

stored energy solutions for a demanding world

Narada

Model: 48NPFC100 (19")

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.

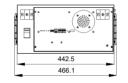
Battery Management System(BMS)

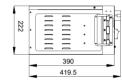
For standard Narada lithium battery module, BMS is applied to monitor voltage, current, temperature of cells and module, take protections against over-charge, over-discharge, over-current, over-temperature,under-temperature and short circuit, etc., and provide cell balancing and current limitation during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

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



Dimensions-mm









Specifications

| Rated Voltage 48V | <u>)</u> 25℃) | | | |
|--|----------------------|--|--|--|
| D-4-1 O-1 | ⊉ 25℃) | | | |
| Rated Capacity 100Ah (0.2C to 40.5V @ | - , | | | |
| Discharge Current (Max.) 100A | | | | |
| Discharge End Voltage 40.5V | 40.5V | | | |
| Charge Current (Recomm.) 20A | 20A | | | |
| Charge Current (Max.) 100A | 100A | | | |
| Charge Voltage 54±0.5V | | | | |
| Width 442.5 mm | | | | |
| Dimensions Depth 390mm | | | | |
| Height 222 mm (5U) | | | | |
| neight 222 min (50) | | | | |
| Typical Weight 44 Kg | | | | |
| Layout of Front Pannel | | | | |
| Status Indicators SOC / ALM / RUN | | | | |
| Communication Ports RS232 / RS485*2 | RS232 / RS485*2 | | | |
| Communication in Parallel 8 modules in maximum | 8 modules in maximum | | | |
| Reset Key Available | Available | | | |
| Terminal Size M6 (Screw size) | M6 (Screw size) | | | |
| LCD Screen Optional | Optional | | | |
| Breaker Available | Available | | | |
| Dry Contact Available | | | | |
| Operation Environments | | | | |
| Discharge - | .20 to + 60°C | | | |
| Temperature Range Charge | 0 to + 60°C | | | |
| Storage (| 0 to + 40°C | | | |
| | +15 to + 35°C | | | |
| Temperature Recommendation Charge | +15 to + 35°C | | | |
| • | +15 to + 30°C | | | |
| Humidity 5% to 95% | | | | |



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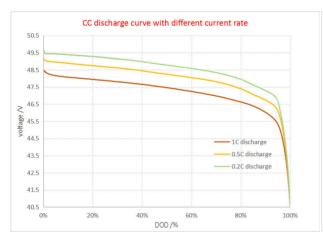
Constant Current Discharge Characteristics /for one module (25°C,77°F)

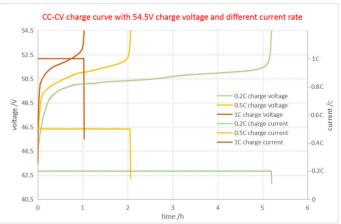
| Current(A) | 0.1C | 0.2C | 0.33C | 0.5C | 0.8C | 1.0C |
|------------------|-------|------|-------|------|------|------|
| End voltage Time | | | Hours | | | |
| 46.5V | 9.73 | 4.85 | 2.93 | 1.90 | 1.15 | 0.90 |
| 45.0V | 9.92 | 4.96 | 3.00 | 1.96 | 1.20 | 0.93 |
| 43.5V | 10.05 | 5.03 | 3.05 | 2.00 | 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:

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Any datasheet issued previously is invalid when new version releases.