

DRM Ports on Sungrow Inverters for Backstop Device

Disclaimer

The material in this document has been prepared by Sungrow Australia Group Pty. Ltd. ABN 76 168 258 679 and is intended as a guideline to assist solar installers for troubleshooting. It is not a statement or advice on any of the Electrical or Solar Industry standards or guidelines. Please observe all OH&S regulations when working on Sungrow equipment.

Backstop:

Many networks now require a backstop device to be connected to PV inverters. The following shows how/where to connect the device and enable in Sungrow’s current range of inverters.

Please note that Sungrow cannot advise on technical matters relating to external controllers. Please refer to manufacturer.

DRM Ports table:

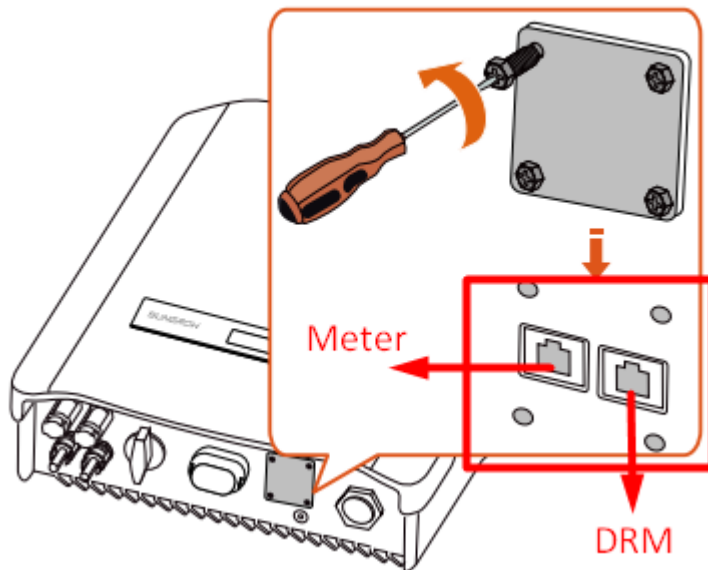
| Inverter Model | DRM Port Location | Type of Plug | Pins |
|----------------------------|--------------------|-------------------|------------|
| SG2/2K53/5/8K-D Premium/NI | DRM Port | RJ45 (TIA/EIA568) | 6-C, 5-R |
| SG2.0RS-S SG3.0/5.0 | Communication Port | Green COM Plug | 6-C, 5-R |
| SG5.0RS-ADA/8.0/10.0 | DRM Port | RJ45 (TIA/EIA568) | 6-C, 5-R |
| SG5.0/7.0/8.0/10/15/20RT | Communication Port | Green COM Plug | 14-C, 13-R |
| SH5K-30 | Communication Port | Green COM Plug | 6-C, 5-R |
| SH5.0/6.0RS | DRM Port | RJ45 | 6-C, 5-R |

| | | | |
|-----------------|--------------------|-------------------|------------|
| | | (TIA/EIA568) | |
| SH5/10RT | Communication Port | Green COM Plug | 14-C, 13-R |
| SG30/50/SG110CX | DRM Port | RJ45 (TIA/EIA568) | 6-C, 5-R |

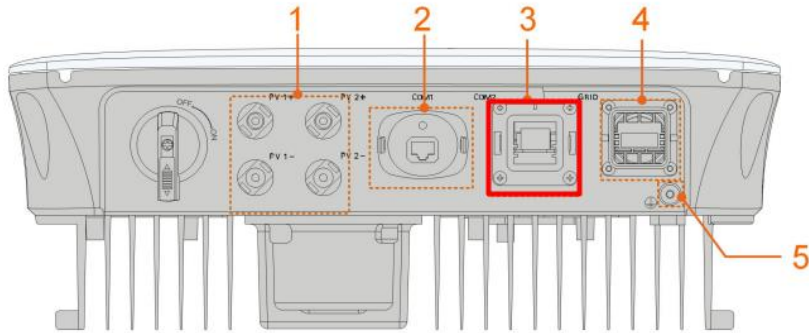
Table 1 – Reference for each inverter type

Inverter DRM connector detail for each Inverter model series:

