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.

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

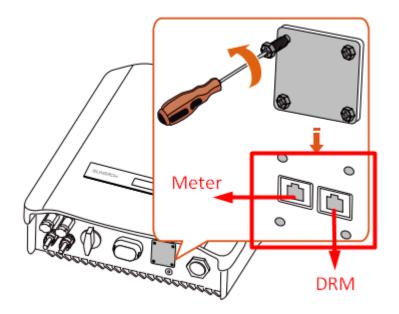
DRM Ports table:

		(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

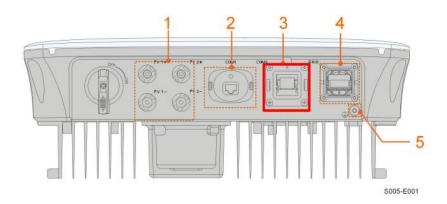
Table 1 – Reference for each inverter type

Inverter DRM connector detail for each Inverter model series:

SG2-8K/D Premium range

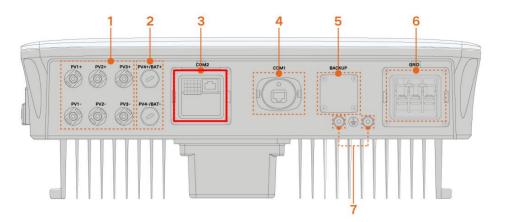


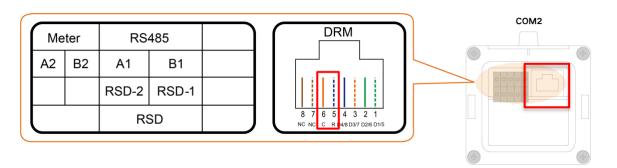
SG2-5RS



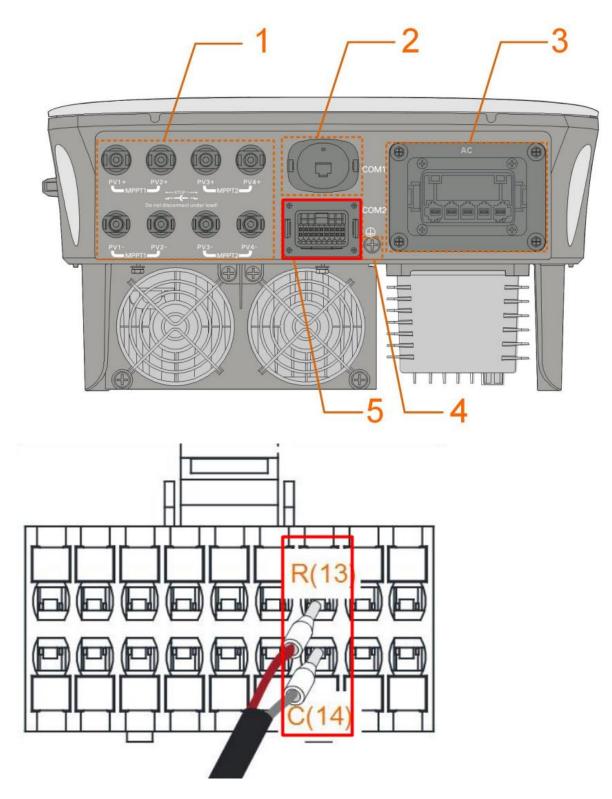
RS485	485 Meter		RSD
A1	A2	R	RSD-1
B1	B2	с	RSD-2

