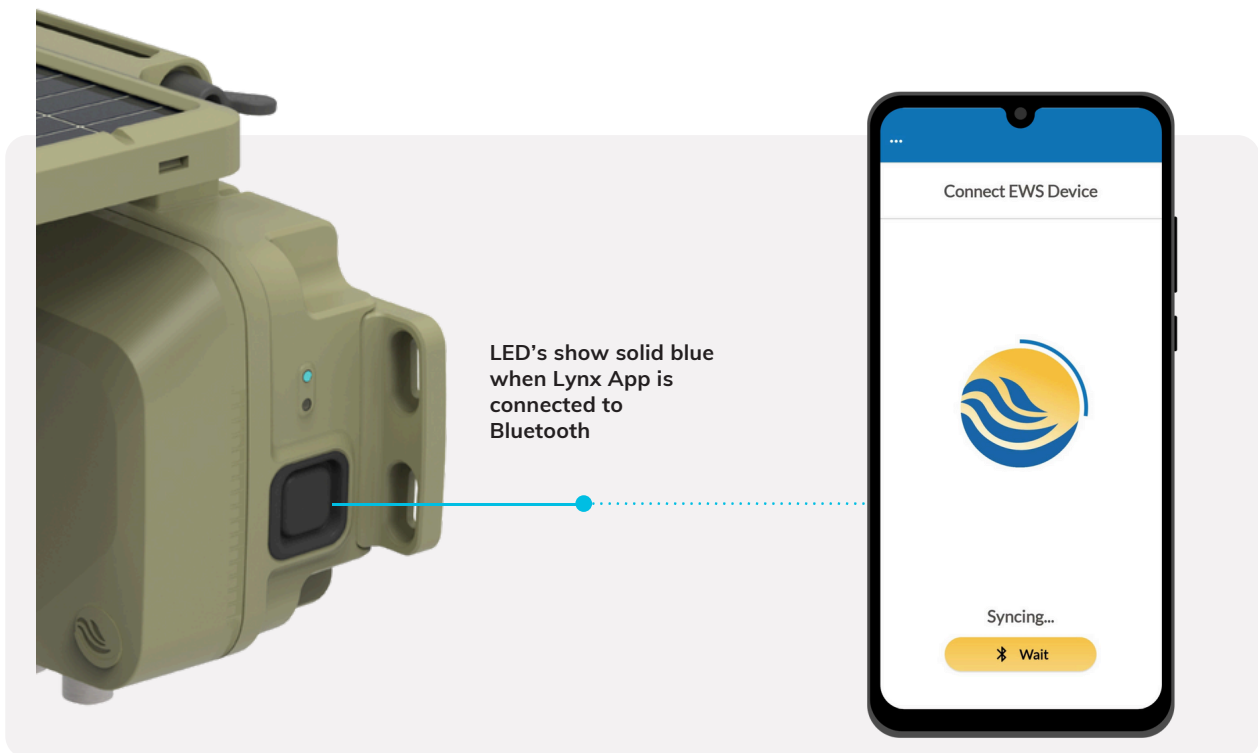
The EWS Lynx Mobile App is available to download from:

Download on the App Store

GET IT ON Google Play

Basic Configuration and Sensor Check.

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It is important to note that **EWS** Devices generally come pre-configured out of the box for plug and play pairing with sensors as requested on purchase - so minimal programming should be required. **Check with EWS or EWS distribution partner first before altering programming.**

EWS Switch

App will indicate when device is connected

EWS Device Connected

⚡ OK

When connected to the **EWS Lynx App** the **icon should show solid blue.** You are now ready to configure Device and check sensors.

Device Information

EWS Switch   ⬆ Share

Model: EWS Switch
Firmware: V00.04.113
Serial: 005591
IMEI: 300434068328850
Modem: Iridium
Battery: 4.05V
Hardware: Switch Mk II V1.0
SIM:
Faults: None
Station ID: Enter Custom Station
Field Notes: Add Custom notes

↻ Reboot   🌙 Shipping Mode

Device   Telemetry   Sensors   Log

Device tab is where you can find all general Device information such as hardware version, firmware version, IMEI number, Devices internal battery voltage as well as custom station ID field and site notes. This is also where device reboot and enter shipping mode buttons are found.

Sensor Check and Measurement Interval.

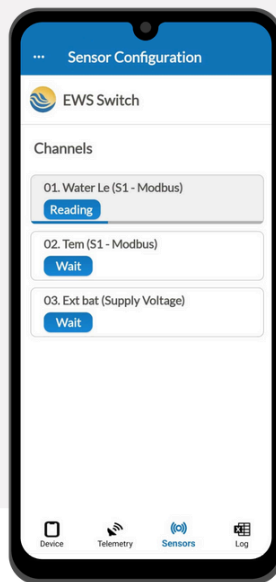To check sensors are connected and reading correctly:

1

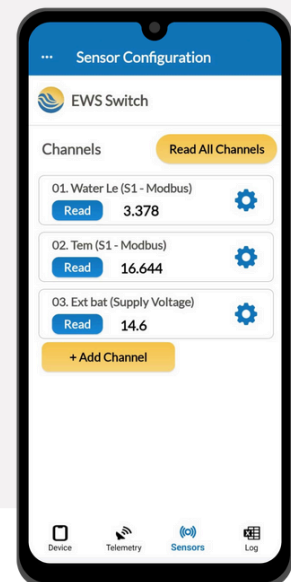Navigate to Sensors tab.
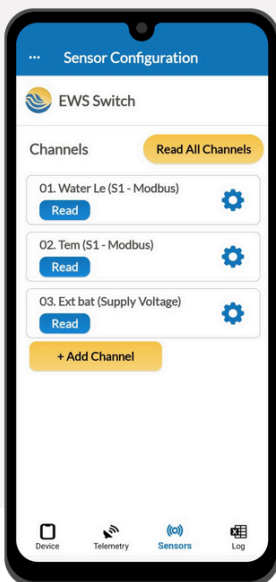
2

Press Read All Channels button. Device will cycle through all configured channels.

3

Check readings are as expected.

To change channel configuration or measurement interval – navigate into each channel and change as required.

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Troubleshooting.

If readings show **Error** – Troubleshoot first by checking sensor wiring, referring to the pinout information at the beginning of this guide. If incorrect wiring is ruled out as the cause of error readings, further configuration and programming checks will need to be carried out to ensure device has been setup correctly for the sensor being used.

Powering your EWS EMT Device.

If you have received your **EWS EMT** Device with no batteries included, you can source the Device specific batteries at your local battery specialist store.

Simply remove the Device lid and insert batteries ensuring they are installed in correct orientation.

EWS EMT Rechargeable Batteries

- **4 x Rechargeable Molicel 21700 high temp charge battery**

Warning.

Incorrectly orientated batteries can permanently damage the Device.

Contact us

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