

Professional lithium battery manufacturer



# Special for AGV

## LiFePO<sub>4</sub> Battery



Scan code after-sales specialist To help you

### Shandong NPNE New Energy Technology Co., Ltd.

NPNE is a professional manufacturer of lithium iron phosphate battery PACK. We focus on all aspects of production, from supplier selection, product design, to module production, to battery pack assembly, testing and so on. And ensure product traceability. NPFA series are lithium iron phosphate batteries. Suitable for AGV instead of lead acid.

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#### Features

##### Longer Cycle Life:

Offers up to 10 times longer cycle life and five times longer float /calendar life than lead acid battery.

##### Lighter weight:

About 40% of the weight of a comparable lead acid battery. A drop in replacement for lead acid battery.

##### Higher Power:

Delivers twice power of lead acid battery , even higher discharge rate. Also can sustain higher charge current and shorten the charge time.

##### Support custom:

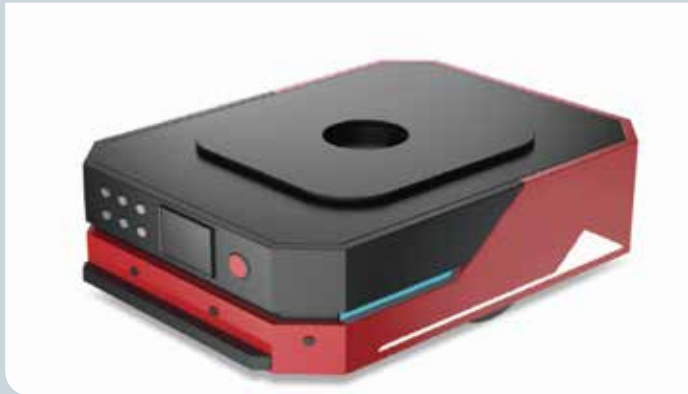
If you have other requirements, such as color, size, heating function, GPS, etc., we will provide a more professional services.

##### Environment friendly:

LiFePO<sub>4</sub> battery does not contain any toxic or harmful substances, and is environmentally friendly in both production and use. Now it is widely accepted by more and more people.

##### Super safety:

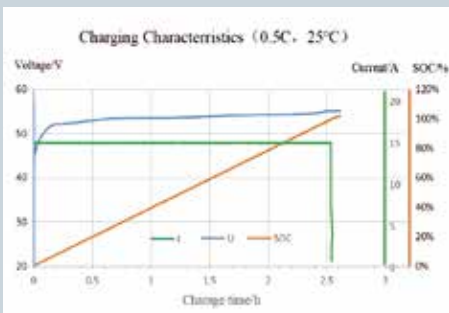
The olivine structure of lithium iron phosphate material is eliminated fundamentally the risk of explosion or combustion due to high impact, overcharged or short circuit situation. Besides, BMS protection ensures safe and efficient operation.



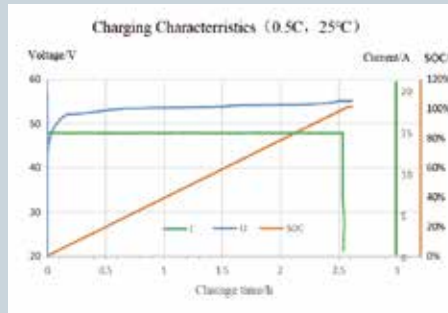
### Product parameter list

Model	Voltage (V)	Capacity (Ah)	Energy (Wh)	Charge Current(A)	Max Discharge current(A)	Pulse current (< 50mS)	Dimensions (mm)	Terminal
NPFA48-27	48	27	1296	15	20	90	350*140*160	Anderson plug
NPFA48-32	48	32	1536	15	20	120	420*140*200	Anderson plug