SG5RS-ADA/8.0/10.0

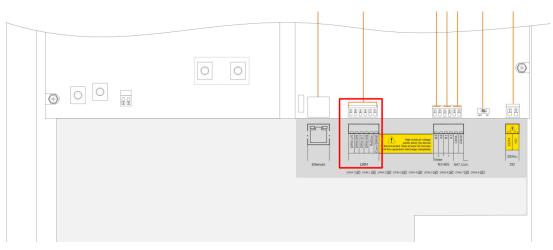


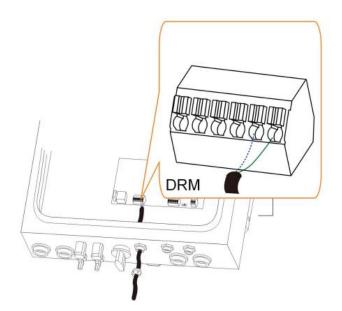


SG5-20RT

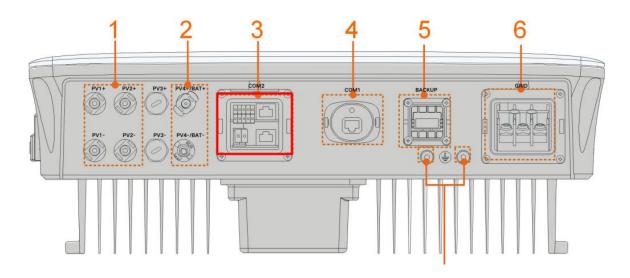


SH5K-30



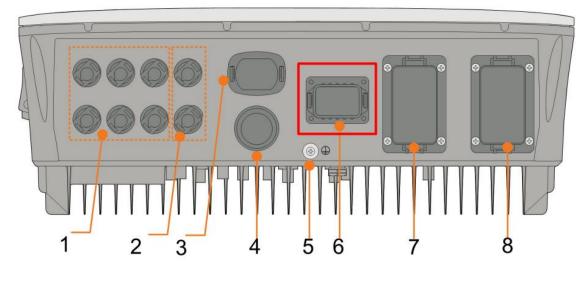


SH5/6RS Hybrid



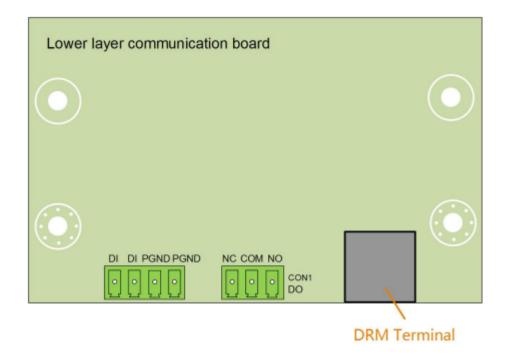
$\left(\right)$	Me	ter	RS4	485	Ena	ble	$\left[\right]$		DRN	1	\neg
	A2	B2	A1	B1	EN	_Н_			_		
	Н	L	RSD-2	RSD-1	EN	_G					
	C/	٩N	R	SD				876 cncc	54 R 04/8	3 2 D3/7 D2/6	1 D1/5
	\square	DO		\bigcap		R	J45	-CAI	N		
	сом	I N	0	NC	NC	NC	L	Н	NC	L	н
l			J	8	7	6	5	4	3	2	

SH5/10RT

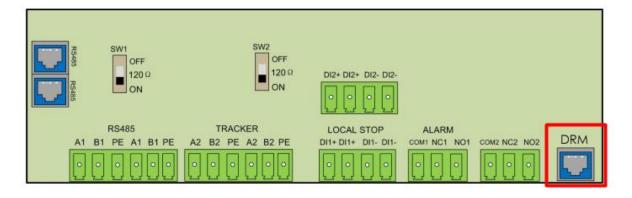


Me	ter	BMS	S/CAN		DI/DRM		DO
A2	B2	Н	L	D1/5	D3/7	R	NO
A1	B1	EN_H	EN_G	D2/6	D4/8	С	СОМ
RS	485	En	able				

SG30/50CX



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.

SG**KD (Gen 2)

System Para	meters Protection Parameters	Power Control			[Q Inverter Pa	rameter Query Task List
No.	Parameter Name Latest Value	Numerical Term	Data Range (min.)	Data Range (max.)	Degree of accuracy	Unit	Remarks
6	Recovery Frequency		50	52	0.01	Hz	
7	Power Recovery Time Delay		0	1,200	0.1	5	
8	Over Frequency Response Delay Time		0	2	0.01	s	
9	DRM Switch Enable	Please Select 🛞					
10	AFCI Activation	Please Select					
11	Clear AFCI Alarm	Open					
12	Power Regulation at Grid Overvoltage	Close					



SG**RS (Gen3 Grid Connect)

ඊ ්	- C Back							
	Advanced Se	ettings						×
ŵ	System Parame	eters Protection Par	ameters Power Control			C	λ Inverter Parameter Query Task Lis	
	INO.	Parameter Name	Latest Value	Numerical Term	Degree of accuracy	Unit	Remarks	.ist
Θ	1	DRM		Please Select	<u></u>			
					0			
©°				Please Select Enable				
				Close				
G				Apply Set	tings			1
()	Firmware	_						_

SG**CX (Commercial - Bluetooth)

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	Advanced Settings						×
ŵ	System Parameters Prote	ection Parameters Power Control			[Q Inverter Parameter Query Tax	sk List
	No. Parameter Na	ame Latest Value	Numerical Term	Degree of accuracy	Unit	Remarks	List
G	1 DRM		Please Select	њ			
			Please Select				
©°			Enable				
			Close				
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<u>_</u> 0			Apply Setti	ngs			
Ģ	Live Data						



