



MAN-01-00914-1.4

## Installation and Operation Guide

v. 1.4

# SolarEdge Home Backup Interface

for use with the SolarEdge Home Hub Inverter – Single Phase

For updates, check:

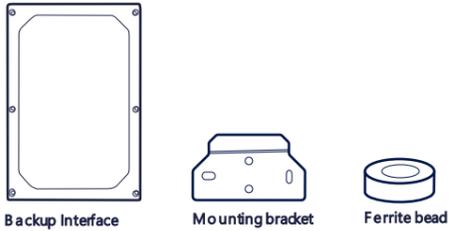


### Support Contact Information

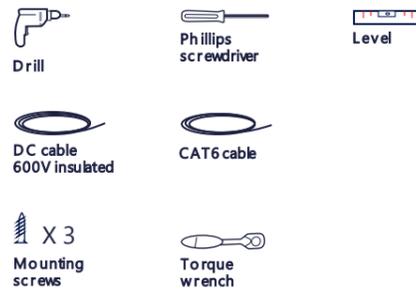
In case of any technical issues with SolarEdge products, please contact us at: <https://www.solaredge.com/service/support>

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Version: 1.4, October 2022  
Subject to change without notice.

## What's in the Package



## Required Tools



## SAFETY AND HANDLING INSTRUCTIONS

- Read this entire document before installing or operating the Backup Interface. Failure to do so or to follow any of the instructions or warnings in this document can result in electrical shock, serious injury, or death, or may damage the Backup Interface and other property.
- Do not discard this document! After installation, keep it adjacent to the Backup Interface for future reference!
- Before operating the Backup Interface and inverter, ensure that they are properly grounded. The Backup Interface and inverter must be connected to a grounded, metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead.
- Opening the Backup Interface and repairing or testing under power must be performed only by qualified service personnel familiar with the Backup Interface.

### WARNING!



This symbol on the product or in the accompanying documentation denotes a hazard. It calls attention to a procedure that, if not correctly performed or adhered to, could result in injury or loss of life. Do not proceed beyond a warning note until the indicated conditions are fully understood and met.



This symbol on the product denotes risk of electric shock due to stored energy. Before handling the product, wait 17 seconds after disconnecting it from all sources of energy.

### 1 Mount Backup Interface

- Select an installation location. Observe clearance of at least 15 cm from other objects.
- Install the mounting bracket and secure it with two screws.
- Hang the Backup Interface on the mounting bracket.
- Secure with a screw.

### 2 Install Conduits

- Release the six screws and remove the Backup Interface cover.
- Install Loads, Grid, Generator (optional) cable conduits as per local regulation.  
**Conduit size:** 25-32mm
- Make sure the ON/OFF switch is in the OFF position.

### 3 Connect Backup Interface

For the Home Hub Inverter Installation Guide, scan

Cable	Gauge	Torque
L1 Grid	6–16mm <sup>2</sup>	6.0 N*m
L1 Loads	4–10mm <sup>2</sup>	6.0 N*m
L1 Generator	4–16mm <sup>2</sup>	6.0 N*m
Comm/CT/12V	CAT6	

- Turn off connection to grid by switching off the main circuit breaker.
- Thread the L1, Neutral and Ground wires from the Main Service panel through the supplied ferrite bead. Connect the wires to the L1, Neutral and Ground terminals.
- Connect wires from the Backed-up Loads panel to the L1, Neutral and Ground terminals.
- Use a CAT6 cable for the 12V connection between the inverter (Backup Interface connector) and Backup Interface (6-pin RS485 connector).
- Use a different CAT6 cable for communication between the inverter (Backup Interface connector) and Backup Interface (6-pin RS485 connector).
- Connect the Backup Interface's CT to the inverter's Energy Meter (L1 connector) using spare wires of the communication CAT6 cable.
- Optional, if a generator is installed:** Connect wires from the generator to the L1, Neutral and Ground terminals.

