

stored energy solutions for a demanding world



**Narada**

## Model: 48NPFC50

## NPFC Series

Narada NPFC series is a complete range of 48V LiFePO<sub>4</sub> (Lithium Iron phosphate) battery products, for a wide variety of applications, such as telecom base station, UPS, renewable energy system, etc., with advanced life, standard size, light weight and strong environmental adaptability.

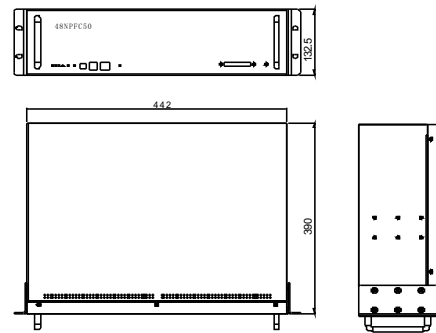


### Battery Management System(BMS)

For standard Narada lithium battery module, 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, Narada supply customized upper computer software for BMS communication via RS232 or RS485 to set parameters or read monitoring data.

### Dimensions-mm



### Specifications

Battery Specification		
Rated Voltage		48V
Rated Capacity		50Ah (C <sub>5</sub> , 0.2C to 40.5V at 25°C)
Discharge Current (Max.)		40A
Discharge End Voltage		40.5V
Charge Current (Recomm.)		10A
Charge Current (Max.)		40A
Charge Voltage		54±0.5V
Dimensions	Width	442mm (17.40 inches)
	Depth	390mm (15.35 inches)
	Height	132.5mm (5.21 inches, 3U)
Typical Weight		32.0kg
Layout of Front Panel		
Status Indicators		SOC / ALM / RUN
Communication Ports		RS232 / RS485
Communication in Parallel		16 models in maximum
Reset Key		Available
Terminal Size		M6 / 13mm (Screw size / Cable Width)
LCD Screen		Optional
Breaker		Optional
Operation 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%

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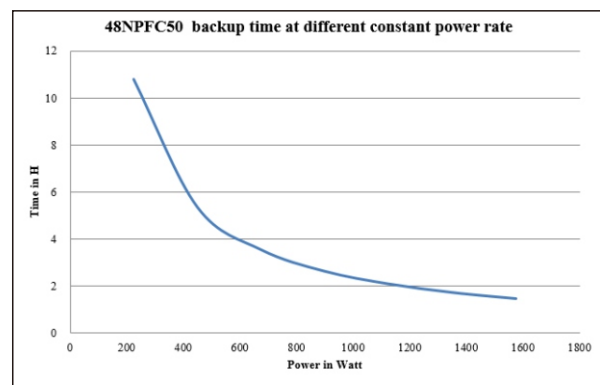
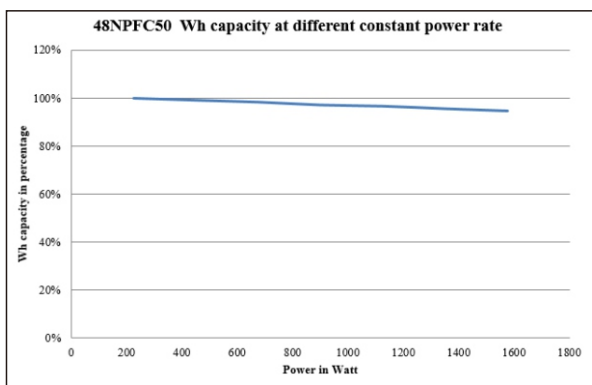
**Constant Current Discharge Characteristics (25°C,77°F)**

End voltage	Current(A)	0.1C	0.15C	0.2C	0.25C	0.3C	0.4C	0.5C	0.6C	0.8C
	Time	Hours								
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)**

End voltage	Power	225W	450W	675W	900W	1125W	1350W	1575W
	Time	Hours						
46.5		10.35	5.11	3.36	2.46	1.92	1.53	1.27
45.0		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
42.0		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**



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