

# 280Ah WALLMOUNT INDOOR LITHIUM BATTERY

The 280Ah WallMount Indoor batteries are ideal for lowvoltage 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 standalone battery installation, the conduit box plugs should be installed.





# EG4 ELECTRONICS

### TECHNICAL SPECIFICATIONS

MODULE OPERATING PARAME	TERS			
PARAMETER	BMS	RECO	DMMENDED SETTING	
VOLTAGE	51.2V		-	
CAPACITY	280Ah	-		
CHARGING VOLTAGE (BULK/ABSORB)	56.0V (+/-0.8V)	56.2V (+/-0.2V)		
FLOAT	-	54V (+/-0.2V)		
LOW DC CUTOFF	44.8V	47-45.6V	47-45.6V (start high, lower as needed)	
CHARGING CURRENT	200A (Max. continuous)	60A - 160A		
DISCHARGING CURRENT	200A (Max. continuous)	160A		
ENVIRONMENTAL PARAMETERS				
CHARGING RANGE	32° 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	IP20			
CHARGING/DISCHARGING PAI	RAMETERS			
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	SPE	C	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 ELECTRONICS

#### PHYSICAL SPECIFICATIONS

DIMENSIONS (H×W×D) WEIGHT DESIGN LIFE

CYCLE LIFE

36.4 in.×18.1 in.×9.6 in. (925 mm×460 mm×245 mm)

282.2 lbs. (128 kg)

>10 Years

>8000 cycles, 0.5C 80% DOD 82.6MWh\*

LIFETIME PRODUCTION

SAFETY CERTIFICATIONS

CERTIFICATIONS

UL1973, UL 9540A (Passed)

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

# EG4 ELECTRONICS

# CHANGELOG

#### 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