



Netcon Lithium-Ion Battery Pack, a cutting-edge energy solution designed to meet the demanding needs of modern technology. Engineered for superior performance, safety, and durability, our battery pack offers an exceptional power-to-weight ratio, making it ideal for a wide range of applications, from industrial equipment to renewable energy storage. With advanced battery management systems, the Netcon Lithium-Ion Battery Pack ensures optimal performance and longevity, delivering reliable power under the most challenging conditions. Whether you're looking to power high-efficiency systems or seeking a robust backup solution, the Netcon Lithium-Ion Battery Pack is your trusted partner in energy innovation.

Lithium Ion Battery Pack

Adopted by the high safety performance, lithium battery cathode material for lithium iron phosphate, high safety, high stability, high cycle life, high specific energy, specific power, low temperature performance is superior, but large current charge and discharge, and many other advantages, at the same time, using suitable for communication demand special high performance battery management system (BMS), with the charge, over discharge, short circuit, over-current (load), temperature, flow, total pressure protection, charging under the secondary electricity, balanced and various protective functions, Ensure the life of lithium battery and reduce the daily maintenance work.

Standard design, easy to assemble, low operating environment requirements (can be in -20 ~ 60°, humidity <95% normal work), small size, light weight, easy installation, simple maintenance in the later stage, can save considerable upfront investment and maintenance costs in the later stage.

Product features

1. The internal single battery adopts the anode material of lithium ferrous phosphate (LiFePO₄), which has high safety, high energy density and excellent cycling performance.
2. The battery pack is equipped with BMS, a high-performance battery management system, which has the protection functions of over discharge, over charge, over current, high temperature and low temperature to ensure the safety of the battery pack.
3. Automatic charge and discharge management. The monitoring unit automatically measures the charge and discharge current of the battery and manages the floating charge and even charge of the battery.
4. When the battery voltage is lower than the alarm value, it will alarm, and when the voltage is too low, it will automatically power down to protect the battery.
6. The battery pack has good electromagnetic compatibility.
7. Current detection and protection function; Temperature detection and protection function; Short circuit protection function Passive balance function.

Lithium Ion, 48V, 50AH Battery pack

BASIC CHARACTERISTICS

Item	Specification
Nominal Capacity	50Ah
Watt Hour	2400Wh
Nominal Voltage	48V
Operating voltage range	37.5V~53.2V
Standard charging method	25A
Maximum continuous charging current	50A
Standard discharging method	25A
Maximum continuous discharge current	50A
Pulse discharge current	60A/1S
Cycle Life	≥3000 cycles (0.5C charge 0.5C discharge) Capacity retention≥80%
Operating Temperature	Discharge : -20°C-55°C Charge : 0°C-55°C
Storage Temperature	-10°C~45°C
Communication mode	RS232/RS485/CAN/Dry contact
Display mode	LED
Shipment voltage	≥48V
Weight	25kg
Size	(L x W x H = 445 x 420 x 132) ±2mm
Designed life	10year

BMS PARAMETERS

Item	Protection	Release
Total voltage overvoltage	54.7V/1S	50V/1S
Cell over voltage	3.65V/1S	3.33V/1S
Total voltage undervoltage	37.5V/1S	40.5V/1S
Cell under voltage	2.5V/1S	2.7V
Charging over current	60A/1S	/
Discharge over current	60A/1S	Remove loader Charge
Short Circuit		Remove loader Charge
Discharge over temperature	65°C±5	55°C
Discharge under temperature	-20°C±5	-10°C
Charge over temperature	65°C±5	55°C
Charge under temperature	-5°C±5	0°C
MOS over temperature	90°C±5	65°C
Power consumption	≤200uA	
Balance	3.5V/40mA	
Internal resistance	≤50 mΩ	

Lithium Ion, 48V, 50AH Battery pack

BMS FUNCTION

1. Voltage detection and protection function: total voltage, cell voltage detection, overvoltage protection, undervoltage protection function, cell voltage acquisition accuracy $\leq 20\text{mV}$.
2. Current detection and protection function.
3. Temperature detection and protection function.
4. Short circuit protection function.
5. Passive balance function.

ORDERING INFORMATION

Item	Specification
NTBTNI48-50	Netcon High performance Lithium Ion, 48V, 50AH Battery pack with BMS function, Rack Mount