SG2-8K/D Premium range



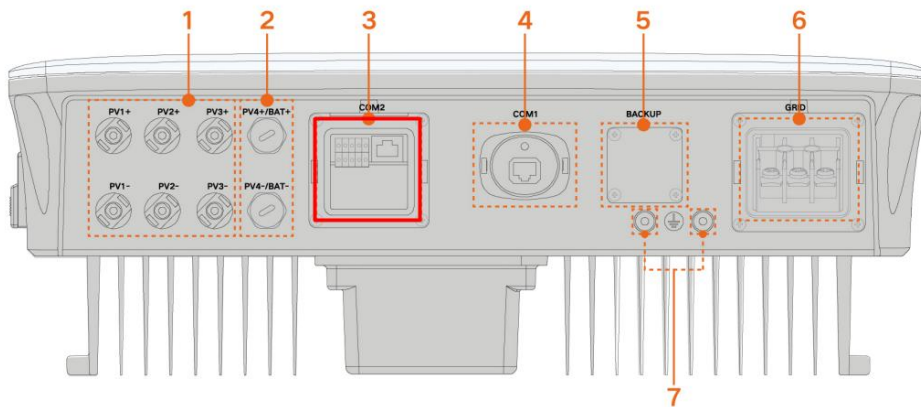
SG2-5RS



S005-E001

| | | | |
|-------|-------|-----|-------|
| RS485 | Meter | DRM | RSD |
| A1 | A2 | R | RSD-1 |
| B1 | B2 | C | RSD-2 |

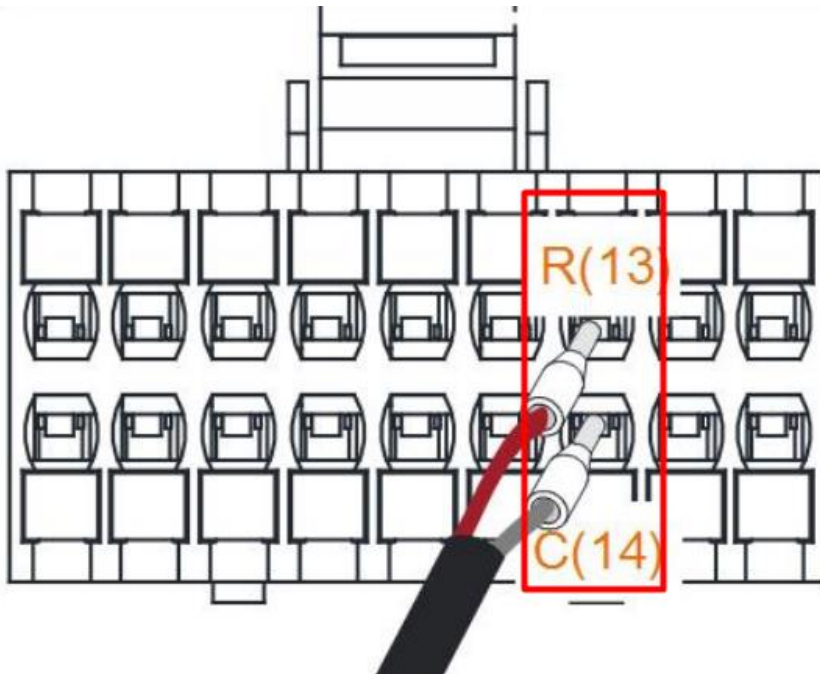
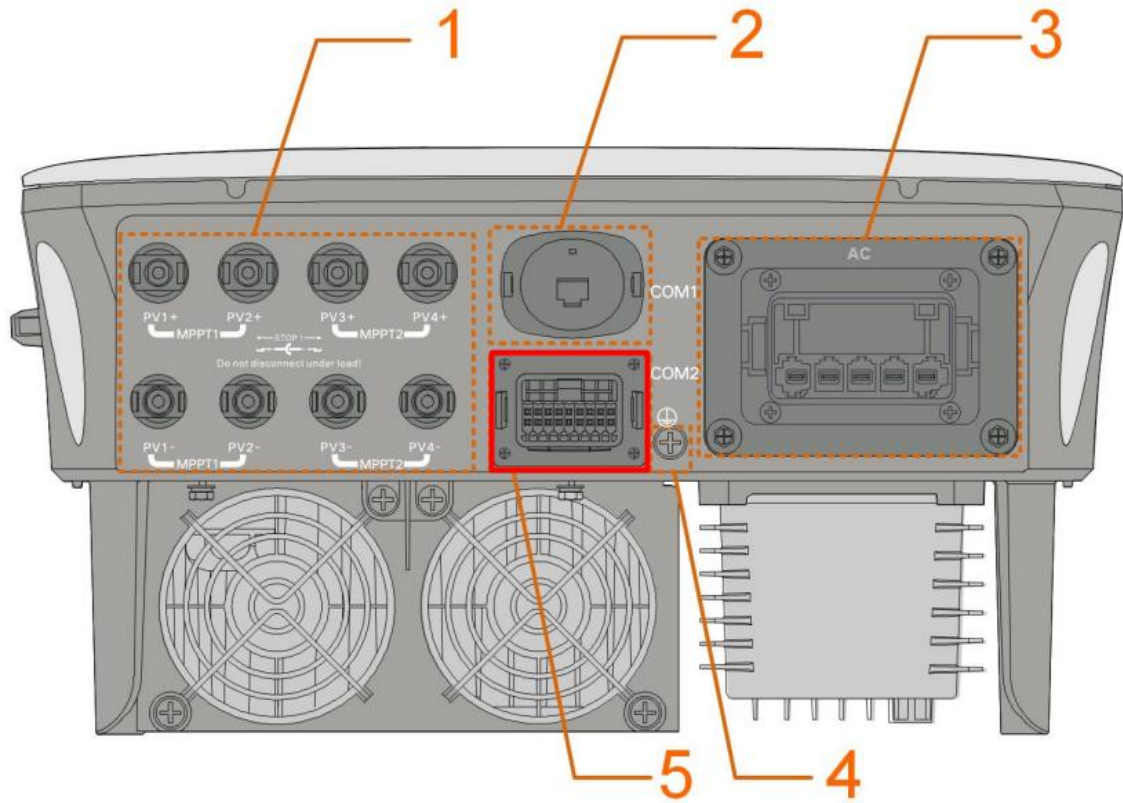
SG5RS-ADA/8.0/10.0



