# 5 switchDin

## **Quick Reference Guide**

### **Droplet + Fronius for Flexible Exports (SA)**

For SA Power Networks Flexible Exports

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#### 1. Required Hardware & Software Checklist

- Fronius SnaplNverter Primo 3-8.2kW / Symo 3.0-20kW
- □ Any compatible Fronius meter
- □ SwitchDin Residential Droplet
- □ GPO for SwitchDin Droplet
- Sets of cables (ethernet & ethernet to USB adaptor)
- SwitchDin App: <u>www.switchdin.com/app</u>



2. Onsite, wire up Smart Meter on grid or load configuration. Refer <u>OTR Wiring Information and</u> <u>Diagram</u>

#### 3. Enable Modbus TCP and port 502 as follows:

- 1. Install Fronius Datamanager
- 2. Open an internet browser
- 3. Enter one of the following into the address field of the internet browser
  - The IP address of the Fronius Datamanager (can be accessed via System Information)
  - Or host name and domain name of the Fronius Datamanager
- 4. The app will open. Click "Settings" on the right-hand side
- 5. Select "MODBUS" in the left-hand menu
- 6. Enter "502" in the Modbus port field
- 7. Select "tcp" as the data export via Modbus option
- 8. Click the tick to complete

Settings		Current general view
GENERAL	Modbus	Services
PASSWORDS	(7) $(7)$	System information
NETWORK		Network diagnostics Firmware update
FRONIUS SOLAR.WEB	Modbus port 6 502	Start assistant
IO MAPPING	String control address offset 101 Sunspec Model Type	
LOAD MANAGEMENT	Demo mode	User: service
	Inverter control via Modbus 🔽	Logout
MODBUS 5		Settings
INVERTERS	Controlling priorities	
FRONIUS SENSOR CARDS	1. Controlling via Modbus Legend: 2. Demonsio paymer reduction 1 highest priority	
METER	2. Dynamic power reduction     2 medium priority       3. IO control     3 lowest priority	
DNO EDITOR	Note: a change of control priorities is possible only in the DNO editor with the service password.	



#### Set the controlling priorities as follows: 4.

not applicable 🔲 not considered 🗌 pin open 📑	pin closed
	✓ X
AUS - Demand Response Modes (DRM) Reactive power output (Grei) for DRM 3 0 % Reactive power consumption (-Grei) for DRM 7 0 %	
Dynamic power reduction	5 🗸 🗴
Power limit: No limit imit for entire system total DC power of the system: 500 Wp Maximum grid feed-in power 0 (W v) Reduct enverter power to 0% if meter connection has been tost.	
	✓ ×
AUS - Demand Response Modes (DRM) Reactive power output (Orei) for DRM 3 Reactive power consumption (-Orei) for DRM 7  %	
	✓ ×
Dynamic power reduction Power limit ® No limit O limit for entire system	
6	() 🗸 🗴
Controlling priorities	_
2. Dynamic power reduction     2medium priority     3. IO control     3lowest priority	

- 1. Select "DNO Editor" in the side menu
- 2. In "Dynamic Power Reduction" section, select "limit for entire system"
- 3. Enter the size of the system
- 4. In "Maximum grid feed-in power", For Primo/ Symo: set 0W.
- 5. Click the tick to save.
- 6. Set the control priorities using the arrows.
  - 1 Controlling via Modbus
  - 2 Dynamic Power
  - Reduction
- 7. Click the tick once the priorities have been set to save

5. Wiring the droplet to the inverter Follow one of the processes below





Using a screwdriver, open the inverter cover

Plug ethernet cable into the inverter port

Plug the other end of the ethernet cable into an adapter

(((• Connect the adapter

to any USB port on the

SwitchDin droplet



Plug the SwitchDin droplet to a GPO. Connect the droplet to the internet through ethernet cable or Wi-Fi to router

OR









Using a screwdriver, open the inverter cover

Plug ethernet cable into the inverter port

Plug the other end of the ethernet cable into the router

Connect the router to the SwitchDin droplet

Plug the SwitchDin droplet to a GPO.



#### 6. Commissioning

- 1. In the Installer app, select installer from the side menu, the scanner will start
- 2. Scan the QR code on the side of the droplet, follow the prompts and select to connect via ethernet or Wi-Fi
- 3. Add a device by clicking the "+" icon on the bottom right of the screen
- 4. Select the discovery option
- 5. Select meter role of "Grid meter" or "Load meter" from the dropdown box
- 6. Click the configuration button for the smart meter, the message "Configured" appears
- 7. Click the configuration button for the inverter, the message "Configured" appears
- 8. If the meter is configured on the load side, click back on the "Add device", select the droplet.
- 9. Select "Manual" option. Search and add "Site Aggregates", click the "+" icon.
- 10. Close the "Add device" window, click Next
- 11. Select the option "Flexible Export program SAPN"
- 12. Enter NMI, click next
- 13. The screen indicates if the connection and registration is successful. Click done.



#### 7. Troubleshooting

1. Droplet status indicator meanings

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biopiet status indicator meanings							
	Indication	Red	Green	Blue			
PWR	Power	N/A	Power	N/A			
WIFI	WiFi	No Wi-Fi	Wi-Fi connected	Weak Wi-Fi signal			
iNet	Internet	No Internet	Internet connected	Configure via SwitchDin app			
SDin	SwitchDin comms	Cannot see SwitchDin	Connected to SwitchDin	N/A			
Devs	Devices attached	No devices	Devices detected	N/A			

- 2. Smart Meter Installation Guide
- 3. SwitchDin Installation video: SwitchDin Fronius Install & Commissioning

#### Warranty claims & support: support@switchdin.com

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