

# 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 application
- Solar, storage, EV charging, and smart devices all monitored and managed by a single app for optimized production, consumption, and backup\* power
- Integrates seamlessly with the complete SolarEdge Home ecosystem, offering a single source for warranty, support and training, to streamline logistics & operations
- Scalable solution that enables to stack up multiple battery modules per inverter for increased capacity (up to 23 kWh)
- Includes enhanced safety features for battery protection
- Simple plug and play installation, with automatic SetApp-based configuration

\* Backup applications are subject to local regulation and may require additional components and firmware upgrade

# / 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)	IEC62619; UN38.3	
Safety (Module level)	UN38.3; IEC62619; IEC63056; IEC62040-1; VDE-AR-E 2510-50 <sup>(3)</sup>	
Emissions	IEC61000-6-1; IEC61000-6-2; IEC61000-6-3; IEC61000-6-4; 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 <sup>(4)</sup> Charge/Discharge	-10 to +50	°C
Storage Temperature (12 months between recharge)	-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 number BAT-05K48M0B-01 and BAT-05K48M0B-02.

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

(3) Designed to meet VDE-AR-E-2510-50.

(4) Derating applies. Please note that 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	

# SolarEdge Home Hub Inverter

## Three Phase, for Europe

SE5K-RWB48 / SE8K-RWB48 / SE10K-RWB48



### Three phase inverter for storage and backup applications

- / Simple installation with single inverter for managing both PV production, battery storage, and operation during power outage for full house backup applications\*
- / More energy using DC coupled solution architecture that stores PV power directly to the battery without AC conversion losses
- / Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- / Designed to eliminate high voltage during installation, maintenance or firefighting for enhanced safety
- / Enables module-level monitoring and full visibility of battery status, PV production, and self-consumption data

\* Requires additional hardware and firmware version upgrade

# / SolarEdge Home Hub Inverter

## Three Phase, for Europe

SE5K-RWB48 / SE8K-RWB48 / SE10K-RWB48

	SE5K-RWB48	SE8K-RWB48	SE10K-RWB48	UNITS
<b>OUTPUT – AC ON GRID</b>				
Rated AC Power Output (Total/Per Phase)	5000/1667	8000/2667	10000/3333	VA
Maximum AC Power Output (Total/Per Phase)	5000/1667	8000/2667	10000/3333	VA
AC Output Voltage – Line to Line / Line to Neutral (Nominal)	380/220; 400/230			Vac
AC Output Voltage – Line to Neutral (Range)	184 – 264.5			Vac
AC Frequency	50/60 ± 5			Hz
Maximum Continuous Output Current (per phase)	8	13	16	A
Residual Current Detector / Residual Current Step Detector	300/30			mA
Grids Supported	3 / N / PE Three Phase (WYE with Neutral)			
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes			
<b>OUTPUT – AC BACKUP</b>				
Maximum AC Power Output (Total/Per Phase)	5000/1667	8000/2667	10000/3333	VA
AC Output Voltage – Line to Line / Line to Neutral (Nominal)	380/220; 400/230			Vac
AC Output Voltage – Line to Neutral Range	184 – 264.5			Vac
AC Frequency	50/60 ± 5			Hz
Maximum Continuous Output Current (per phase)	7.2	11.7	14.4	A
Residual Current Detector / Residual Current Step Detector	300/30			mA
Grids Supported	3 / N / PE Three Phase (WYE with Neutral)			
Transformer-less, Ungrounded	Yes			
Utility Monitoring, Ensure Safe Disconnection from Utility Grid in Backup Operation, Configurable Power Factor, Country Configurable Thresholds	Yes			
Automatic Switchover Time	< 10			Sec
Max Allowed Imbalanced Between Phases	1.66	2.66	3	Kw
<b>INPUT PV</b>				
Maximum DC Power (Module STC)	10000	13000	15000	W
Input Voltage Range	750 – 900			Vdc
Maximum Input Current	13.3	17.3	20	Adc
Reverse-Polarity Protection	Yes			
Ground-Fault Isolation Detection	700kΩ Sensitivity			
Peak Inverter Efficiency	98			%
European Weighted Efficiency	97.3	97.6		%
<b>INPUT/OUTPUT BATTERY</b>				
Supported Battery Types	SolarEdge Home Battery BAT-05K48 (1-5 battery modules)			
Maximum Charge/Discharge Power	5000			
Input Voltage Range	40 – 62			
Maximum Continuous Input/Output Current	125			
Peak Battery to Grid Discharge Efficiency	96.1			
Battery to Inverter Communication	CAN			
<b>ADDITIONAL FEATURES</b>				
Supported Communication Interfaces	Built in: 2 x RS485, Ethernet, SolarEdge Home Network			

# / SolarEdge Home Hub Inverter

## Three Phase, for Europe

### SE5K-RWB48 / SE8K-RWB48 / SE10K-RWB48

	SE5K-RWB48	SE8K-RWB48	SE10K-RWB48	UNITS
<b>STANDARD COMPLIANCE</b>				
Safety	IEC62109			
Grid Connection Standards <sup>(1)</sup>	VDE-AR-N 4105, Tor Erzeuger Typ A, EN 50549-1, CEI 0-21, G98 Type A, G98 NI Type A, RD1699 / RD413 / NTS, VDE-V 0126-1-1, VFR 2019, C10/11, EN 50438			
Emissions	IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, EN55011			
RoHS	Yes			
<b>INSTALLATION SPECIFICATIONS</b>				
AC Output – Cable Gland Diameter	15 – 21			mm
Battery DC – Cable Gland Outer Diameter	2 x 11 – 16.5			mm
PV DC Input	2 x MC4 pair			
Dimensions (H x W x D)	907 x 317 x 192			mm
Weight	37			kg
Operating Temperature Range	-40 to +60			°C
Cooling	Internal and external fans			
Noise	< 50			dBA
Protection Rating	IP65 – outdoor and indoor			
Mounting	Brackets provided			

(1) For all standards, see the Certifications category in the [Knowledge Center](#).

#### SOLAREGE HOME HUB INVERTER – ACCESSORIES (PURCHASED SEPARATELY)

##### OPTIONAL COMMUNICATION INTERFACES

Wi-Fi (requires Wireless Gateway)

Cellular

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
-  @SolarEdgePV
-  SolarEdgePV
-  SolarEdge
-  [www.solaredge.com/corporate/contact](http://www.solaredge.com/corporate/contact)

**[solaredge.com](http://solaredge.com)**

© SolarEdge Technologies, Ltd. All rights reserved. SOLAREEDGE, the SolarEdge logo, OPTIMIZED BY SOLAREEDGE are trademarks or registered trademarks of SolarEdge Technologies, Inc. All other trademarks mentioned herein are trademarks of their respective owners. Date: March 30, 2023 DS-000112-ENG Subject to change without notice.

Cautionary Note Regarding Market Data and Industry Forecasts: This brochure may contain market data and industry forecasts from certain third-party sources. This information is based on industry surveys and the preparer's expertise in the industry and there can be no assurance that any such market data is accurate or that any such industry forecasts will be achieved. Although we have not independently verified the accuracy of such market data and industry forecasts, we believe that the market data is reliable and that the industry forecasts are reasonable.



---

# 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 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, EN55011	
<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	dB(A)
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.