SolarEdge Home Battery 48V

For Europe

BAT-05K48

BATTERIES



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
- Integrates seamlessly with the complete SolarEdge Home ecosystem, 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 to stack up 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 subject to local regulation and may require additional components and firmware upgrade

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	BAT-05K48(1)	UNITS
BATTERY MODULE SPECIFICATION		
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(2)	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)	IEC62619; UN38.3	
Safety (Module level)	UN38.3; IEC62619; IEC63056; IEC62040-1; VDE-AR-E 2510-50(3)	
Emissions	IEC61000-6-1; IEC61000-6-2; IEC61000-6-3; IEC61000-6-4; 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(4) 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.

SOLAREDGE 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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CE

Installation Guide

Home Battery (Low Voltage) Installation Guide

with SetApp Configuration

MAN-01-00954-1.0

For Europe and APAC

Version 1.0

What's in the Package

- Battery module
- Mounting bracket
- 2 x M5 screws

Battery accessories

SOLAREDGE HOME BATTERY - ACCESSORIES (PURCHASED SEPARATELY)	
DESCRIPTION	PN
Accessory SolarEdge Home Battery, Low Voltage, mechanical top cover (1 required per tower)	IAC-RBAT-5KMTOP-01
Accessory SolarEdge Home Battery, Low Voltage to **SolarEdge Home Hub** Inverter – Three Phase (PN SE*K-RWB48)	IAC-RBAT-5KCINV-01
Accessory SolarEdge Home Battery, Low Voltage cable set SolarEdge Home Battery, Low Voltage to **SolarEdge Home Wave** Inverter – One Phase (PN SE*K-RWS)	IAC-RBAT-5KCINV-02
Accessory SolarEdge Home Battery, Low Voltage, cable set battery module to battery module	IAC-RBAT-5KCBAT-01
Accessory SolarEdge Home Battery, Low Voltage, cable set tower to tower	IAC-RBAT-5KCTOW-01
Floor stand support SolarEdge Home Battery, Low Voltage (optional)	IAC-RBAT-5KFSTD-01
Accessory 10 * Spare connector kit for battery to Inverter connection, SolarEdge Home Battery, Low Voltage	IAC-RBAT-5KCNCT-01
Accessory 10 * Spare connector kit for tower to tower connection, SolarEdge Home Battery, Low Voltage	IAC-RBAT-5KCNCT-02

Selecting and Preparing the Installation Site

Make sure to observe the following requirements, when selecting an installation site.

Configurations

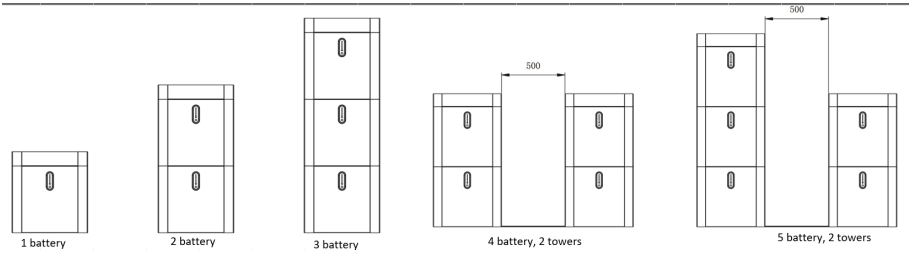
The term *Battery module* refers to a single battery. The term *Battery Tower* or *Tower* refers to a number of modules stacked on top of each other and connected in parallel. The term *Battery pack* or *Battery* refers to all the battery modules connected to each other and to the same inverter, in one or two towers.

In a single battery module configuration, a single battery module may be installed and connected to the inverter.

Up to five battery modules in two towers may be installed in a multiple battery module configuration, with a maximum of three battery modules in a tower.

Number of Towers		1	1	1	2	2	2	2
Content	PN	1 battery	2 battery	3 battery	2 battery	3 battery	4 battery (3+1 or 2+2)	5 battery (3+2 or 4+1)
Battery pack with	BAT-05K48M0B-01	1	2	3	2	3	4	5
Tower cover with 5 screws	IAC-RBAT-5KMTOP-01	1	1	1	2	2	2	2
Battery to battery cable kit same tower	IAC-RBAT-5KCBAT-01	0	1	2	0	1	2	3
Tower to tower cable set	IAC-RBAT-5KCINV-01	0	0	0	1	1	1	1
Battery to inverter cable set	IAC-RBAT-5KCTOW-01	1	1	1	1	1	1	1
Floor support stand*	IAC-RBAT-5KFSTD-01	1	1	1	2	2	2	2
* floor stand is								

Number of Towers		1	1	1	2	2	2	2
Content	PN	1 battery	2 battery	3 battery	2 battery	3 battery	4 battery (3+1 or 2+2)	5 battery (3+2 or 4+1)
recommended								



General Guidelines and Requirements

- The battery may be installed in an outdoor or indoor location.
- Since the battery must be secured to a wall using the supplied mounting bracket, the installation location must be adjacent to a wall.
- When installed indoors, the battery must not be obstructed by any building structure, room furniture or equipment.
- The battery shall not be exposed to direct sun or rain.
- Since the battery has natural convection, the installation site must be clean, dry and well ventilated.
- The installation location must allow easy access to the battery for installation and maintenance.
- The front panel should not be covered.

