## stored energy solutions for a demanding world

# Model: 48NPFC100 (23")

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.

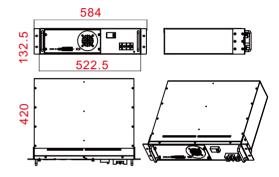
### Battery Management System(BMS)

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, overtemperature,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 RS485 to set parameters or read monitoring data.



### **Dimensions-mm**



### Specifications

Battery Specific	ation		15S				
Rated Voltage	Rated Voltage		48V				
Rated Capacity	-		100Ah (0.2C to 40.5V @ 25 °C)				
Discharge Curre	Discharge Current (Max.)		100A				
Discharge End V	Discharge End Voltage		40.5V				
Charge Current	Charge Current (Recomm.)		20A				
Charge Current	Charge Current (Max.)		100A				
Charge Voltage			54±0.5V				
Dimensions	Width Depth Height		522.5 mm 420.0 mm 132.5 mm( 3U)				
Typical Weight	Typical Weight		48.0 Kg				
Layout of Front	Pannel						
Status Indicators	Status Indicators		SOC / ALM / RUN				
Communication	Communication Ports		RS232 / RS485*2				
Communication in Parallel		8 modules in parallel maximum					
Reset Key		Available					
Terminal Size	Terminal Size		M6 (Screw size)				
LCD Screen	LCD Screen		Optional				
Breaker	Breaker		Available				
Dry contact			Available				
Operation Envi	ronments						
Temperature Ra	nge		Discharge Charge Storage	-20 to + 60°C 0 to + 60°C 0 to + 40°C			
Temperature Re	commendation		Discharge Charge Storage	+15 to + 35℃ +15 to + 35℃ +15 to + 30℃			
Humidity	Humidity		5% to 95%				



Tel:+86-571-56975980 E-mail:intl@narada.biz Website: en.naradapower.com





**NPFC Series** 

# Model: 48NPFC100 (23")

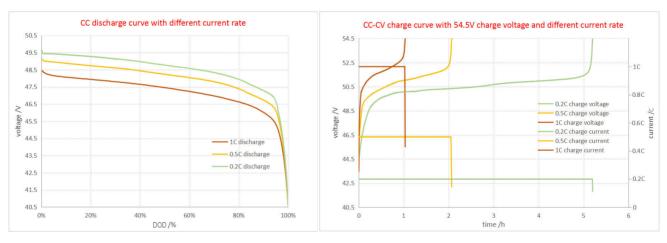
### Constant Current Discharge Characteristics /for one module (25°C,77°F)

Current(A) End voltage Time	0.1C	0.2C	0.33C Hours	0.5C	0.8C	1.0C
46.5V	9.73	4.85	2.93	1.90	1.15	0.90
45.0V	9.92	4.96	3.00	1.96	1.20	0.93
43.5V	10.05	5.03	3.05	2.00	1.23	0.96
42.0V	10.13	5.07	3.08	2.02	1.25	0.98
40.5V	10.18	5.10	3.09	2.03	1.26	1.00

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

Power End voltage Time	480W	960W	1580W	2400W	3800W	4400W
End voltage Time			Hours			
46.5V	9.83	4.89	2.92	1.85	1.05	0.82
45.0V	10.02	4.99	3.01	1.91	1.11	0.86
43.5V	10.13	5.05	3.05	1.95	1.15	0.90
42.0V	10.21	5.09	3.08	1.98	1.18	0.93
40.5V	10.25	5.12	3.09	2.00	1.20	0.95

## **Performance Curves**





#### **Disclaimers of warranties:**

Copyright © Narada power source Co., Ltd. 2019. All rights reserved.

The information in this document may contain predictive statements including, without limitation, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements.

No portion of the information or documents may be reproduced in any form or by any means without the prior written consent of Narada. All the data in datasheet is valid for single module operation. For parallel operation please ask Narada technical for guidelines.

Any datasheet issued previously is invalid when new version releases.