

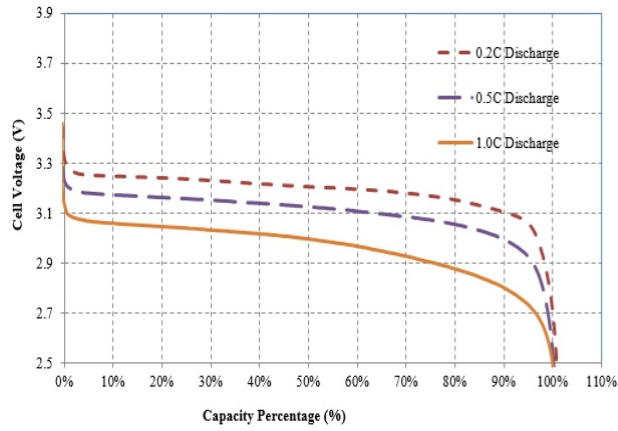
NPFC series

48V10Ah to 75Ah

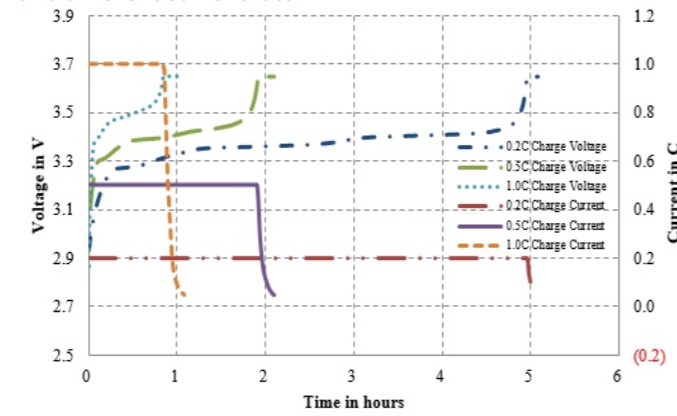
LiFePO₄ Battery System
for green solutions

Performance Curves

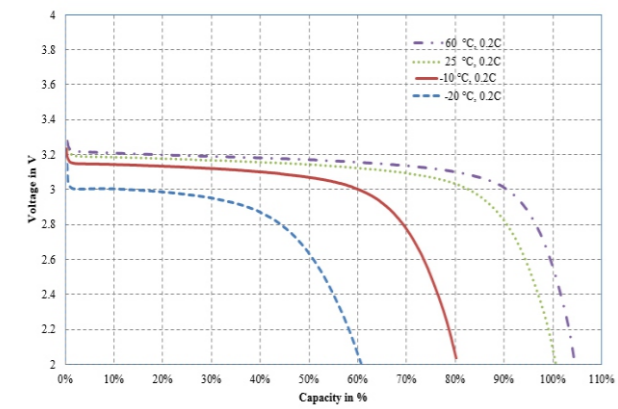
CC discharge to 2.50Vpc with different current rate



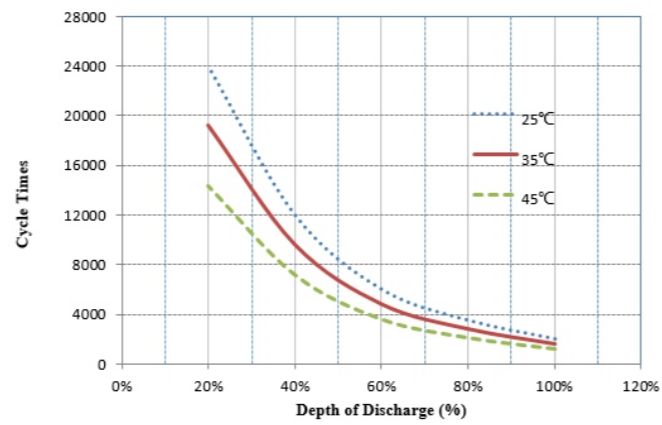
CC-CV charge with 3.65Vpc constant voltage and different current rate



Discharge curves under different temperature



Cycle times Vs. DOD at different temperature



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NPFC series V3.6 - EN-N -05 (Ver.-05 Mar. 2014) Subject to revision without prior notice. E.&O.L.E.

Green Power
NPFC series



NPFC series

48V10Ah to 75Ah

LiFePO₄ Battery System for green solutions

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 upper computer software for BMS communication via RS232 or RS485 to set parameters or read monitoring data.

Features and Benefits

• Features:

- Compatible with ETS standard cabinet.
- BMS monitoring, management and protection included.
- RoSH standard complied.
- RS485 and RS232 communication interface included.
- Compatible with existing telecom facilities.
- Support parallel connection to increase configuration.

• Benefits:

- Operation safety.
- Fast recharge & long cycle life.
- Compact & standard dimension.
- Light for rack mount.
- Force cooling is optional.
- Steady service performance.
- Optimum cell management strategy.
- Maintenance free.

General Specifications

Battery Model ¹⁾	Rated Voltage ²⁾ (V)	Rated Capacity ³⁾ (Ah)	Voltage Range (V)	Charge Voltage (V)	Charge Current (A)		Max. Discharge Current (A)	Dimensions (in mm)			Approx. Weight (kg)
					Recomm.	Max.		W	D	H ⁴⁾	
48NPFC10	48	10	40.5 to 54	54.0 ± 0.5	2	10	10	442	245	44	7.3
48NPFC20	48	20	40.5 to 54	54.0 ± 0.5	4	20	20	442	245	88	13.4
48NPFC30	48	30	40.5 to 54	54.0 ± 0.5	6	20	20	442	245	132.5	18.4
48NPFC40	48	40	40.5 to 54	54.0 ± 0.5	8	40	40	442	390	132.5	30.0
48NPFC50	48	50	40.5 to 54	54.0 ± 0.5	10	40	40	442	390	132.5	32.0
48NPFC60	48	60	40.5 to 54	54.0 ± 0.5	12	40	40	442	390	132.5	33.0
48NPFC70	48	70	40.5 to 54	54.0 ± 0.5	14	60	60	442	400	132.5	37.0
48NPFC75	48	75	40.5 to 54	54.0 ± 0.5	15	60	60	442	400	132.5	37.0

NOTES

- 1) Battery Model
- 2) Rated Voltage
- 3) Rated Capacity
- 4) H in Dimensions

Battery models listed in the datasheet are standardized products. Narada can also supply customized design in cell, BMS and dimensions for various application scenarios.
 48V = 3.20Vpc * 15pcs (Rated voltage of each LFP cell is 3.20Vpc).
 C₅ (0.2C to 40.5V at 25°C).
 1U = 44mm.

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Operation Environment

	Battery status	Requirements	Recommendation
Operation Temperature	storage	0 ~ +40 °C	+15 ~ +30 °C
	discharge	-20 ~ +60 °C	+15 ~ +35 °C
	charge	0 ~ +60 °C	+15 ~ +35 °C
Operation Humidity	5%~95%		
Operation Altitude	0~2000m.If altitude above 2000m, the operation temperature reduces by 1°C every 200m rising. The maximum altitude is 4000m.		

Battery System



- 1 Indicator light for capacity (SOC)
- 2 Alarm light (ALM)
- 3 Run light (RUN), indicate system operation state
- 4 Address dial number (ADD)
- 5 Up-link communication (RS-232)
- 6 Cascading telecommunication (RS-485)
- 7 Reset button (RESET)
- 8 System DC output (Battery Output)

Principle Diagram