Restricted Locations

Do not install the battery at any of following locations:

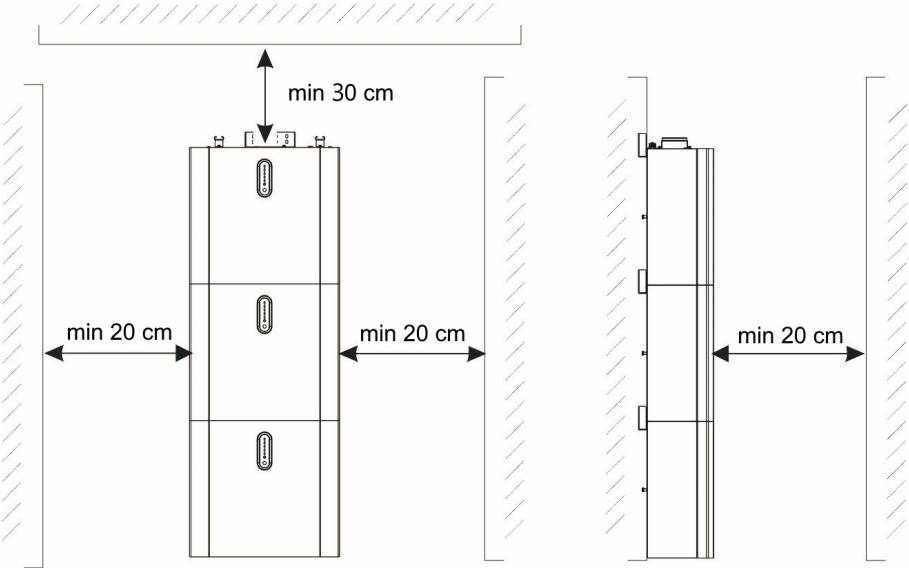
- residential rooms
- wall or ceiling niches
- entrance/exit areas or below a staircase/passage
- environments with humidity and condensed water level of over 90%

- earthquake zones where additional safety measures are required
- sites at altitudes of more than 2000 meters above the sea level
- sites exposed to direct sunlight or sites where the ambient temperature may exceed the specified maximum temperatures
- near flammable materials or gases or explosive environments

Clearance

Observe the following minimum clearance:

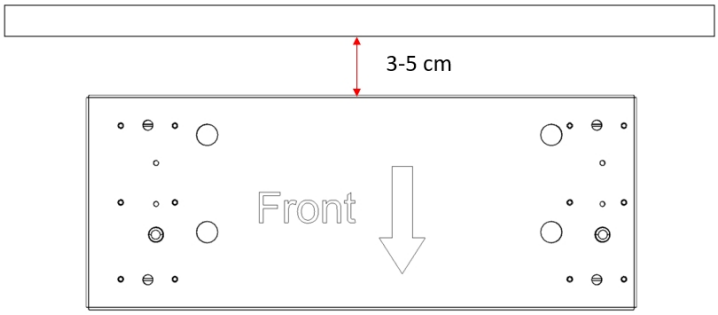
- 20 cm from all sides of the battery module



- 30 cm from another battery module or any heat source, such as water heater unit, gas-fueled heater, air conditioning unit or any other equipment
- 100 cm from emergency exits
- 30 cm from doors
- 20 cm from windows or air vents
- 20 cm from other devices

Installation procedure

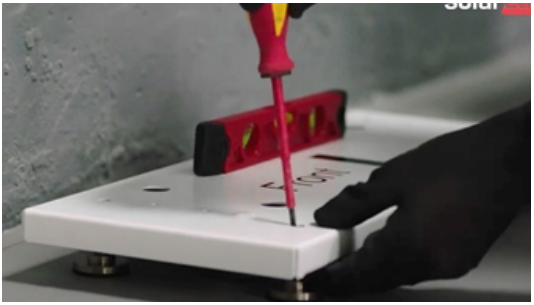
1. Install a floor stand (recommended by SolarEdge):
   a. Place the floor stand at a distance of 3-5cm from the wall.



NOTE

The arrow should point at the battery module front.

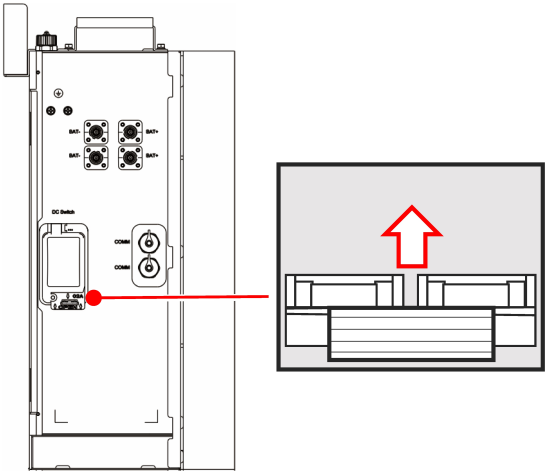
   b. To level the floor stand, adjust each of the four legs by turning the screw using a flat screwdriver.



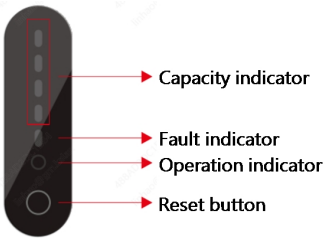
   c. When the floor stand is balanced, tighten the nut with an open wrench in order to secure the leg's height, then close the nut.

Powering on the Battery Module

1. Turn on the DC switch.



2. Press the power button for 3-6 seconds until the indicator lights are on.



Top Cover Installation

After installing the battery and making all the connections, install the top cover on the top battery module in every tower.

1. Take the top cover out of its box
2. Remove the top plate screws
3. Place the frame on top of the top battery module in the tower, secure it with the 3 screws provided in the kit
4. Assemble the top plate with the 5 screws.

