

# Solis Technical Board – Victoria Emergency Backstop Instruction

Dear Solis Customers,

Regarding registration and capability tests of Solis inverters to VIC DNSPs, we found that most sites failed to register due to missing smart meter configurations.

Only a small number of sites require further investigation from the 3rd party aggregator and DNSP tech support to pass all tests.

We apologize for the inconvenience caused by this temporary issue. Please follow the 4-Steps instructions below and contact Solis service on **0385559516** / <u>service@solisinverters.com.au</u> for further assistance.

#### 1- Make sure Meter and Internet are connected well while onsite

The Victorian government requires meter and internet connectivity for Emergency Backstop control. We have observed that most Solis installations failed due to an unconfigured meter. It is essential for all installers in VIC to configure the meter before leaving the site.

To verify this, simply ensure that the **flow chart is visible** in the SolisCloud app, showing the correct import/export power. Please refer to Appendix A for compatible meter and inverter model, and Appendix B&C for meter wiring and configuration.



### 2- Select VIC DNSP on SolisCloud APP

Please ensure *Agent* is selected as *VIC DNSPs* while creating a site on SolisCloud platform so the data can be passed through correctly.

* NMI@		
Input NMI		
Agent		Agent
Choose Agent for Flexible Export Only	~	Choose Agent for Flexible Export Only
Organization Code®		WA
0A6089	Search	SAPN
Datalogger SN		VIC DNSPs
Add datalogger SN	$(\div)$	OTHERS

# 3- Configure Default Export Limit and take a screenshot

Set the default export limit according to the following for each DNSP and capture a screenshot as proof as part of grid connection requirement. Below the default limits in VIC:

- CitiPower/PowerCor/United Energy: as per pre-approved, or 0W if not specified in preapproval
- AusNet: 1000W
- Jemena: 500W

Please refer to Appendix C for export limitation setting

# 4- Register and Start the Capability Test on the DNSP Portal While Onsite

Please remain onsite for registration and try capability test. Please refer to Q&A in Appendix D for common errors you may encounter.

If the capability test fails 3 times continuously you may inform us and leave the site. We will assist remotely.



Appendix A – C	ompatible inverter	models and meter	r/inverter comp	atibility table
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Meter models	Acrel 1ph meter	Eastron 1ph meter	Acrel 3ph meter	Eastron 3ph meter
Inverter models	ACR10R-D16TE	SDM120CTM	DTSD1352	SDM630MCT
				2500 2510 2110
S5-GR1P(1-3)K-M	$\checkmark$			
S5-GR1P(3-6)K	~			
S6-GR1P(3-6)K-S (Meter)	1	~		
S5-GR1P(7-10)K	$\checkmark$	$\checkmark$		$\checkmark$
S5-GR3P(5-20)K-AU			~	1
S6-GR3P(5-10)K03-NV-ND-AU			~	1
S5-GC(25-50)K-AU			~	1
S5-GC(50-70)K			$\checkmark$	
S5-EH1P(3-6)K-L	~	√ (incl.)		$\checkmark$
S6-EH1P(3-6)K-L-AU		√ (incl.)		1
S6-EH1P(3-8)K-L-PLUS-AU		√ (incl.)		1
S6-EH3P(5-10)K-H-AU				√ (incl.)



# Appendix B – meter wiring diagram

## **B.1-** Acrel meter single phase meter – ACR10R-D16TE





# **B.2- Eastron single phase meter - SDM120CT**





## B.3- Acrel three phase meter - DTSD1352





## B.4- Eastron three phase meter - SDM630MCT





# Appendix C – Meter configuration C.1 - Meter configuration S5 Grid-Tie inverters

Inverter models include:

S5-GR1P(1-3)K / S5-GR1P(3-6)K / S5-GR1P(7-10)K S5-GR3P(5-20)K-AU / S5-GC(25-50)K-AU



1-press ENTER button to wakeup the screen

2-press DOWN button to navigate to Advanced Setting

3-enter password 0010 by entering DOWN-> DOWN-> UP-> ENTER

From Advanced Setting ->

- a) Config meter location: Internal EPM Set->Mode Select->Meter in Grid
- b) Config meter model: Internal EPM Set->Meter Select->1PH Meter or 3PH Meter -> (select meter model respectively)
- c) Config export limitation Internal EPM Set-> Soft Hard Lmt set->Soft Backflowpower-> (enter export limitation value)