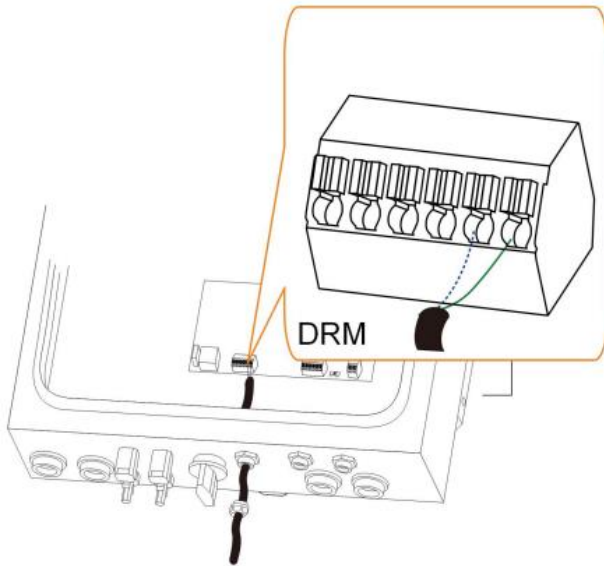
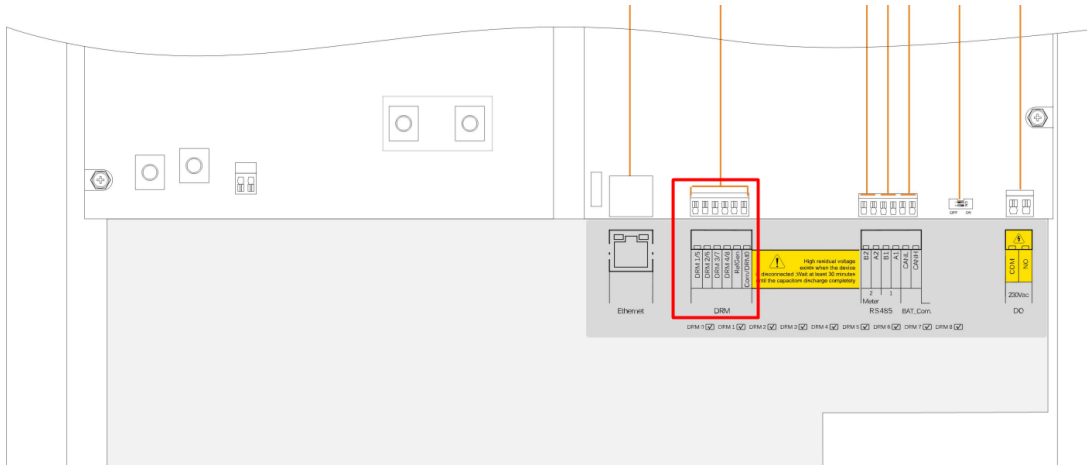
| | | | | |
|-------|----|-------|-------|--|
| Meter | | RS485 | | |
| A2 | B2 | A1 | B1 | |
| | | RSD-2 | RSD-1 | |
| | | RSD | | |

