

# SolarEdge Home Battery 48V For Europe

BAT-05K48



## Optimized storage solution for SolarEdge Home Hub and StorEdge three phase inverters

- DC coupled battery featuring comprehensive system efficiency, generating more energy to store and use for on-grid and backup\* power applications
- Integrates seamlessly with the SolarEdge Home and SolarEdge Commercial ecosystems, offering a single source for warranty, support, and training, to streamline logistics & operations
- Includes enhanced safety features for battery protection
- Solar, storage, EV charging, and smart devices all monitored and managed by a single app for optimized production, consumption, and backup\* power
- Scalable solution that enables stacking multiple battery modules per inverter for increased capacity (up to 23 kWh)
- Simple plug and play installation, with automatic SetApp-based configuration

\* Backup applications are available for residential installations only and are subject to local regulations. Additional components and a firmware upgrade may be required. For more information regarding commercial deployments where backup power is not supported, please refer to [this application note](#).

# / SolarEdge Home Battery 48V

## For Europe

### BAT-05K48

	BAT-05K48 <sup>(1)</sup>	UNITS
<b>BATTERY MODULE SPECIFICATION</b>		
Usable Energy (100% depth of discharge)	4600	Wh
Continuous Output Power (charge/discharge) for a Single Module	2825 / 4096	W
Continuous Output Power (charge/discharge) for Multiple Modules	5000 / 5000	W
Peak Roundtrip Efficiency	>95.4	%
Warranty <sup>(2)</sup>	10	Years
Voltage Range	44.8 – 56.5	Vdc
Communication Interfaces	RS485 between modules, CAN bus to inverter	
Modules per Inverter	Up to 5 connected in parallel	
Battery Type	Li-Ion – LFP	
Supporting Inverter Models	See <a href="#">Technical Note - Compatibility Matrix for SolarEdge Home Three Phase Inverters and Batteries</a>	
<b>STANDARD COMPLIANCE</b>		
Safety (Cell level)	IEC 62619; UN38.3	
Safety (Module level)	UN38.3; IEC 62619; IEC 63056; IEC 62040-1; VDE-AR-E 2510-50	
Emissions	IEC 61000-6-1; IEC 61000-6-2; IEC 61000-6-3; IEC 61000-6-4; 61000-3-12	
<b>MECHANICAL SPECIFICATIONS</b>		
Dimensions (W x H x D)	540 x 500 x 240	mm
Weight	54.7	kg
Mounting	Floor stand and wall attach	
Operating Temperature (charge/discharge) <sup>(3)(4)</sup>	-10 to +50	°C
Storage Temperature (12 months between recharges)	-10 to +45	°C
Maximum Altitude	2000	m
Enclosure Protection	IP65 / NEMA 3R - indoor and outdoor (water and dust protection)	
Cooling	Natural convection	
Noise (at 1m distance)	< 25	dBA

(1) Specification applies to part numbers BAT-05K48M0B-01 and BAT-05K48M0B-02.

(2) For warranty details, please refer to the [SolarEdge Home Battery Limited Product Warranty](#).

(3) Derating applies. At high temperatures, the battery discharge power will derate when the internal temperature of the battery is higher than 40°C. At low temperatures, the battery charge power will derate when the internal temperature of the battery is lower than 15°C. SolarEdge has implemented an internal heating procedure to mitigate the effect of the charge power derating at low temperatures. This heating procedure consumes some of the charge power.

(4) Operating the SolarEdge Home Battery at extreme temperatures for extended durations of time may void the battery warranty coverage. Please see the [SolarEdge Home Battery Limited Product Warranty](#) for additional details.

### SOLAREEDGE HOME BATTERY - ACCESSORIES (PURCHASED SEPARATELY)

DESCRIPTION	PN
Accessory residential battery, top cover (1 required per tower)	IAC-RBAT-5KMTOP-01
Accessory residential battery, cable set battery to SolarEdge Home Hub Inverter - Three Phase (PN SE*K-RWB48)	IAC-RBAT-5KCINV-01
Accessory residential battery, cable set battery to StorEdge Inverter Three Phase (PN SE*K-RWS)	IAC-RBAT-5KCINV-02
Accessory residential battery, cable set module to module	IAC-RBAT-5KCBAT-01
Accessory residential battery, cable set tower to tower	IAC-RBAT-5KCTOW-01
Accessory residential battery, floor stand (1 required per tower)	IAC-RBAT-5KFSTD-01
Accessory 10 * Spare connector kit for Battery to Inverter connection, SolarEdge Home Battery 48V	IAC-RBAT-5KCNCT-01
Accessory 10 * Spare connector kit for Tower to Tower connection, SolarEdge Home Battery 48V	IAC-RBAT-5KCNCT-02

### BATTERY HEIGHT BY CONFIGURATION

CONFIGURATION	WITH FLOORSTAND	WITHOUT FLOORSTAND	UNITS
1 module with top cover	670	620	mm
2 modules with top cover	1170	1120	
3 modules with top cover	1670	1620	

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# SolarEdge Home Backup Interface

