

## Model: 48NPFC200

## **NPFC Series**

Narada NPFC series is a complete range of 48V LiFePO $_4$ (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.

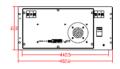
### Battery Management System(BMS)

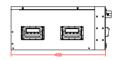
For standard Narada lithium battery module, BMS is applied to monitor voltage, current, temperature of cells and module, take protections against over-charge, over-discharge, over-current, over-temperature,under-temperature and short circuit, etc., and provide cell balancing and current limitation during charging process to ensure a reliable safety and excellent performance.

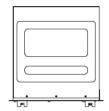
Meantime, Narada supply customized UI software for BMS communication via RS485 to set parameters or read monitoring data.



#### Dimensions-mm









## **Specifications**

Battery Specific	ation		15S			
Rated Voltage		48V				
Rated Capacity		200Ah (0.2C to 40.5V @ 25°C)				
	Discharge Current (Max.)		100A			
Discharge End Voltage		40.5V				
Charge Current (Recomm.)		40A				
Charge Current (Max.)		100A				
Charge Voltage			54.0±0.5V			
- 3	Width		442.5 mm			
Dimensions	Depth					
	Height		480 mm			
	rieigni		222 mm			
Typical Weight	Typical Weight		76.0±1Kg			
Layout of Front	Pannel					
Status Indicators	Status Indicators		SOC / ALM / RUN			
Communication I	Communication Ports		RS232 / RS485*2			
Communication i	Communication in Parallel		8 modules in parallel maximum			
Reset Key		Available				
Terminal Size	Terminal Size		M8 (Screw size)			
LCD Screen	LCD Screen		Optional			
Breaker	Breaker		Available			
Dry contact			Optional			
Operation Envi	ronments					
			Discharge	-20 to + 60°C		
Temperature Range		Charge	0 to + 60°C			
			Storage	0 to + 40 ℃		
			Discharge	+15 to + 35℃		
Temperature Recommendation			Charge	+15 to + 35℃		
			Storage	+15 to + 30°C		
Humidity	Humidity		5% to 95%			

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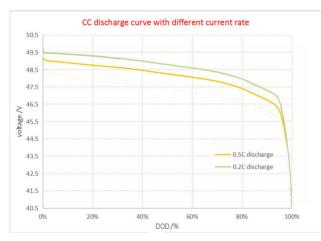
## Constant Current Discharge Characteristics /for one module (25°C,77°F)

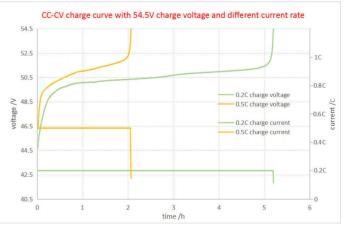
Current(A)	0.1C	0.2C	0.33C	0.5C/100A
End voltage Time			Hours	
46.5V	9.73	4.85	2.93	1.88
45.0V	9.92	4.96	3.00	1.96
43.5V	10.05	5.03	3.05	2.00
42.0V	10.13	5.07	3.08	2.01
40.5V	10.18	5.10	3.09	2.03

### Discharge Data with Constant Power /for one module (25°C,77°F)

Power	480W	960W	1580W	2300W	3800W	4400W
End voltage Time			Hours			
46.5V	18.93	9.39	5.60	3.70	2.00	1.64
45.0V	19.27	9.58	5.78	3.91	2.25	1.89
43.5V	19.48	9.69	5.86	3.95	2.30	1.94
42.0V	19.62	9.77	5.90	4.00	2.33	1.95
40.5V	19.70	9.82	5.94	4.02	2.34	1.97

### **Performance Curves**

























#### Disclaimers of warranties:

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