



WALLMOUNT ALL WEATHER LITHIUM BATTERY

The EG4® WallMount All Weather 280Ah batteries are ideal for low-voltage residential outdoor energy storage system (ESS) 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 and longevity 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.

WEATHER-TIGHT QUICK CONNECTS

Included battery cables with outdoor rated connectors allowing for fast, safe, and reliable battery connections.

INTEGRATED SELF-HEATING FEATURE

Heats the battery when the ambient temperature is low. A key feature for outdoor Lithium battery cell operations.

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 THE EG4 18KPV

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



SPECIFICATION SHEET

MODULE OPERATING PARAMETERS			
Parameter	BMS		Recommended Charger Settings
Total Energy Capacity	14.3kWh @25C, 100% SOC		-
Voltage	51.2V		-
Capacity	280Ah ±2%		@25°C ±2°C @ 0.5C
Charging Voltage (Bulk/Absorb)	56.0V (±0.8V)		56.2V (±0.2V)
Float	-		54V (±0.2V)
SOC Cutoff	-		20%*
Charge Current	200A Max. Continuous		60 - 140A
Discharge Current	200A Max. Continuous		160A
BMS PARAMETERS			
Charge	Spec	Delay	Recovery
Cell Voltage Protection	3.8V	1 sec	3.45V
Module Voltage Protection	60V	1 sec	55.2V
Charge Over-Current 1	>205A	10 sec	-
Charge Over-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
Discharge Over-Current 1	>205A	10 sec	60 sec
Discharge Over-Current 2	>300A	3 sec	60 sec
Short Circuit	2000A	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 Temperature 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	Measure Range: -40°F – ≈212°F (-40°C – ≈100°C)
Voltage Accuracy	0.5%	Cycle Measurement	Cells & Module
Current Accuracy	3%	Cycle Measurement	Measure Range: -200 – 200A
SOC	5%		Integral Calculation
Power Consumption (Standby)	<300uA		Standby/Storage
Power Consumption (Operating)	<25mA		Charging/Discharging
Communication Ports	RS485/CAN		Customizable

BATTERY HEATER SPECIFICATIONS		
Parameter	Spec	Condition
Voltage	56V	-
Power Consumption	224W	-
Internal Battery Temperature	≤32°F (0°C) or ≥41°F (5°C)	Heat On/Heat Off
ENVIRONMENTAL PARAMETERS		
Charging Range		32°F to ≈113°F (0°C to ≈45°C)
Discharging Range		-4°F to ≈122°F (-20°C to ≈50°C)
Storage Range		-4°F to ≈122°F (-20°C to ≈50°C)
Ingress Protection		IP65
Operating Altitude		<6561.68 ft. (<2000m)
PHYSICAL SPECIFICATIONS		
Dimensions (H × W × D)		34.6 × 22.3 × 9.1 in. (88 × 56.6 × 23.2cm)
Weight		308.6 lbs. (140 kg)
Design Life		>15 years
Cycle Life		>8000 Cycles @ 0.5C 80% DOD
Lifetime Production		82.6MWh*
SAFETY CERTIFICATIONS		
Certifications		UL1973, UL9540A (Passed)

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

** $(51.2V \times 280Ah / 1000 \times 80\% \times 8000 \text{ cycles} / 1000) 90\% = MWh$

CHANGELOG

Version 1.1.6

- Modified recommended charging current from 60 – 160A to 60 – 140A.

Version 1.1.5

- Added operating altitude range value

Version 1.1.3

- Added additional safety certification

Version 1.1.0

- Reformatted document to match template standards.
- Adjusted the short circuit current rating from 600A to 2000A.

Version 1.0.2

- Added Total Energy Capacity to table

Version 1.0.1

- Added QR Codes

Version 1.0.0

- First revision of spec sheet