

# PT48LFP100(48V100Ah)

Lithium iron phosphate ( $\text{LiFePO}_4$ ) battery

Your best power choice for  
Telecom energy storage system!



The LCD function is optional

NILE  $\text{LiFePO}_4$  solutions are more advanced, highly efficient and has many advantages over the traditional Lead Acid battery.

Our batteries weigh less, charge faster, last longer, do not release gas, and have anti-theft, communication and remote monitoring functions.

Here introducing popular LFP series battery of PlatinIran which is high demanding among telecom industry users for its most advanced features:

## Advantage

### ✓ Safer:

- ◆ Excellent deep cycle ability:  $\geq 4500$  cycles@100%DOD;
- ◆ 15+ years design life;
- ◆ Adopt Grade A  $\text{LiFePO}_4$  cells from TOP5 manufacturer in the world;
- ◆ Built-in smart BMS with intelligent automatic protection for overcharge, over discharge, over current, short-circuit and over temperature etc.;
- ◆ IEC62619, UN38.3, CE, RoHs, etc.;

### ⚙️ Smarter:

- ◆ High compatibility with most brands of rectifier as a system, HUAWEI, DPC, etc.;
- ◆ Support GPRS, SNMP remote monitoring;
- ◆ Optional GPS, gyroscope anti-theft function;
- ◆ Modbus protocol available, RS485 port;

### 🛡️ Simpler:

- ◆ Space-saving 19-inch standard rack mount design;
- ◆ Modular design, easy to install;
- ◆ Supports max 15 sets in parallel to expand capacity;
- ◆ No maintenance required through out the lifetime;

## Specifications

### Nominal Characteristics

Battery Model	PT48LFP100
Nominal Voltage	48V
Nominal Capacity	100Ah
Nominal Energy	4800Wh

### Electrical Characteristics

Recommended Boost Charging Voltage	$54 \pm 0.5V$
Recommended Float Charging Voltage	$54 \pm 0.5V$
Recommended Charging Current	20A
Maximum Charging Current	100A
Maximum Discharging Current	100A

### Operating Conditions

Cycle Life	$\geq 4500$ Cycles@100% DOD@25°C
Roundtrip Efficiency	$\geq 98\%$
Operating Charge Temperature	0°C to +50°C
Operating Discharge Temperature	-20°C to +60°C
Storage Temperature	-20°C to +60°C

### Mechanical Characteristics

Length x Width x Height	480 x 483 x 177 mm
Weight	42.5Kg
Terminal	M6
IP Rating	IP20

## Application

- Base transceiver station
- Communication equipments
- Central office
- Microprocessor based office machine
- UPS

## How to work:

### 1. Grid backup power:

When the grid is normal, the grid will supply power to the load through the rectifier and charge the battery at the same time, when the grid fails, the battery will supply power to the load.

### 2. PV energy system:

In the daytime, the PV will power to the load and store the excess power in the batteries. In the evening, use the power from the batteries to power the load.

### 3. Generator energy system:

Battery priority to the load power supply, when the battery is full discharged, can control the generator to turn on the power supply to the load, and charge the battery at the same time.

When the battery is full, automatically shut down the generator, switch to the battery to the load power supply.



## Performance curve

