

PRODUCT SPECIFICATIONS

LITHIUM-ION BATTERY - LiFePO4

MODEL JRT-48NPFC100

STORED ENERGY SOLUTIONS FOR A DEMANDING WORLD

JRT-48NPFC100 is an energy storage module based on Li-ion technology. It is designed for a wide variety of applications, such as telecom base station, renewable energy system, etc., with advanced life, standard size, light weight and strong environmental adaptability.



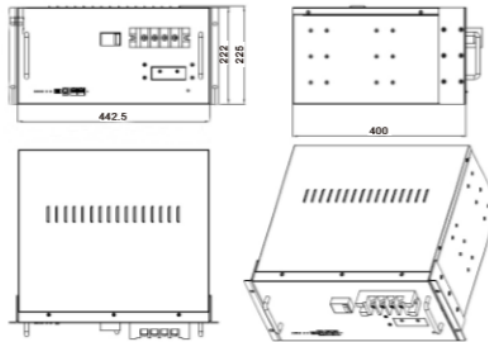
Battery Management System

BMS is applied to monitor voltage, current, temperature of cells and module, take protections against over-charge, over-discharge, over-current, over-temperature, under temperature and short circuit, etc., and provide cell balancing and current limitation during charging process to ensure a reliable safety and excellent performance. Meantime, 48NPFC100 supply customized upper computer software for BMS communication via RS232 or RS485 to set parameters or read monitoring data.

Specifications

Battery Specification	
Rated Voltage	48V
Rated Capacity	100Ah (C , 0.2C to 40.5V @ 25 C)
Discharge Current (Max.)	100A
Discharge End Voltage	40.5V
Charge Current (Recomm.)	20A
Charge Current (Max.)	100A
Charge Voltage	54±0.5V
Dimensions	Width 442.5mm (17.42 inches) Depth 400mm (15.75 inches) Height 225mm (8.86 inches,5U)
Typical Weight	45.0kg
Layout of Front Panel	
Status Indicators	SOC / ALM / RUN
Communication Ports	RS232 / RS485
Communication in Parallel	15 modules in maximum
Reset Key	Available
Terminal Size	M8 (Screw size)
LCD Screen	Optional
Breaker	Standard
Operational Environments	
Temperature Range	Discharge -20 to +60 °C - Charge 0 to +60 °C Storage 0 to +40 °C
Temperature Recommendation	Discharge +15 to + 35 °C - Charge +15 to + 35 °C Storage +15 to + 30 °C
Humidity	5% to 95%

Dimensions



Constant Current Discharge Characteristics (25°C, 77°F)

Current	0.1C	0.15C	0.2C	0.25C	0.3C	0.4C	0.5C	0.6C	0.8C
End Voltage	Time[h]								
46.5	9.56	6.35	4.75	3.78	3.12	2.29	1.79	1.45	1.02
45.0	9.76	6.49	4.85	3.87	3.21	2.39	1.89	1.57	1.15
43.5	9.89	6.58	4.92	3.92	3.25	2.42	1.93	1.60	1.19
42.0	9.98	6.64	4.96	3.96	3.29	2.45	1.94	1.61	1.21
40.5	10.04	6.68	5.00	3.99	3.31	2.46	1.96	1.63	1.22
39.0	10.08	6.70	5.02	4.01	3.33	2.48	1.97	1.64	1.22

Discharge Data with Constant Power (25°C, 77°F)

Power	450W	900W	1350W	1800W	2250W	2700W	3150W
End Voltage	Time[h]						
46,5	10.35	5.11	3.36	2.46	1.92	1.53	1.27
45	10.55	5.22	3.45	2.55	2.02	1.66	1.40
43,5	10.66	5.28	3.49	2.58	2.06	1.69	1.43
42	10.75	5.32	3.52	2.61	2.07	1.70	1.45
40,5	10.79	5.35	3.54	2.62	2.09	1.72	1.46
39.0	10.82	5.37	3.55	2.63	2.09	1.73	1.47

Performance Curves