| | | | | | | | |
|-----|----|---|---|----------|------|------|---|
| DRM | | | | | | | |
| | | | | | | | |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| NC | NC | C | R | 4/8 D3/7 | D2/6 | D1/5 | |

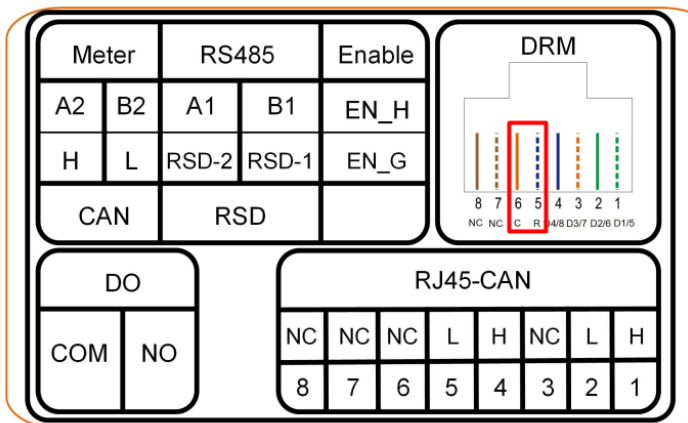
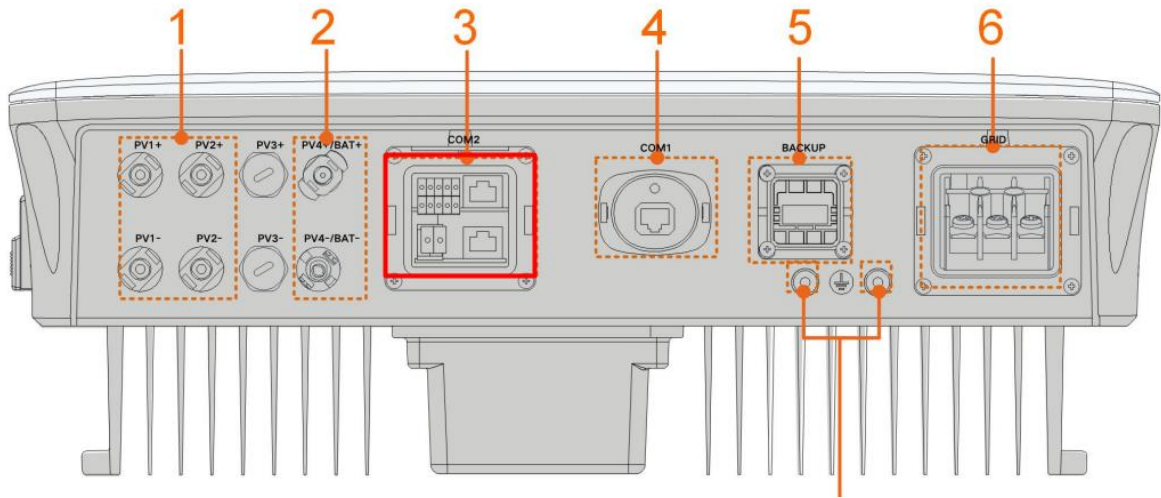
SG5-20RT



