



EG4® WALLMOUNT INDOOR 280Ah LITHIUM BATTERY

The WallMount Indoor 280Ah batteries are ideal for low-voltage residential indoor energy storage applications. The batteries use lithium iron phosphate cells with the highest safety performance and an intelligent Battery Management System (BMS) that can monitor and record the voltage of each cell along with the current, voltage, and temperature of the module in real-time. The BMS also contains a passive balance function and an advanced battery control method, both of which improve the performance of the battery pack.

**BUILT-IN
200A BMS**

**INTEGRATED
600A BUSBARS**

**82.6MWh
LIFETIME
PRODUCTION***

***10 YEAR
WARRANTY
>8000 CYCLES @
80% DOD**

ON-BOARD LCD TOUCH SCREEN

Easy to see BMS monitoring, and selectable closed-loop communications with EG4, Schneider, Sol-Ark, Victron, Growatt, Megarevo, Luxpower, and Deye inverters.

DUAL ON-BOARD FIRE ARRESTORS

Offer fail-safe protection against thermal runaway.

INTEGRATED SELF-HEATING FEATURE

Internal heating keeps cells operating during cold temperatures.

INTEGRATED BUSBARS

The battery design comes manufactured with 600A internal busbars with multiple terminals (4 positive & 4 negative) eliminating the need for external busbars when paralleling batteries and/or multiple inverters.

INNOVATIVE EMERGENCY STOP FUNCTION

The optional ESS disconnect can shut down all batteries and inverters (if equipped with rapid shut down capability) with the press of a button.

THE PERFECT PARTNER TO EG4 INVERTERS

The optional conduit box mates up directly to the connection ports of EG4 inverters allowing a sleek and efficient installation. For other inverters or stand-alone battery installation, the conduit box plugs should be installed.



TECHNICAL SPECIFICATIONS

MODULE OPERATING PARAMETERS			
PARAMETER	BMS		RECOMMENDED SETTING
TOTAL ENERGY CAPACITY	14.3kWh @25C, 100% SOC		-
VOLTAGE	51.2V		-
CAPACITY	280Ah		-
CHARGING VOLTAGE (BULK/ABSORB)	56.0V (+/-0.8V)		56.2V (+/-0.2V)
FLOAT	-		54V (+/-0.2V)
SOC CUTOFF	-		20%*
CHARGING CURRENT	140A (Max. continuous)		60 – 140A
DISCHARGING CURRENT	140A (Max. continuous) 200A (Max. continuous for 30 min)		60 – 140A
BMS PARAMETERS			
CHARGE	SPEC	DELAY	RECOVERY
CELL VOLTAGE PROTECTION	3.8V	1 sec	3.45V
MODULE VOLTAGE PROTECTION	60.0V	1 sec	55.2V
OVER CHARGING CURRENT 1	>205A	10 sec	-
OVER CHARGING CURRENT 2	>225A	3 sec	-
TEMPERATURE PROTECTION	<23°F or >158°F <-5°C or >70°C	1 sec	>32°F or <140°F >0°C or <60°C
DISCHARGE	SPEC	DELAY	RECOVERY
CELL VOLTAGE PROTECTION	2.3V	1 sec	3.1V
MODULE VOLTAGE PROTECTION	44.8V	1 sec	48V
OVER-CHARGING CURRENT 1	>205A	10 sec	60 sec
OVER-CHARGING CURRENT 2	>300A	3 sec	60 sec
SHORT CIRCUIT	>600A	<0.1 mS	-
TEMPERATURE PROTECTION	<-4°F or >167°F <-20°C or >75°C	1 sec	>14°F or <149°F >-10°C or <65°C
PCB TEMP PROTECTION	>230°F (>110°C)	1 sec	@ <176°F (<80°C)
GENERAL SPECIFICATIONS			
PARAMETER	SPEC		CONDITION
CELL BALANCE	120mA	Passive Balance	Cell Voltage Difference >40mV
TEMPERATURE ACCURACY	3%	Cycle Measurement	Measuring Range -40°F to ≈212°F (-40°C to ≈100°C)
VOLTAGE ACCURACY	0.5%	Cycle Measurement	For Cells & Module
CURRENT ACCURACY	3%	Cycle Measurement	Measuring Range -200A - 200A
SOC	5%	-	Integral Calculation
POWER CONSUMPTION	Sleep & Off Mode	<300uA	Storage/Transport/Standby
POWER CONSUMPTION	Operating Mode	<25mA	Charging/Discharging
COMMUNICATION PORTS	RS485/CAN		Can be customized
BATTERY HEATER SPECIFICATIONS			
PARAMETER	SPEC		CONDITION
VOLTAGE	56V		-
POWER CONSUMPTION	224W		-
INTERNAL BATTERY TEMPERATURE	≤32°F (0°C) ≥41°F (5°C)		Heat On/Heat Off

*EG4 recommends this value be set no lower than 20% to maintain the recommended 80% depth of discharge.

ENVIRONMENTAL PARAMETERS

CHARGING RANGE	32° to ≈122°F (0°C to ≈50°C)
DISCHARGING RANGE	-4°F to ≈131°F (-20°C to ≈55°C)
STORAGE RANGE	32°F to ≈113°F (0°C to ≈45°C)
INGRESS PROTECTION	IP20
OPERATING ALTITUDE	<16404 ft. (<5000m)

PHYSICAL SPECIFICATIONS

DIMENSIONS (H×W×D)	34.1 in.×18.1 in.×10.4 in. (865 mm×460 mm×264 mm)
WEIGHT	286.6 lbs. (130 kg)
DESIGN LIFE	>10 Years
CYCLE LIFE	>8000 cycles, 0.5C 80% DOD
LIFETIME PRODUCTION	82.6MWh**

SAFETY CERTIFICATIONS

CERTIFICATIONS	UL1973, UL 9540A
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** $(51.2V \times 280Ah / 1000 \times 80\% \times 8000 \text{ cycles} / 1000) 90\% = MWh$

For information regarding warranty registration on EG4® Electronics products, please navigate to <https://eq4electronics.com/warranty/> and select the corresponding product to begin the registration process.

CHANGELOG

Version 1.1.7

- Added additional surge value for battery discharge, 200A for 30 minutes.

Version 1.1.6

- Adjusted operating altitude in environmental parameters from <2000m to <5000m

Version 1.1.5

- Added operating altitude range to spec sheet
- Modified the weight and dimensions of the unit
- Modified Max. Continuous charging current from 200A to 140A
- Modified Max. Continuous discharging current from 200A to 140A
- Modified recommended discharging current from 160A to 60A – 140A
- Modified temperature range for charge range, discharge range, and storage range

Version 1.1.4

- Modified recommended max charge from 60 – 160A to 60 – 140A

Version 1.1.3

- Replaced Low DC Cutoff with SOC Cutoff at 20% with a note under the table.
- Minor formatting changes

Version 1.1.2

- Added 2 line items to the spec sheet notating Total Energy Capacity and Max Continuous Discharge Rate
- Minor formatting changes
- Greyscale image added to front page

Version 1.1.1

- Changed verbiage on page 1 of the document
- Added changelog

Version 1.1

- Changed verbiage on page 1 of the document
- Changed UL 9540A certification from (Testing) to (Passed)

Version 1.0

- First iteration of the completed Spec Sheet