EWS Quick-Start

Switch Device.

Your EWS Switch Device

Your **EWS Switch** is a powerful yet compact multi-communication enabled IoT Device designed specifically for remote environmental monitoring applications. Your EWS Switch Device is compatible with most environmental sensor types and has inputs for 4-20mA, Modbus RS485, SDI12 and Pulse as well as a relay out.

Your Device will be either Iridium Satellite or 4G LTE transmission type and either rechargeable or non-rechargeable battery type depending on what you have ordered.

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 Switch opposite the push button. Switch Devices that are 4G LTE transmission type have a sticker indicating Cellular with the Device IMEI number on the side.

Switch Devices that are rechargeable battery type can be visually identified by the colour blue, and having a flat lid profile. Switch Devices that are non-rechargeable battery type can be identified by the colour green and having a slightly raised lid profile.
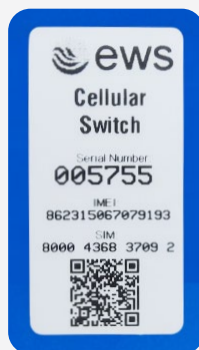
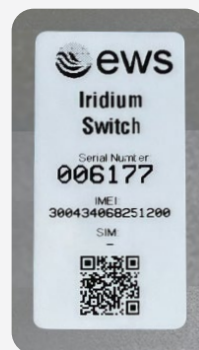## Rechargeable Switch Device

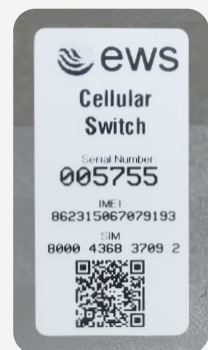| Iridium Satellite transmission type	4GLTE transmission type
ꙅews **Iridium Switch** Serial Number **006177** IMEI 300434068251200 SIM —	ꙅews **Cellular Switch** Serial Number **005755** IMEI 862315067079193 SIM 8000 4368 3709 2

Non-rechargeable Switch Device

Iridium Satellite transmission type	4GLTE transmission type
ꙅews **Iridium Switch** Serial Number **006177** IMEI 300434068251200 SIM —	ꙅews **Cellular Switch** Serial Number **005755** IMEI 862315067079193 SIM 8000 4368 3709 2

Wiring and Sensor inputs.

The **EWS Switch** Device has two sensor input leads labelled **S1** and **S2** and one power input lead (power input on rechargeable Device type only). S1 and S2 input leads differ in sensor protocol inputs and are split as indicated below in the pinout tables.
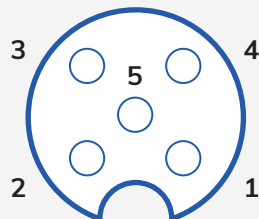
The two sensor leads S1 and S2 are terminated with standard female 5-Pin M12 connector plugs. The power input lead (on the rechargeable Device type) is terminated with a standard male end 3-Pin M8 connector plug.

Sensor 1 (S1)

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

Sensor 1 Plug Diagram

Sensor 2 (S2)

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

Sensor 2 Plug Diagram
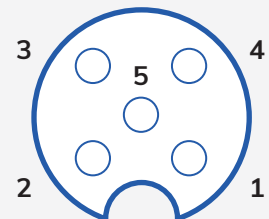
Getting started.

1

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

Your **EWS Switch** 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 SwitchComm** 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 SwitchComm Mobile App.

The **EWS SwitchComm 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 will connect automatically.
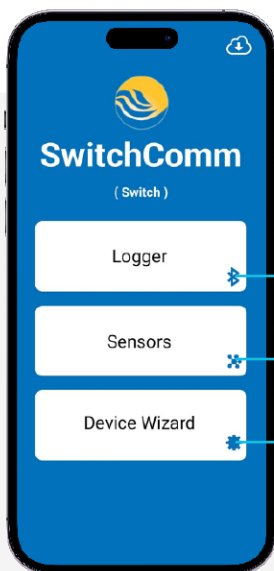
LED's show solid blue when SwitchComm App is connected to Bluetooth

SwitchComm
(Switch)

Logger

Sensors

Device Wizard

The EWS SwitchComm 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 Switch** 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.**

Solid blue icons indicate you are connected to your Switch Device

When connected to the **EWS SwitchComm App** the **icons should show solid blue.** You are now ready to configure Device and check sensors.
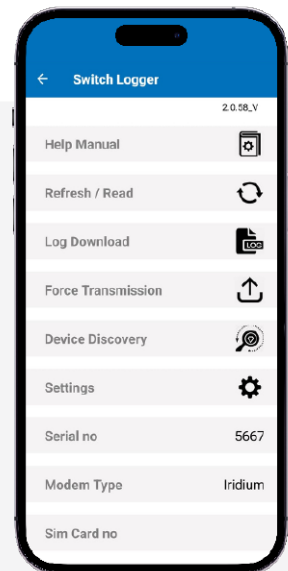
Logger tab is where you can change Device transmission intervals under **Settings** sub-tab, download Log files under **Log Download** sub-tab, **force a transmission** and find other general Device information such as firmware version IMEI number, Devices internal battery voltage.

Sensor Check and Measurement Interval.

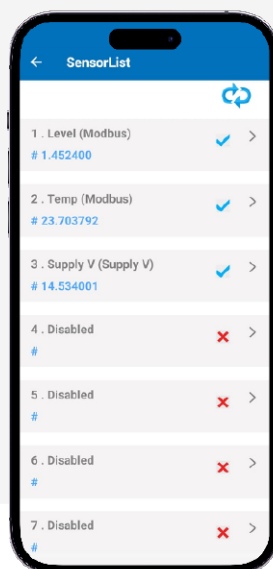To check sensors are connected and reading correctly:

1

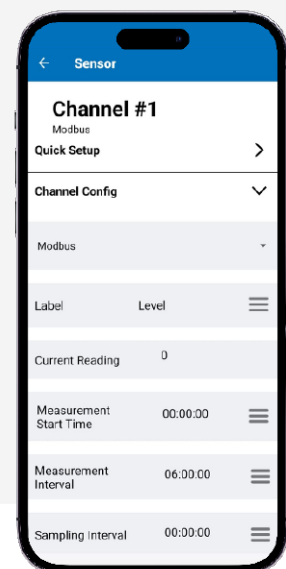Navigate to Sensors tab.
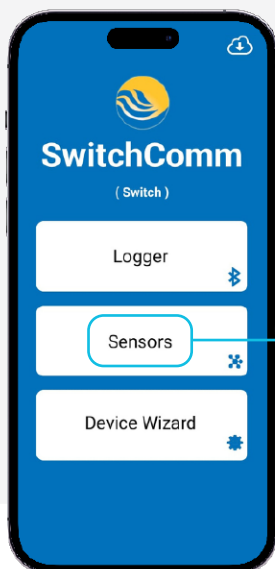
2

Press blue refresh 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.

! ## 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 Switch Device.

If you have received your **EWS Switch** 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 go in at the correct orientation.

EWS Switch Rechargeable Type

Specified Battery (or equivalent)

- 2 x Samsung INR18650-30Q Li-ion Lithium 3000mAh 3.7V HIGH DRAIN 15Ah Discharge Rate Rechargeable Battery - (Flat Top)

EWS Switch Non-Rechargeable Type

Specified Battery (or equivalent)

- 1 x Fanso ER34615M D size 3.6V 14000Ah Lithium Thionyl Chloride Battery - Spiral Wound Type

! Warning.

Incorrectly orientated batteries can permanently damage the Device.

Contact us

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