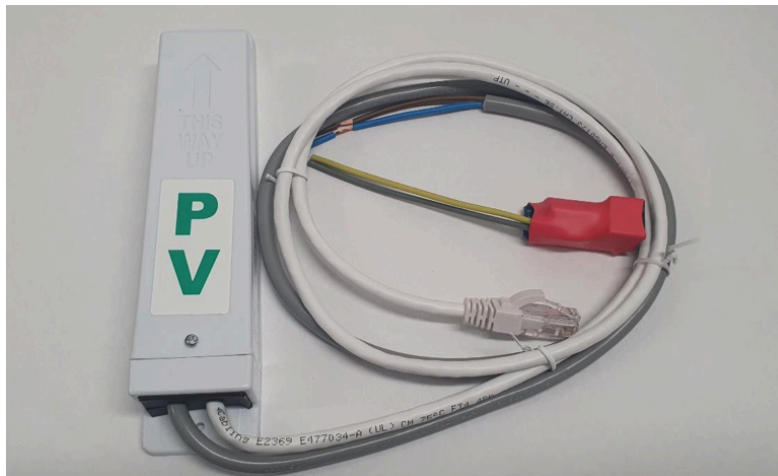


## **GSD Pin Selection for FoxESS Models**

### **1 Introduction**

Generation Signalling Device (GSD) is a device installed on a solar system which allows the electricity utility (Energy Queensland) to trigger emergency backstop mechanism by switching off the solar system remotely. A signal is sent to the GSD via the power lines using Audio Frequency Load Control (AFLC) and switches the solar system either OFF or ON depending on the signal received.

By reducing the solar export to the grid during low demand, the grid will remain stable and prevents blackout.



*Figure 1 Generating Signal Device (GSD)*

### **2 Queensland Requirement**

From 6 February 2023, all inverters with output capacity of 10kVA and higher. Large solar systems with multiple inverters can either install one GSD on each inverter or install a single GSD connected to a Demand Response Controller (DRM).

### 3 Connection to Inverter

GSD's control cable (White) is in RJ45 connector which can be directly connected to DRM ports of the inverter. Alternatively, please follow the direct pin connection under heading [4](#) and to enable DRMO settings.

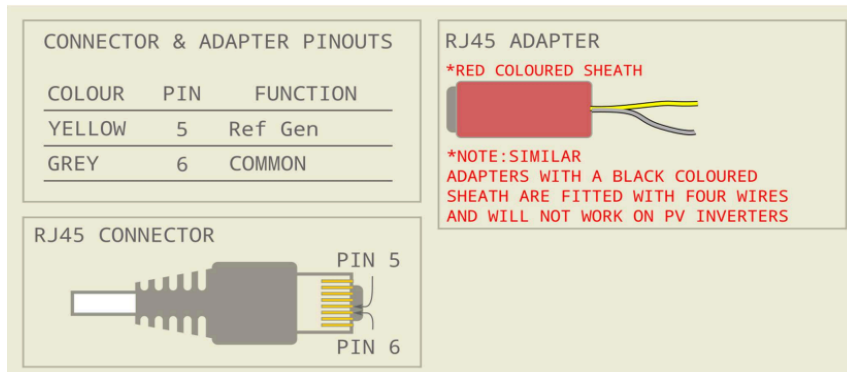
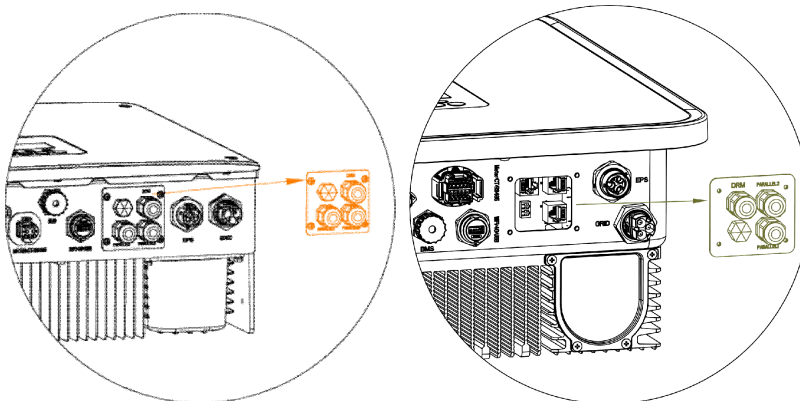


