

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 ⁽¹⁾	UNITS
BATTERY MODULE SPECIFICATION		
Usable Energy (100% depth of discharge)	4600 / 4850 ⁽²⁾	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 ⁽³⁾	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 Technical Note – Compatibility Matrix for SolarEdge Home Three Phase Inverters and Batteries	
STANDARD COMPLIANCE		
Safety (Cell level)	IEC 62619; UN38.3; UL9540A	
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	
MECHANICAL SPECIFICATIONS		
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) ⁽⁴⁾⁽⁵⁾	-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) As of January 2025, available for batteries connected to new installations of SolarEdge Home Hub Three Phase inverters. Valid for new and existing sites.
(3) For warranty details, please refer to the [SolarEdge Home Battery Limited Product Warranty](#).
(4) 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.
(5) 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 Battery 400V For Europe

BAT-10K1P

BATTERY



DC-Coupled Battery Optimized to Work with SolarEdge Home Inverters

- / DC coupled battery featuring outstanding overall system efficiency, generating more energy to store and use for on-grid and backup* power applications
- / Integrates seamlessly with the complete SolarEdge Home ecosystem using SolarEdge Home Network, offering a single source for warranty, support, and training, to streamline logistics & operations
- / Scalable solution for increased power and capacity with multiple SolarEdge inverters and batteries
- / Includes multiple safety features for battery protection
- / Solar, storage, EV charging, and smart devices all monitored and managed by a single app to an optimized production, consumption, and backup* power
- / Simple plug and play installation, with automatic SetApp-based configuration
- / Flexible installation - wall or floor mount, indoor or outdoor
- / Wireless communication to the inverter, reducing wiring, labor, and installation faults

* Backup applications are subject to local regulations and may require additional components and firmware upgrade.

/ SolarEdge Home Battery 400V

For Europe

BAT-10K1P

		BAT-10K1PS0B-x2	Units
OUTPUT			
Usable Energy (100% depth of discharge)		9700	Wh
Continuous Output Power ⁽¹⁾		5000	W
Peak Output Power in Backup (for 10 seconds)		7500	W
Peak Roundtrip Efficiency		94.5	%
Warranty ⁽²⁾		10	Years
Voltage Range		350 – 450	Vdc
Maximum Continuous Output Current		14.3	A
Maximum Short Circuit Current / Duration		1k / 10	Adc / msec
ADDITIONAL FEATURES			
Compatible Inverters		SolarEdge Home Hub/Wave Inverter – Single Phase, StorEdge Single Phase Inverter with HD-Wave Technology, SolarEdge Home Short String Inverter ⁽³⁾	
Batteries Per Inverter ⁽⁴⁾	SolarEdge Home Hub/Wave Inverter – Single Phase	Up to 3	
	StorEdge Single Phase Inverter with HD-Wave Technology	Up to 3	
	SolarEdge Home Short String Inverter	1	
Communication Interfaces	SolarEdge Home Hub/Wave Inverter – Single Phase	SolarEdge Home Network ⁽⁵⁾ , RS485	
	StorEdge Single Phase Inverter with HD-Wave Technology	SolarEdge Home Network ⁽⁵⁾ , RS485	
	SolarEdge Home Short String Inverter	SolarEdge Home Network ⁽⁵⁾	
STANDARD COMPLIANCE			
Certification	Cell	IEC62619	
	Battery	IEC 61010-1, IEC 62619, UN38.3, UL9540, UL9540A	
Emissions		IEC 61000-6-1, IEC 61000-6-3	
INSTALLATION SPECIFICATIONS			
Dimensions (W x H x D)		790 x 1179 x 250	mm
Weight		119	kg
Mounting		Floor ⁽⁶⁾ or wall mount ⁽⁷⁾	
Ambient Operating Temperature Range ⁽⁸⁾		-10 to +50	°C
Storage Temperature (limited period) ⁽⁹⁾		-30 to +60	°C
Storage Temperature (up to 12 months from shipment date)		-10 to +30	°C
Enclosure Protection		IP55 – indoor and outdoor (water and dust protection)	
Maximum Altitude		2000	m
Cooling		Natural convection	
Noise at 1m Distance		< 25	dBA

(1) Charge/discharge power may differ according to the temperature range.