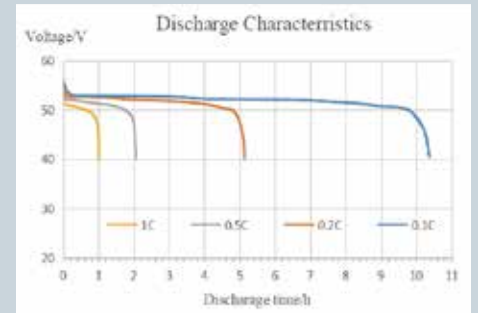
### Technical characteristic curve



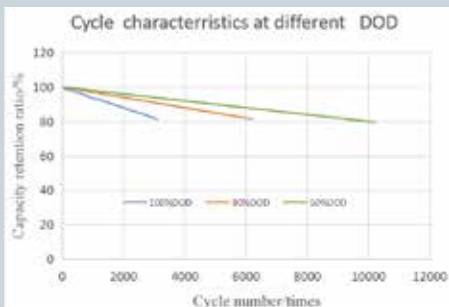
Charging characteristic 0.2C



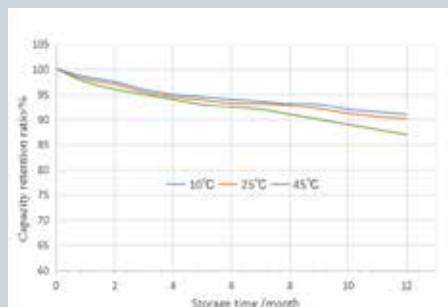
Charging characteristic 0.5C



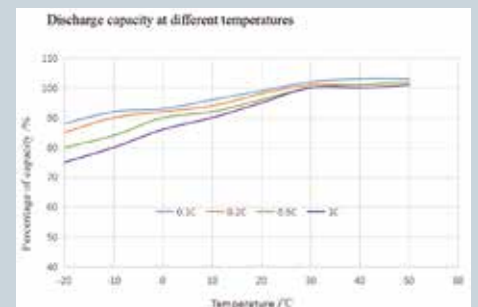
Self-discharge characteristics



Cycle performance



Different temperature capacity

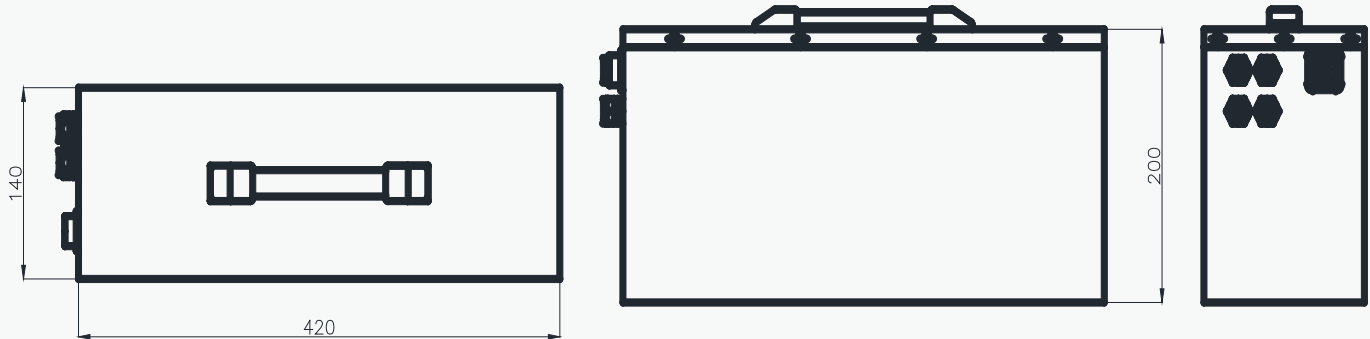


Discharge characteristics

# NPFA48-32



## Dimensions(mm)



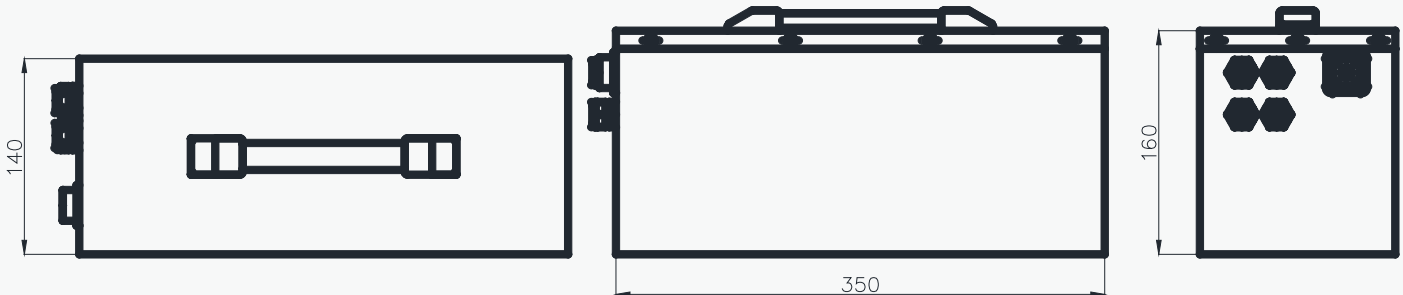
## Specification

LiFePO <sub>4</sub> Battery		Model: NPFA48-32	
Electrical Characteristics	Nominal Voltage	48V	
	Nominal Capacity	32Ah @0.2C	
	Energy	1536Wh	
	Internal Impedance (ACR)	80mΩ	
	Cycle Life	≥3,000@0.2C (100%DOD) ≥6,000@0.2C (80%DOD) ≥10,000@0.2C (50%DOD)	
	Monthly Self Discharge	Less than 2%	
	Protection Function	Over charge protection, Over discharge protection, Temperature protection, Short-circuit protection, Balanced function	
Standard Charge	Charge Voltage	54.8±0.2V	
	Charge Mode (CC/CV)	0.2C to 54.8V ; then 54.8V charge current to 0.02C	
	Charge Current	6A	
	Max.Charge Current	15A	
Standard Discharge	Continues Current	32A	
	Max. Pulse Current	90A(≤3S)	120A(≤50mS)
	Discharge Cut-off Voltage	37.5V	
Environmental	Charge Temperature	0°C-55°C	@60±25% Relative Humidity
	Discharge Temperature	-20°C-60°C	
	Storage Temperature	-20°C-45°C	
	IP Class	IP67	
Mechanical	Dimension(L*W*H)	(420±3) mm* (140±2)mm* (200±2)mm	