Figure 2 GSD Control Cable Wiring diagram

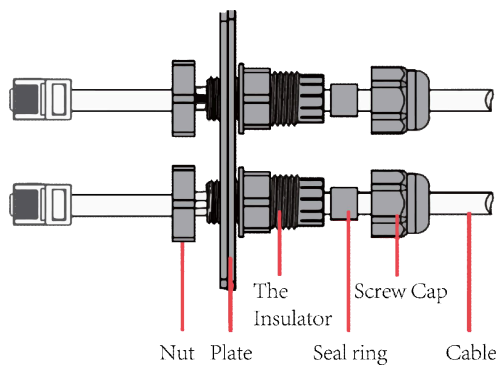
For **H1** and **KH** there will a plate to be screw off for proper connection as follows:

Connection steps:

Step 1: Screw this plate off from inverter.

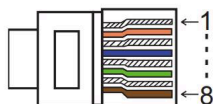


Step 2: Prepare a standard network cable and cable connector, then insert the network cable through the cable connector.



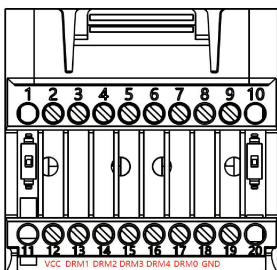
Step 3: Insert the cable connector into DRM/COM port at the bottom of inverter and screw it tightly. Then insert other side of the network cable into PC or other device.

## 4 Direct Pin Connection



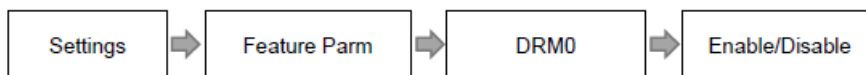
Model	Ports to use	Socket asserted by shorting pins	
		REF GEN	COMM
H1-G2	DRM	4	3
KH	DRM	5	6
H3 Smart	DRM	5	6
H3 Pro	COM	12	17
H3 Plus	DRM	5	6

For H3 Pro COM cable adapter:



12	13	14	15	16	17	18
VCC	DRM 1	DRM 2	DRM 3	DRM 4	DRM 0	GND

DRM0 setting in the inverter:



Remote DRM0 Settings in FoxCloud website:

Use the SN number of the inverter and go to Remote Settings>> BasicParameters1>> Enable DRM0State

Home > Device > Remote Setting

Inverter Remote Upgrade | My Sites | Sites Detail | Inverter | Inverter Details | Remote Setting

Inverter SN: [redacted] After setting Safetycountry/Safetytype/GridCode, please click the Clear and Refresh Page.

- SystemTime
- BasicParameters1** (highlighted with red arrow)
- WorkModeParameters
- ChargingTime
- BasicParameters2
- SafetyStartParameters
- SafetyVoltageParameters
- SafetyFrequency
- Safety-P(f)
- Safety-LVRT
- Safety-P(u)
- Safety-DCI
- Safety-ActiveDispatch
- Safety-Reactive
- G100Settings

GridCode: AS4777\_AU-2020A

Language: English

PVConfig: independent

**DRM0State:**  (circled in red)

Meter1/CT1: CT

Meter2/CT2: CT

EmsAddress: 247 (1-247)

Password: 0 (0-9999)

For H3 Smart DRM0 function is activated here:

# FOXESS AUSTRALIA PTY LTD

ABN: 31 641 059 841

53 Willow Avenue, Springvale VIC 3171, Australia

Ph: 1300 377 369



Inverter SN : 60HD153257BA001 After setting Safetycountry/Safetytype/GridCode, please click the Clear and Refresh Page.

- SystemTime
- BasicParameters1
- OperationMode
- ChargingTime
- BasicParameters2
- RippleControl**
- ExportLimit
- OffGridParameters
- SafetyStartParameters
- SafetyVoltage
- SafetyFrequency
- Safety-P(f)
- Safety-P(u)

\* RippleControlEnable

\* K1TriggerSignal

\* K2TriggerSignal

\* K3TriggerSignal

\* K4TriggerSignal

\* K1PowerRatio  %

\* K2PowerRatio  %

\* K3PowerRatio  %

## Remote DRM0 Settings in FoxCloud App:

Use the SN number of the inverter and go to the plant.

For H3 Smart, find and enable RippleControl instead of BasicParameters1.