## C.2 - Meter configuration for S6 Grid-Tie inverters

Inverter models include: S6-GR1P(3-6)K-S / S6-GR1P(5-10)K3-NV-ND-AU

meter model and meter location can be configured under Quick setting during initial commissioning

Quick Setting	9	•••	$ \otimes\rangle$
Battery Model verter Time	Meter Setting	Grid Code	
Meter Type			
Acrel 1P Meter			
Acrel 3P Meter			
Eastron Standard 1	P Meter		
Eastron Standard 3	P Meter		$\checkmark$
NO Meter			
Meter Installation	n Location		
Grid side			$\checkmark$
Load side			
Grid + PV Inverter, 0 Eastron Meter	Only applicable	for	
Back		Next Step	

They can also be configured later by following below menu path:

a) Config meter location:

Settings -> EPM Setting -> Built-in EPM Setting->Built-in EPM mode selection->Meter in Grid Mode

- b) Config meter model: Settings -> EPM Setting -> Meter Selection->(select meter model respectively)
   c) Config expert limitation
- c) Config export limitation
   Settings -> EPM Setting -> Built-in EPM Setting-> System Export Power Limit Value-> (enter export limitation value)



# C.3 - CT configuration for CT type of S6-GR1P(3-6)K-S inverters

Solis S6-GR1P(3-6)K-S inverter has 10-meter-long CT included in inverter box. It supports VIC backstop control with CT only, meter is not required.



You will find CT/Meter labelled at the bottom of inverter.

Please config CT by following path:

a) Config meter location:

EPM Setting -> Built-in EPM Setting->Built-in EPM mode selection->CT Sensor Mode

- b) Config CT Ratio: EPM Setting -> CT Setting->CT Ratio 3000
- c) Config export limitation
   Settings -> EPM Setting -> Built-in EPM Setting-> System Export Power Limit Value-> (enter export limitation value)

ON Power ON	OFF Power OFF	< EPM Settin	ng 💀 🛞	(1) Built-in EPM Setting	·•· ⊗	< (2) CT Setting	·•· ⊗
Inverter Setting		Built-in EPM Setting (1)		Built-in EPM Mode Select	OFF >	CT Link State	Correct
Grid Parameter Setting		External EPM Setting		Built-in EPM Hard Limit Mode Select	OFF >	CT Ratio	3000 >
EPM Setting		CT Setting (2)		System Export Power Limit Value	1500W >	CT Direction Setting	Forward >
Inverter Work Mode Setting				Fail: Built-in EPM Mode Select			
Frequency Derating Setting				ME CT Sensor Mode	<b>)</b> т>		
VRT Setting				G10 Meter in Load Mode	=F >		
				G10 Meter 24–Hour Monitoring Mode	< A0		
				G10 CT Load Monitoring Mode	>		
				G10 RD2 Cancel Save	ic >		
<u>ن</u>	遊 🔞						
Home Info	Alarm Setting						



# C.4 - Meter configuration for S5 Hybrid inverters

Inverter models include: S5-EH1P(3-6)K-L



1-press ENTER button and press DOWN button to navigate to *Advanced Setting* 2-enter password 0010 by entering DOWN-> DOWN-> UP-> ENTER

From *Advanced Setting* ->

a) Config meter model:

Storage Energy Set ->Meter Set -> Meter Select -> (Choose the corresponding meter model) a) Config meter location:

Storage Energy Set ->Meter Set -> Meter Placement -> Grid

b) Config export limitation
 Export Power Set -> (enter the export limitation value)



## C.5 - Meter configuration for S6 Hybrid inverters

Inverter models include:

## S6-EH1P(3-6)K-L-AU /S6-EH1P(3-8)K-L-PLUS-AU / S6-EH3P(5-10)K-H-AU

meter model and meter location can be configured under Quick setting during initial commissioning

Verter Time Battery Grid Model Code Weter Time Work Setting Work
Meter Type
Acrel 1P Meter
Acrel 3P Meter
Eastron Standard 1P Meter
Eastron Standard 3P Meter
NO Meter
Meter Installation Location
Grid side 🗸 🗸
Load side
Grid + PV Inverter, Only applicable for Eastron Meter
Back Next Step

They can also be configured later by following below menu path:

- a) Setup meter model: Home page ->Advanced Settings -> Meter/CT Setting-> Meter Type->(select meter model respectively)
  b) Setup meter location:
- Home page ->Advanced Settings -> Meter/CT Setting-> Meter Location ->Meter in Grid
- c) Setup export limitation Home page->Storage Mode->enable "Allow export"-> fill-in "Max export power"



### **Appendix D - Frequently Asked Questions:**

#### Q1:

### Where can I get LFDI ?

#### A:

Unlike other inverter brands, Solis inverters communicate to DNSP through a third-party aggregator called *Greensync Dex*. -For CitiPower, PowerCor, United Energy, and AusNet, the LFDI is not required. Simply select Greensync Dex as the communication device.

united U		Help & support
Dashboard My properties Energy usage	Connection Services Customer resolution centre	ZHEN V
Steps	DER Communication Device	
Work Requirements     DERR Details	Based upon assessment of your application, this site is subject to Victoria's emergency backstop mechanism for roothop solar. Under Victoria's emergency backstop mechanism for roothop solar, alter with a total inverter Rated Output Between D-30 VVA are required to use an internet-enabled communicatio (CBIP-AUS compliant) as the backstop mechanism only. For a list of all approved devices please <u>disk hars</u> .	n device
DER Communication Device     Contact Details     Attachments	If internet connectivity is not available the write site installation will need to be setup as a zero-export. For more information go to our subalts. Communication Device Details	
Confirmation	The set registes a served with on-site memory to make on provide communication with an investers that are subject to victorials emergency out-dough metalinism on outrig solar.     "Can all solar investers at this site be connected to the internet?     Yes	
	*Please select a communication device for this site           Catch Power Catch Solar Relay           ✓ Catch Power Catch Solar Relay	
	Greensylo Dex Communication Device Registration The device must be registered with our systems. Registration is initiated via the device manufacturer's app. Once successful you must verify this registration below.	

Please note "GreenSync" option is not yet available on Jemena website. Please email us with the site detail and we will provide LFDI for registration within 3 days.



#### Q2:

#### I get "Verification failed" error, what should I do?

#### **Communication Device Registration**

The device must be registered with our systems. Registration is initiated via the device manufacturer's app. Once succes

Please note some manufacturer's apps do not currently support direct device registration. Where direct device registratic Form Device Identifier (LFDI), which you must copy & paste, or manually enter into the field below.



#### A:

It means the inverter is not compatible with backstop control. Please follow the check points in this document such as meter / internet / "VIC DNSP" selection etc.



#### Q3:

## I get "Test 2 fail" or "Test 3 fail" error, what should I do?

	TEST STEP	
	Test 1: Confirming connection has been made	Passed
	Test 2: Confirming adherence to default export	Passed
)	Test 3: Confirming adherence to active power limit	Control execution error. Check device and site settings or restart device and try again
	Test 4: Confirming configuration is completed	Pending
Те	est failed, please try again. If the problem persists ple	ase contact us on 1800 772 940.
Te	est failed, please try again. If the problem persists ple TEST STEP Test 1: Confirming connection has been made	Passed

Pending

#### A:

1-please make sure to conduct the test on a sunny day

Test 4: Confirming configuration is completed

2-please re-try test 3 times while onsite. If it keeps failing, please make sure the inverter is programed with default export limit before leaving the site

3-we encourage you to re-try test while in office because the test can pass after multiple retries. Please contact us with NMI code and a screenshot of the fault for further assistance.