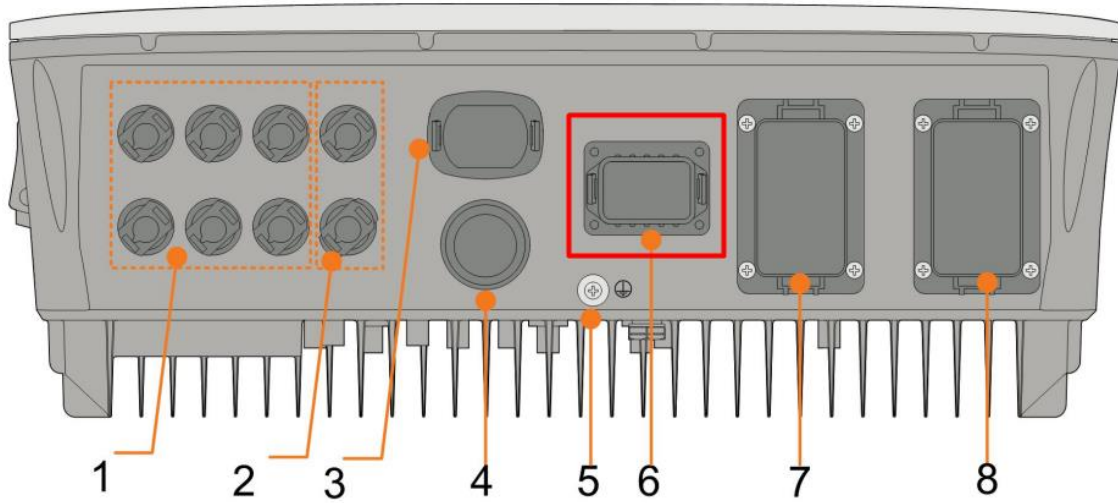
SH5K-30



SH5/6RS Hybrid

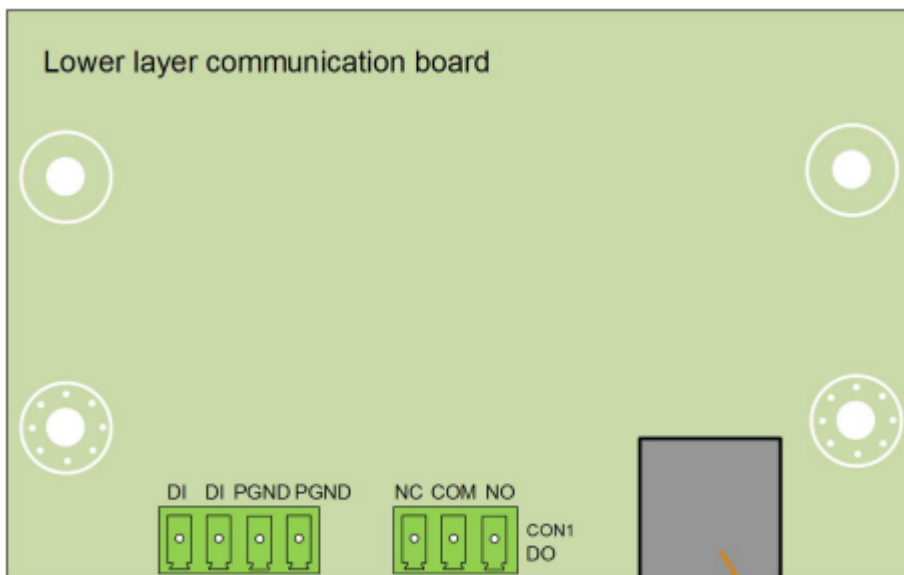


SH5/10RT



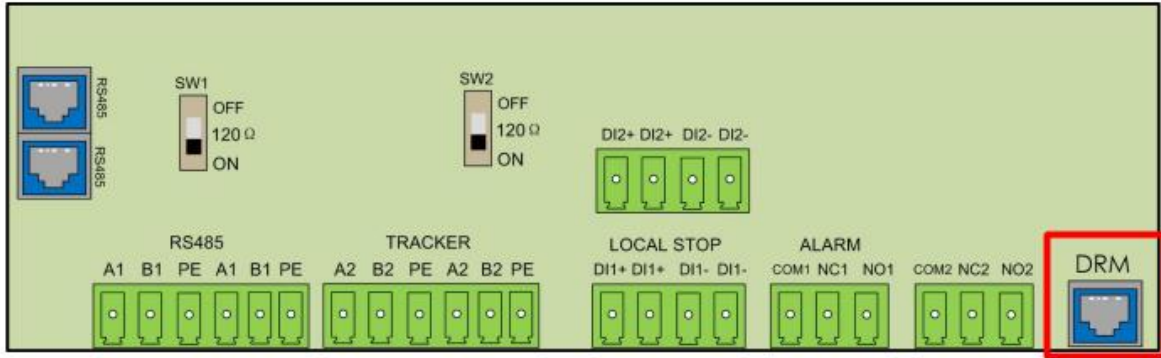
| Meter | | BMS/CAN | | DI/DRM | | DO |
|-------|----|---------|------|--------|------|----|
| A2 | B2 | H | L | D1/5 | D3/7 | |
| A1 | B1 | EN_H | EN_G | D2/6 | D4/8 | C |
| RS485 | | Enable | | | | |