## Single Phase, for Europe

BI-EU1P

BACKUP



### Flexible Backup Interface

- / Automatically provides backup power to home loads in the event of grid interruption
- / Flexibility in which loads to back up - the entire home or selected loads
- / Scalable solution to support higher power & higher capacity
- / Seamless integration with the SolarEdge Home Hub Inverter to manage and monitor both PV generation and energy storage

# / SolarEdge Home Backup Interface

## Single Phase, for Europe

### BI-EU1P

	BI-EU1P <sup>(1)</sup>	UNITS
<b>GRID CONNECTION</b>		
AC Current Input	100	A
AC Voltage Line – Neutral (Min/Nom/Max)	184 / 230 / 264	V
AC Frequency Range	50 / 60	Hz
On Grid to Off Grid Switchover Time	< 3	sec
<b>OUTPUT TO DISTRIBUTION PANEL</b>		
Maximum AC Current Output	100	A
AC Voltage Line – Neutral (Min/Nom/Max)	184 / 230 / 264	V
AC Frequency Range	50 / 60	Hz
Overvoltage Category	III	
<b>ADDITIONAL FEATURES</b>		
Supported Grid Topologies	TT; TN-S; TN-C-S <sup>(2)</sup>	
Operation During Backup	Disconnection of phase + N from external grid; PE to Neutral connection on load side / disconnection configuration option on internal grid	
Communication	RS485	
Energy Meter (for Import/Export)	Integrated <sup>(3)</sup> , 1.25% accuracy	
Manual Control Over Microgrid Interconnection Device	Yes	
<b>STANDARD COMPLIANCE</b>		
Safety	IEC/EN 62109-1	
Emissions	IEC 61000-6-2; IEC 61000-6-3; IEC 61000-3-11; IEC 61000-3-12; EN 55011	
<b>INSTALLATION SPECIFICATIONS</b>		
Supported Inverters	SolarEdge Home Hub Inverter – Single Phase	
AC from Grid / Loads Conductor Cross Section	6 – 25	mm <sup>2</sup>
Grid / Loads Conduit Diameter	14 – 22	mm
Communication Cable Cross Section	0.2 – 1.5	mm <sup>2</sup>
Communication Gland Diameter	5 – 15	mm
Weight	< 5	kg
Noise	< 50	dBA
Operating Temperature Range	-40 to +50	°C
Relative Humidity Range	0 – 100	%
Protection Rating	IP65 – outdoor and indoor	
Dimensions (H x W x D)	390 x 238 x 147	mm
Pollution Degree	3	
Maximum Altitude Rating	2000	m

(1) Applicable for PN BI-NEUNU-1P-01.

(2) For other topologies please consult with SolarEdge support.

(3) Pending firmware support.

# SolarEdge Home Backup Interface Three Phase, for Europe

BI-EU3P

BACKUP



## Flexible Backup Interface

- / Automatically provides backup power to home loads in the event of grid interruption
- / Flexibility in which loads to back up - the entire home or selected loads
- / Scalable solution to support higher power & higher capacity
- / Seamless integration with the SolarEdge Home Hub Inverter to manage and monitor both PV generation and energy storage

# / SolarEdge Home Backup Interface

## Three Phase, for Europe

### BI-EU3P

	BI-EU3P <sup>(1)</sup>	UNITS
<b>GRID CONNECTION</b>		
AC Current Input	3*63	A
AC Voltage Line – Neutral (Min / Nom / Max)	184 / 230 / 264	V
AC Frequency Range	50 / 60	Hz
On Grid to Off Grid Switchover Time	< 3	Sec
<b>OUTPUT TO DISTRIBUTION PANEL</b>		
Maximum AC Current Output	3*63	A
AC Voltage Line – Neutral (Min/Nom/Max)	184 / 230 / 264	V
AC Frequency Range	50 / 60	Hz
Overtoltage Category	III	
<b>ADDITIONAL FEATURES</b>		
Supported Grid Topologies	TT; TN-S; TN-C-S <sup>(2)</sup>	
Operation During Backup	Disconnection of 3 phases + N from external grid; PE to Neutral connection on load side / disconnection configuration option on internal grid	
Number of Communication Inputs	1	
Communication	RS485 and SolarEdge Home Network <sup>(3)</sup>	
Energy Meter (for Import/Export)	Integrated <sup>(3)</sup> , 1.25% accuracy	
Manual Control Over Microgrid Interconnection Device	Yes	
<b>STANDARD COMPLIANCE</b>		
Safety	IEC/EN 62109-1	
Emissions	IEC 61000-6-2; IEC 61000-6-3; IEC 61000-3-11; IEC 61000-3-12; EN 55011	
<b>INSTALLATION SPECIFICATIONS</b>		
Supported Inverters	SolarEdge Home Hub Inverter – Three Phase	
Grid / Loads Conductor Cross Section	6 – 25	mm <sup>2</sup>
Grid / Loads Conduit Diameter	14 – 22	mm
Communication Cable Cross Section	0.2 – 1.5	mm <sup>2</sup>
Communication Gland Diameter	5 – 15	mm
Weight	< 5	kg
Noise	< 50	dBA
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	mm
Environmental Category	Outdoor	
Pollution Degree	3	
Maximum Altitude Rating	2000	m

(1) Applicable for PN BI-NEUNU-3P-01.

(2) For other topologies please contact SolarEdge support.

(3) Pending firmware support.