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

(3) For compatible inverter details, see the [SolarEdge Home Hub Inverter](#), [SolarEdge Home Wave Inverter 2.2kW-6kW](#), [SolarEdge Home Wave Inverter 8kW, 10kW](#), and [StorEdge® Single Phase Inverter](#) datasheets. The [SolarEdge Home Short String Inverter](#) is only compatible in the Netherlands and Poland.

(4) Installations with multiple SolarEdge Home Batteries connected to a single inverter require a pair of SolarEdge branch connectors (DC + and DC -) per battery, excluding the last battery. The branch connectors should be purchased separately. For details, see the [Connecting the Home Hub Inverter to Multiple Home Batteries](#) technical note.

(5) For details, see the [SolarEdge Home Network Plug-In](#) datasheet and [SolarEdge Home Network Plug-in Kit Selection](#) technical note.

(6) The floor stand is purchased separately. One floor stand is required per SolarEdge Home Battery. See the [Floor Stand Installation Guide](#) and the Accessories P/N table below.

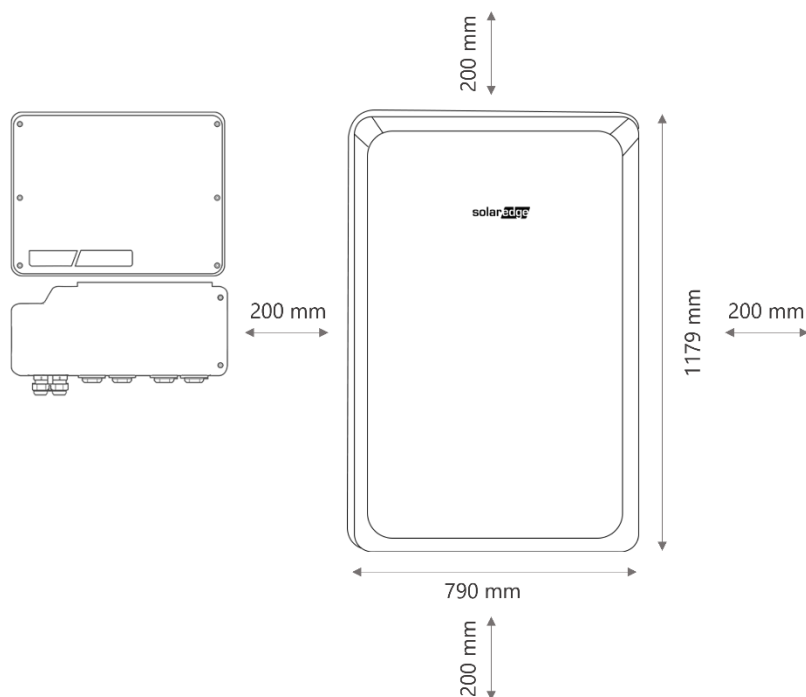
(7) Wall mount installation requires handles that should be purchased separately. See the Accessories P/N table below.

(8) The SolarEdge Home Battery 400V is to be installed in a location where the ambient temperature falls between 0°C to +40°C for no less than 95% of the warranty period and between -10°C to +50°C for the rest of the period. For details, see the [SolarEdge Home Battery Limited Product Warranty](#).

(9) For details, see the [Transportation and Storage Guidelines - Application Note](#).

SolarEdge Home Battery – Accessories (purchased separately)	
Accessory	P/N
Floor stand	IAC-RBAT-FLRSTD-01
Reusable lifting handles	IAC-RBAT-HANDLE-01
Branch connector set (includes 10 pairs of DC + and DC - connectors) Required for installations with multiple SolarEdge Home Battery batteries with a single Inverter. For details, see the Connecting the Home Hub Inverter to Multiple Home Batteries technical note.	IAC-RBAT-RWYCB-01

SolarEdge Home Battery Dimensions and Placement



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.

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