SolarEdge Home Backup Interface

For North America

BI-E

HOME BACKUP

Backup Interface for Flexible Backup

- Automatically provides backup power to home loads in the event of grid interruption
- Full flexibility in which loads to back up – the entire home or selected loads
- Scalable solution to support higher power and higher capacity
- Built-in Auto Transformer that supports 5kW of Phase Imbalance
- Built-in PCS certified* Energy Meter readies the Backup Interface to be part of the Busbar Current Management**
- Seamless integration with the SolarEdge Home Hub Inverter to manage and monitor both PV generation and energy storage
- Generator connection support

* Only applicable to Backup Interface with part number **BI-xxxxx-03**. Backup Interface with part number **BI-xxxxx-02** includes a built-in Auto Transformer and Energy Meter that is NOT PCS certified.
** Only applicable to Backup Interface with part number **BI-xxxxx-03**.

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Applicable to Backup Interface with Part Number	BI-xxxxx-02 / BI-xxxxx-03	
Model	**BI-E**	**Units**
INPUT FROM GRID		
AC Current Input	200	A
AC Output Voltage (Nominal)	240	Vac
AC Output Voltage Range	211 – 264	Vac
AC Frequency (Nominal)	60	Hz
AC Frequency Range	59.3 – 60.5	Hz
Microgrid Interconnection Device Rated Current	200	A
Maximum Input Short Circuit Current	10(1)	kA
Overcurrent Protective Device	100 – 200(1,2)	A
Service Side AC Main Circuit Breaker Rated Current	200	A
Service Side AC Main Circuit Breaker Interrupt Current	10,000	A
Grid Disconnection Switchover Time	<100	ms
OUTPUT TO MAIN DISTRIBUTION PANEL		
Maximum AC Current Output	200	A
AC L-L Output Voltage (Nominal)	240	Vac
AC L-L Output Voltage Range	211 – 264	Vac
AC Frequency (Nominal)	60	Hz
AC Frequency Range	59.3 – 60.5	Hz
Maximum Inverters AC Current Output in Backup Operation	144	A
Imbalance Compensation in Backup Operation	5000	W
AC L-N Output Voltage in Backup (Nominal)	120	V
AC L-N Output Voltage Range in Backup	105 – 132	V
AC Frequency Range in Backup	55 – 65	Hz
INPUT FROM INVERTER		
Number of Inverter Inputs	Up to 3	
Maximum Rated AC Power in On-Grid and Backup Operation	12,500	W
Maximum Continuous Current in On-Grid and Backup Operation	52	A
Factory Installed Inverter Input AC Circuit Breaker	40/63(3)	A
Upgradability	Up to 3 x 40A/63A(4) CB	
GENERATOR		
Maximum Rated AC Power	22,500	W
Maximum Continuous Input Current	94	Aac
Dry Contact Switch Voltage Rating	250 / 30	Vac / Vdc
Dry Contact Switch Current Rating	5	A
2-wire Start Switch	Yes	
ADDITIONAL FEATURES		
Installation Type	Suitable for use as service equipment	
Number of Communication Inputs	2	
Communication	RS485	
PCS Certified Energy Meter (for Import/Export)(5)	1% accuracy	
Manual Control Over Microgrid Interconnection Device	Yes	

(1) When the backup interface is protected by class J or RK5 fuses, it is suitable to be used in circuits capable of delivering up to 22 KAIC amperes of fault current

(2) For instructions how to replace the main circuit breaker and a list of acceptable main circuit breakers, please refer to Main Circuit Breaker Replacement application note.

(3) Backup Interface with part number **BI-xxxxx-03** includes one 63A circuit breaker. Backup Interface with part number **BI-xxxxx-02** includes one 40A circuit breaker.

(4) 63A circuit breaker supports up to one 11.4kW inverter, and 40A circuit breaker supports up to one 7.6kW inverter. 20A, 30A, and 50A breakers can be used for inverters with lower power ratings (On-Grid and Backup Operation). The circuit breaker kits are available with the following part numbers:

- For 63A, CB-UPG-63-01
- For 40A, CB-UPG-40-01

(5) Backup Interface with part number **BI-xxxxx-02** includes an Energy Meter that is NOT PCS certified.

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Applicable to Backup Interface with Part Number	BI-xxxxx-02 / BI-xxxxx-03	
Model	**BI-E**	**Units**
STANDARD COMPLIANCE		
Safety	UL 1741; CSA 22.2 NO. 107	
	UL 869A	
Emissions	FCC Part 15 Class B	
INSTALLATION SPECIFICATIONS		
Supported Inverters	StorEdge Single Phase Inverter; SolarEdge Home Hub Inverter	
AC from Grid Conduit Size / AWG Range	2'' conduit / 2/0 AWG – 300 kcmil Cu/Al	
AC to Loads Conduit Size / AWG Range	2'' conduit / 4 – 4/0 AWG	
AC Inverter Conduit Size / AWG Range	1'' conduit / 14 – 4 AWG	
AC Generator Input Conduit Size / AWG Range	1'' conduit / 8 – 3 AWG	
Communication Conduit Size / AWG Range	3/4'' conduit / 24 – 10 AWG	
Weight	73 / 33	lb / kg
Cooling	Fan (user replaceable)	
Noise	< 50	dBA
Operating Temperature Range	(-) 40 to (+) 122 / (-) 40 to (+) 50	˚F / ˚C
Protection Rating	NEMA 3R; IP44	
Dimensions (H x W x D)	20.59 x 13.88 x 8.62 / 523.5 x 352.5 x 219	in / mm

SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

SolarEdge
@SolarEdgePV
@solaredge_us
SolarEdgeNorthAmerica
SolarEdge
www.solaredge.com/corporate/contact

solaredge.com

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