

Model: 48NPFC160

NPFC Series

Narada NPFC series is a complete range of 48V LiFePO₄(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.

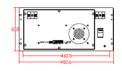
Battery Management System(BMS)

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.

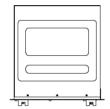
Meantime, Narada supply customized UI software for BMS communication via RS485 to set parameters or read monitoring data.



Dimensions-mm









Specifications

| Battery Specific | ation | 15S |
|----------------------------|----------|-------------------------------|
| Rated Voltage | | 48V |
| Rated Capacity | | 160Ah (0.2C to 40.5V @ 25 C) |
| Discharge Current (Max.) | | 100A |
| Discharge End Voltage | | 40.5V |
| Charge Current (Recomm.) | | 30A |
| Charge Current (Max.) | | 100A |
| Charge Voltage | | 54.0±0.5V |
| Dimensions | Width | 442.5 mm |
| | Depth | 480 mm |
| | Height | 222 mm |
| | 3 | |
| Typical Weight | | 70.0±1Kg |
| 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 Range | | Charge 0 to + 60℃ |
| | | Storage 0 to + 40 ℃ |
| | | Discharge +15 to + 35℃ |
| Temperature Recommendation | | Charge +15 to + 35℃ |
| | | Storage +15 to + 30°C |
| Humidity | | 5% to 95% |
| | | |

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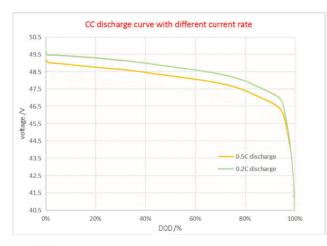
Constant Current Discharge Characteristics /for one module (25°C,77°F)

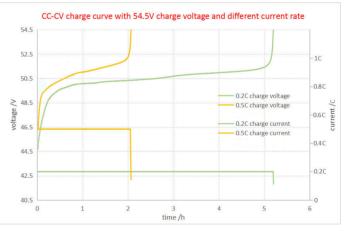
| Current(A) End voltage Time | 0.1C | 0.2C | 0.33C | 0.5C | 0.62C /100A |
|-----------------------------|-------|------|-------|------|-------------|
| End voltage Time | | | Hours | | |
| 46.5V | 9.73 | 4.85 | 2.93 | 1.88 | 1.49 |
| 45.0V | 9.92 | 4.96 | 3.00 | 1.96 | 1.55 |
| 43.5V | 10.05 | 5.03 | 3.05 | 2.00 | 1.58 |
| 42.0V | 10.13 | 5.07 | 3.08 | 2.01 | 1.59 |
| 40.5V | 10.18 | 5.10 | 3.09 | 2.03 | 1.60 |

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 | 15.14 | 7.51 | 4.48 | 2.96 | 1.60 | 1.31 |
| 45.0V | 15.42 | 7.66 | 4.62 | 3.12 | 1.80 | 1.51 |
| 43.5V | 15.59 | 7.75 | 4.68 | 3.16 | 1.84 | 1.55 |
| 42.0V | 15.70 | 7.82 | 4.72 | 3.20 | 1.86 | 1.56 |
| 40.5V | 15.76 | 7.85 | 4.75 | 3.21 | 1.87 | 1.58 |

Performance Curves

























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