EyeM4 or Logger1000

EyeM4 X	Sungrow training - training \otimes sun (\times) +		- 0 ×
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🔚 New tab 🎦 Welcome M Gmail 💶 YouTube 🌻 Maps G Google 🎦 Neo So	ul Cafe – Th 🚺 D&D Beyond - An 😂 Roll20: Onlin	e virtu 😝 Facebook 🔋 Netflix Australia - w	Hero Forge Custom
EyeM4 ==			😒 0 🛕 0 🌐 English 🙎 O&M User
tt Overview	Realtime Values DC Data Initial Param	eter Operation Parameters System Para	meters Protection Parameters Protection F 🗸
Device Monitoring	Refresh		Settings Configure Synchronization
X Device	Parameter Name	Current Value	Illustrate
Device List	DRM	Disable ~	Î
Firmware Update	Adars Forrer Solt Start alter Fadit	Enable	
Inverter Log	Active Power Soft Start Time after Fault	360	[1~1200] s
AFCI Activation	Active Power Gradient Control	Enable ~	
Fault Recorder	Active Power Decline Gradient	16	[1~6000] %/min
T Power Control 👻	Active Power Rising Gradient	16	[1~6000] %/min
History Data	Active Power Setting Persistence	Disable ~	
System -	Active Power Limit	Enable ~	
About	Active Power Limit Ratio	79.8	[0.0~110.0] %
a line of the second se	Shutdown When Active Power Limit to 0%	Disable ~	T
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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		< back	< BACK		
SETTINGS		POWER REGULATION PARAMETERS	Active Power Soft Start after Fault		
System Parameters	>	Active Power Regulation	Active Power Soft Start Time after Fault 360 s		
Operation Parameters	>	Power Regulation at Grid Overvoltage			
Power Regulation Parameters	>	Feed-in Limitation	Active Power Gradient Control		
Protection Parameters	>	Reactive Power Regulation $>$	Active Power Decline Gradient 16 %/min		
Communication Parameters	>		Active Power Rising Gradient 16 %/min		
			Active Power Setting Persistence		
			Active Power Limit		
			Active Power Limit Ratio		
			Shutdown When Active Power Limit to 0%		
			Active Overload Switch		
			DRM		

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

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SETTINGS		POWER REGULATION PARAMETE	RS	ACTIVE POWER REGULATION
System Parameters	>	Active Power Regulation	>	Active Power Soft Start after Fault
Operation Parameters	>	Power Regulation at Grid Overvoltage	>	Active Power Soft Start Time after Fault
Power Regulation Parameters	>	Power Regulation at Grid Undervoltage	>	360 s
Protection Parameters	>	Feed-in Limitation	>	Active Power Gradient Control
Energy Management Parameters	>	Reactive Power Regulation	>	Active Power Decline Gradient
Battery Parameters	>			16 %/min
Communication Parameters	>			Active Power Rising Gradient 16 %/min
				Active Power Setting Persistence
				Active Power Limit
				Active Power Limit Ratio
				DRM

SG2.0-10RS

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SETTINGS		POWER REGULATION PARAMETERS	ACTIVE POWER REGULATION
System Parameters	>	Active Power Regulation	Active Power Soft Start after Fault
Operation Parameters	>	Power Regulation at Grid Overvoltage $>$	Active Power Soft Start Time after Fault
Power Regulation Parameters	>	Feed-in Limitation	360 s
Protection Parameters	>	Reactive Power Regulation	Active Power Gradient Control
Communication Parameters	>		Active Power Decline Gradient 16 %/min
			Active Power Rising Gradient 16 %/min
			Active Power Setting Persistence
			Active Power Limit
			Active Power Limit Ratio
			DRM

SG2K-8K-D

SETTINGS POWER CONTROL DRM Country/Region Active Power Regulation DM Reactive Power Regulation DM DM Operation Parameters DRM DM Protection Parameters DRM DM Power Control DRM DM	< васк	< BACK	< BACK	
Country/Region Australia Reactive Power Regulation System Parameters Feed-in Limitation Operation Parameters DRM Protection Parameters	SETTINGS	POWER CONTROL	DRM	
Australia Reactive Power Regulation System Parameters Feed-in Limitation Operation Parameters DRM	Country/Region Australia	Active Power Regulation	DRM	00
Operation Parameters DRM Protection Parameters >		Reactive Power Regulation	on >	
Protection Parameters >	System Parameters	> Feed-in Limitation	>	
	Operation Parameters		\geq	
Power Control	Protection Parameters	>		
	Power Control			



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).