SG30/50CX



DRM Terminal

SG110CX



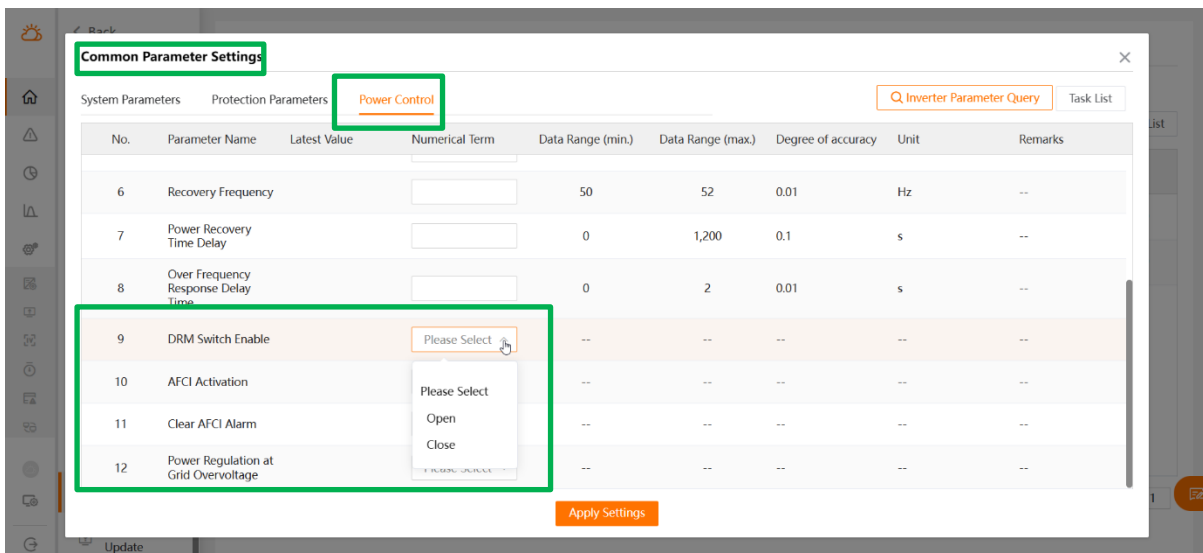
Enabling the DRM per model type (iSolarCloud Portal and App):

Enable the DRM Through iSolarCloud Webportal (See below for Local Access/App Instruction):

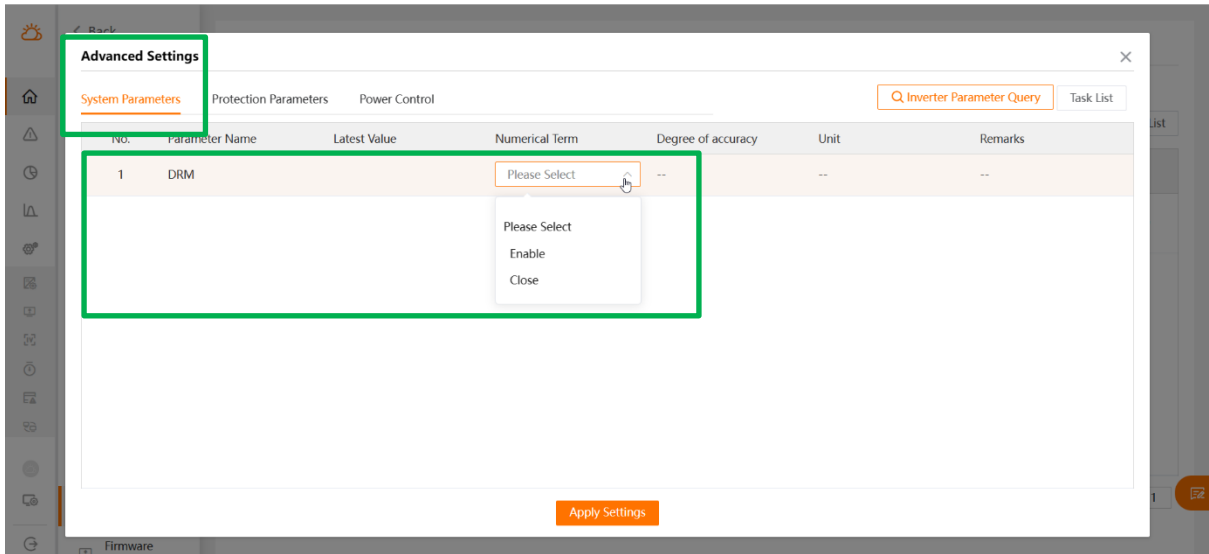
In all cases, go to the settings menu and you can enable the DRM from there.

