

## Model: 48NPFC100 (3U)

**NPFC Series** 

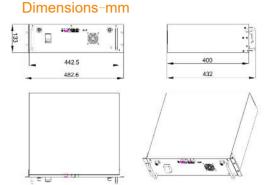
Narada NPFC series is a complete range of 48V LiFePO $_4$ (Lithium Iron phosphate) battery products, for a wide variety of applications, such as telecom base station, UPS, renewable energy system, etc., with advanced life, standard size, light weight and strong environmental adaptability.

## 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 RS485 to set parameters or read monitoring data.



## **Specifications**

Battery Specific	ation	15S
Rated Voltage		48V
Rated Capacity		100Ah (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±0.5V
	Width	442.5 mm
Dimensions	Depth	400 mm
	Height	133 mm
Typical Weight		Approximate 38.5 Kg
Layout of Front	Pannel	
Status Indicators		SOC / ALM / RUN
Communication	Ports	RS232 / RS485*2
Communication	in Parallel	8 modules in parallel maximum
Reset Key		Available
Terminal Size		M8 (Screw size)
LCD Screen		Optional
Breaker		Available
Dry contact		Available
Operation Envi	ronments	
		Discharge -20 to + 60°C
Temperature Ra	nge	Charge 0 to + 60℃
		Storage 0 to + 40 ℃
		Discharge +15 to + 35°C
Temperature Recommendation		Charge +15 to + 35 ℃
		Storage +15 to + 30°C
Humidity		5% to 95%

NARADA POWER SOURCE CO.,LTD.

## Model: 48NPFC100 (3U)

## **NPFC Series**

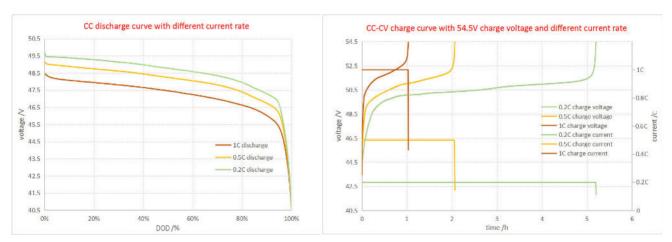
#### Constant Current Discharge Characteristics /for one module (25°C,77°F)

Current(A) End voltage Time	0.1C	0.2C	0.33C	0.5C	0.8C	1.0C
End voltage Time			Hours			
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	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.