	Weight	18.0±0.5Kg	
	Material of case	<input type="checkbox"/> ABS plastic	<input checked="" type="checkbox"/> Metal
	Colour	<input checked="" type="checkbox"/> Black	<input type="checkbox"/> Gray
	Terminal	Anderson plug	

# NPFA48-27



## Dimensions(mm)



## Specification

LiFePO <sub>4</sub> Battery		Model: NPFA48-27	
Electrical Characteristics	Nominal Voltage	48V	
	Nominal Capacity	27Ah @0.2C	
	Energy	1296Wh	
	Internal Impedance (ACR)	100mΩ	
	Cycle Life	≥3,000@0.2C (100%DOD) ≥6,000@0.2C (80%DOD) ≥10,000@0.2C (50%DOD)	
	Monthly Self Discharge	Less than 2%	
	Protection Function	Over charge protection, Over discharge protection, Temperature protection, Short-circuit protection, Balanced function	
Standard Charge	Charge Voltage	54.8±0.2V	
	Charge Mode (CC/CV)	0.2C to 54.8V ; then 54.8V charge current to 0.02C	
	Charge Current	6A	
	Max.Charge Current	15A	
Standard Discharge	Continues Current	27A	
	Max. Pulse Current	72A(≤3S)	90A(≤50mS)
	Discharge Cut-off Voltage	37.5V	
Environmental	Charge Temperature	0°C-55°C	@60±25% Relative Humidity
	Discharge Temperature	-20°C-60°C	
	Storage Temperature	-20°C-45°C	
	IP Class	IP67	
Mechanical	Dimension(L*W*H)	(350±3) mm* (140±2)mm* (160±2)mm	
	Weight	16.0±0.5Kg	
	Material of case	<input type="checkbox"/> ABS plastic	<input checked="" type="checkbox"/> Metal
	Colour	<input checked="" type="checkbox"/> Black	<input type="checkbox"/> Gray
	Terminal	Anderson plug	