The following screenshots cover all the Sungrow range.

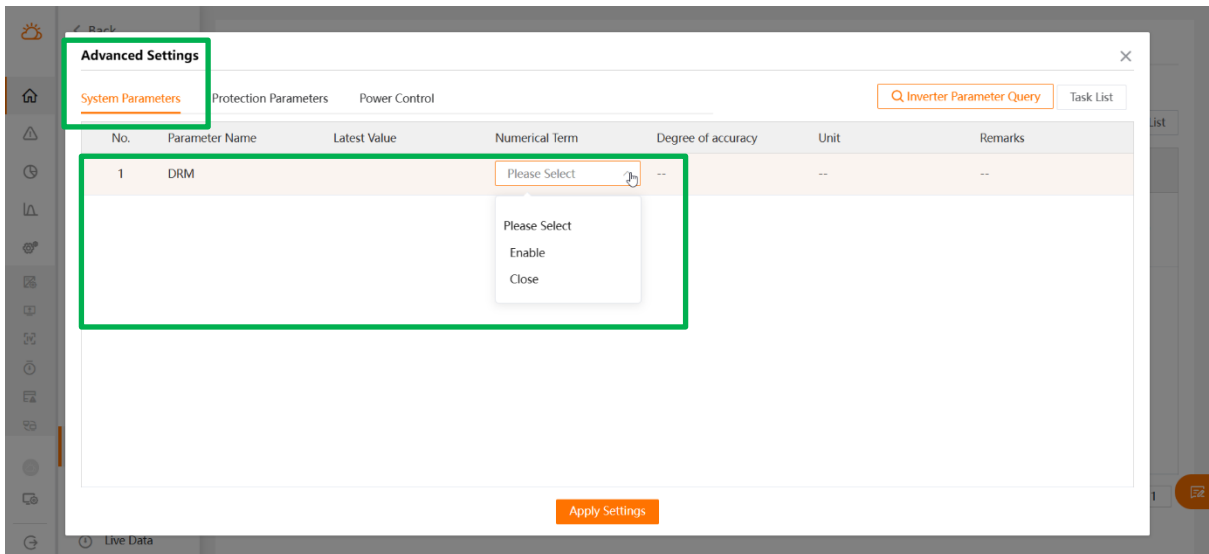
SGKD (Gen 2)**



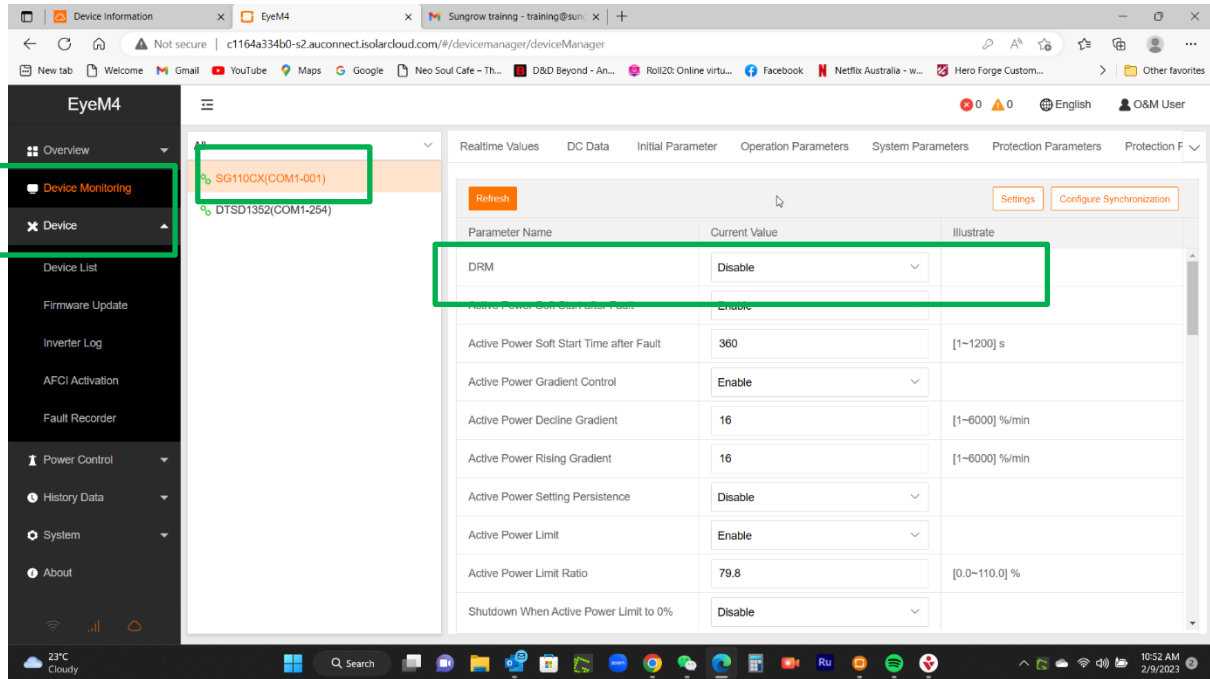
SGRS (Gen3 Grid Connect)**



SGCX (Commercial - Bluetooth)**



EyeM4 or Logger1000



Enable the DRM Through iSolarCloud App Local Access:

Accessible once logged in into local access through the dongle network under settings.

Log in as "admin" and password pw8888

SG5.0-20RT/30CX/50CX/110CX

< BACK

SETTINGS

- System Parameters >
- Operation Parameters >
- Power Regulation Parameters >**
- Protection Parameters >
- Communication Parameters >

< BACK

POWER REGULATION PARAMETERS

- Active Power Regulation >**
- Power Regulation at Grid Overvoltage >
- Feed-in Limitation >
- Reactive Power Regulation >

< BACK

- Active Power Soft Start after Fault
- Active Power Soft Start Time after Fault 360 s
- Active Power Gradient Control
- Active Power Decline Gradient 16 %/min
- Active Power Rising Gradient 16 %/min
- Active Power Setting Persistence
- Active Power Limit
- Active Power Limit Ratio 100.0 %
- Shutdown When Active Power Limit to 0%
- Active Overload Switch
- DRM**

SH5.0/10RT and SH5.0/6.0RS

< BACK

SETTINGS

- System Parameters >
- Operation Parameters >
- Power Regulation Parameters >**
- Protection Parameters >
- Energy Management Parameters >
- Battery Parameters >
- Communication Parameters >

< BACK

POWER REGULATION PARAMETERS

- Active Power Regulation >**
- Power Regulation at Grid Overvoltage >
- Power Regulation at Grid Undervoltage >
- Feed-in Limitation >
