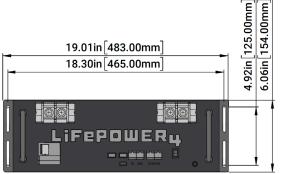


EG4® LIFEPOWER4 48V V2 BATTERY

EG4 Lithium Iron Phosphate battery
51.2V (48V battery) 5.12kWh with 100A
internal BMS, composed of (16) UL
recognized prismatic 3.2V cells in series
which have been tested at >6,000 deep
discharge cycles to 80% DoD. Fully
charge and discharge this battery daily
for over 15 years without issue.
Reliable and rigorously tested, with 99%
operating efficiency.



CONFIGURABLE INVERTER PROTOCOL SELECTION

*10-YEAR WARRANTY

E-STOP FUNCTIONALITY

>6,000 CYCLES

Charge and discharge confidently with batteries built for long-life and durability using 80% DoD (Depth of Discharge).

10-YEAR WARRANTY

Have peace of mind knowing the product has a 10-year standard warranty.

INVERTER PROTOCOL DIP SWITCH

The inverter protocol DIP switch allows for the selection of the inverter protocol directly from the battery.

ENHANCED SAFETY FEATURES

E-Stop functionality offers fail-safe operation in potentially high-risk environments. Dual On-Board fire arrestors allow for added peace of mind during operations.

PARALLEL UP TO 64 BATTERIES

For maximum power, the battery protocol DIP switch option allows up to ~327.7kWh of storage while preserving BMS communications.

*For information regarding warranty registration on EG4® Electronics products, please navigate to https://eg4electronics.com/warranty/ and select the corresponding product to begin the registration process.



EG4 ELECTRONICS

TECHNICAL SPECIFICATIONS

MODULE OPERATING PARAMETERS				
PARAMETER	BMS	RECOMMENDED		
VOLTAGE	51.2V	-		
CAPACITY	100Ah		-	
CHARGING VOLTAGE (BULK/ABSORB)	56.8V	-		
LOW DC CUTOFF/SOC CUTOFF	44.8V	48V ± 0.2V* 20%**		
CHARGING CURRENT	100A (Max. continuous)	30A		
DISCHARGING CURRENT	100A (Max. continuous)	-		
MAXIMUM CONTINUOUS DISCHARGE RATE	5.12kW	-		
NAMEPLATE ENERGY CAPACITY	5.12kWh	-		
BMS PARAMETERS				
CHARGE	SPEC	DELAY	RECOVERY	
CELL VOLTAGE PROTECTION	3.8V	1s	3.45V	
MODULE VOLTAGE PROTECTION	60.0V	1s	55.2V	
OVER CHARGING CURRENT 1	>102A	20s	-	
OVER CHARGING CURRENT 2	≥120A	3s	-	
TEMPERATURE PROTECTION	<23°F or >158°F <-5°C or >70°C	1s	<32°F or >140°F >0°C or 60°C	
DISCHARGE				
CELL VOLTAGE PROTECTION	2.3V	1s	3.1V	
MODULE VOLTAGE PROTECTION	44.8V	1s	48.0V	
OVER CHARGING CURRENT 1	>102A	30s	60s	
OVER CHARGING CURRENT 2	>150A	3s	60s	
SHORT-CIRCUIT	>300A	<0.1ms	-	
TEMPERATURE PROTECTION	<-4°F or >167°F <-20°C or >75°C	1s	>14°F or <149°F >-10°C or <65°C	
PCB TEMP PROTECTION	>221°F (>105°C)	1s	<176°F (<80°C)	

EG4 ELECTRONICS

GENERAL SPECIFICATIONS					
PARAMETER	SPEC	TYPE	CONDITION		
CELL BALANCE	120mA	Passive Balance	Cell Voltage Difference >40mV		
TEMPERATURE ACCURACY	3%	Cycle Measurement	Measuring Range 40°F – 212°F (-40°C – 100°C)		
VOLTAGE ACCURACY	0.5%	Cycle Measurement	For Cells/Module		
CURRENT ACCURACY	3%	Cycle Measurement	Measurement Range +/-200A		
SOC	5%	-	Integral Calculation		
POWER CONSUMPTION (SLEEP & OFF MODE)	<300uA	-	Storage/Transport/ Standby		
POWER CONSUMPTION (OPERATING)	<25mA	-	Charging/Discharging		
COMMUNICATION PORTS	RS485/CAN	-	Customizable		
MAXIMUM MODULES IN SERIES			1		
MAXIMUM MODULES IN PARALLEL			64		
E-STOP FUNCTION			Yes		
DIMENSION (H×W×D)	6.1 in. ×	6.1 in. × 19 in. × 17.4 in. (155 mm × 442 mm × 470 mm)			
WEIGHT			99.6 lbs. (45.2 kg)		
ENVIRONMENTAL PARAMETERS					
CHARGING RANGE		32°F – 113°F (0°C – 45°C)			
DISCHARGING RANGE	-4°F – 122°F (-20°C – 50°C)				
STORAGE RANGE	-4°F – 122°F (-20°C – 50°C)				
INGRESS PROTECTION			IP20		
STANDARDS AND CERTIFICATIONS					
MODULE	UL 1973 ETL Recognized Component Certification UL9540A (Passed) UL9540 listed with 18kPV-12LV ons. note that battery SOC% and battery voltage do not				

^{*}When running the battery in open-loop communications, note that battery SOC% and battery voltage do not directly correlate. Raise or lower this value in 0.2V increments.

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

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CHANGELOG

Version 1.1.1

- Added CETL logo to cover page
- Modified SOC cutoff row to also show Voltage cut-off

Version 1.1

• Modified spec sheet to show 20% recommended battery cut-off

Version 1.0

• Document published