## 4 Close Backup Interface

1. Mount the Backup Interface cover.
2. Secure with six screws with a torque of 3 N\*m.
3. Toggle on the ON/OFF switch.

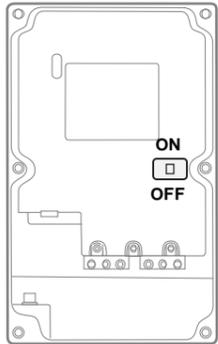
## 5 Configure Installation

1. Run SetApp.
2. Scan the QR code on the inverter.
3. Follow the on-screen instructions.

**Commissioning**

- Power Control
- Energy Manager
- Backup Configuration
- Backup
- Enable

## Manually Switching to Grid-Connected Mode



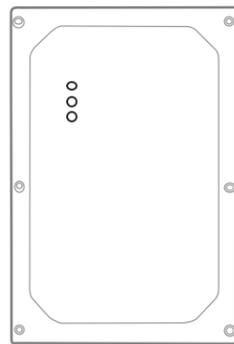
In case of a Backup Interface failure or when necessary, you can reconnect the system to AC power from the grid.

When the system is manually switched to the grid-connected mode, no backup of the loads is possible.

To switch to the grid-connected mode:

1. Turn off the Backup Interface.
2. Turn off the inverter.
3. Move the Manual Control switch to ON.

## LED Indications



### AC



**ON**  
Backup mode

**Blinking**  
Connected to grid

**All LEDs OFF**  
No power

### Comm



**ON**  
Comm with inverter OK

**OFF**  
No comm with inverter

### Fault



**ON**  
Fault

**OFF**  
No faults

## Technical Specifications

BI-NAUGN1P		
<b>INPUT FROM GRID</b>		
AC Current Input	100	A
AC Output Voltage (Nominal)	230	Vac
AC Output Voltage Range	160 - 264	Vac
AC Frequency (Nominal)	50	Hz
AC Frequency Range	45 - 55	Hz
Microgrid Interconnection Device Rated Current	100	A
Grid Disconnection Switchover Time	<3	sec
<b>OUTPUT TO MAIN DISTRIBUTION PANEL</b>		
Maximum AC Current Output	100	A
AC Frequency (Nominal)	50	Hz
AC Frequency Range	45 - 55	Hz
Maximum Inverters AC Current Output in Backup Operation	100	A
AC L-N Output Voltage in Backup (Nominal)	230	V
AC L-N Output Voltage Range in Backup	160 - 264	V
AC Frequency Range in Backup	45 - 55	Hz
Overvoltage Category	III	
<b>GENERATOR<sup>(1)</sup></b>		
Maximum Rated AC Power	23000	W
Maximum Continuous Input Current	100	Aac
Dry Contact Switch Voltage Rating	250/30	Vac/Vdc
Dry Contact Switch Current Rating	5	A
2-wire Start Switch	Yes	
<b>ADDITIONAL FEATURES</b>		
Installation Type	Suitable for use as service equipment	
Number of Communication Inputs	1	
Communication	RS485	
Manual Control Over Microgrid Interconnection Device	Yes	
<b>STANDARD COMPLIANCE</b>		
Safety	IEC/EN 62109-1	
Emissions	AS/NZS CISPR 32	
<b>INSTALLATION SPECIFICATIONS</b>		
Supported Inverters	Single phase EnergyHub inverter with Prism technology	
AC From Grid Conductor Cable Area	6 - 16	mm <sup>2</sup>
Grid / Loads Conduit Size	25 - 32	mm
AC Conductor Cable Area	4 - 10	mm <sup>2</sup>
Generator Conductor Cable Area Range	4 - 16	mm <sup>2</sup>
Generator Conduit Size	25-32	mm
Communication Cable Conductor Area	0.02 - 1.5	mm <sup>2</sup>
Communication Gland Size	5-15	mm
Weight	<4	kg
Noise	< 50	dB(A)
Operating Temperature Range	-40 to +50	°C
Relative Humidity Range	0-100	%
Protection Rating	IP65	
Dimensions (H x W x D)	390 x 238 x 147	
Environmental Category	Outdoor	
Pollution degree	3	
Maximum Altitude Rating	2000	

(1) Requires supporting inverter firmware