- Reactive Power Regulation >

< BACK

ACTIVE POWER REGULATION

- Active Power Soft Start after Fault
- Active Power Soft Start Time after Fault 360 s
- Active Power Gradient Control
- Active Power Decline Gradient 16 %/min
- Active Power Rising Gradient 16 %/min
- Active Power Setting Persistence
- Active Power Limit
- Active Power Limit Ratio 100.0 %
- DRM**

SG2.0-10RS

< BACK

SETTINGS

- System Parameters >
- Operation Parameters >
- Power Regulation Parameters >**
- Protection Parameters >
- Communication Parameters >

< BACK

POWER REGULATION PARAMETERS

- Active Power Regulation >**
- Power Regulation at Grid Overvoltage >
- Feed-in Limitation >
- Reactive Power Regulation >

< BACK

ACTIVE POWER REGULATION

- Active Power Soft Start after Fault
- Active Power Soft Start Time after Fault 360 s
- Active Power Gradient Control
- Active Power Decline Gradient 16 %/min
- Active Power Rising Gradient 16 %/min
- Active Power Setting Persistence
- Active Power Limit
- Active Power Limit Ratio 100.0 %
- DRM**

SG2K-8K-D

< BACK

SETTINGS

- Country/Region Australia >
- System Parameters >
- Operation Parameters >
- Protection Parameters >
- Power Control >**

< BACK

POWER CONTROL

- Active Power Regulation >**
- Reactive Power Regulation >
- Feed-in Limitation >
- DRM >

< BACK

DRM

- DRM**

If the issue persists after following above procedures, please take photos testing on site and contact Sungrow Service Department on 1800 786 476 or email to service@sungrowpower.com.au, Monday- Friday 9am - 5pm (AEDT).