

LFP25.6-200

Lithium iron phosphate battery





LITHIUM

SERIES

Characteristics

Nominal capacity at 5 hours rate (25°C) 200Ah	Characteristics			
Nominal capacity at 5 hours rate (25°C) 200Ah	Electrical			
S120Wh Charge Efficiency at 0.2C (25°C) 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% 96.99% Approx. internal resistance (25°C) \$200 mΩ Cycle life / 0.2C 100% D.D. > 3000 cycles 40°C 101% 25°C 100% 40°C 75% 90% 40°C 75% 40°C 40°	Nominal voltage		25.6V	
Charge Efficiency at 0.2C (25°C) 99.5%	Nominal capacity at 5 hours rate (25°C)		200Ah	
Discharge Efficiency at 1C (25°C) 96-99% Approx. internal resistance (25°C) ≤200 mΩ Cycle life / 0.2C 100% D.O.D >3000 cycles Capacity affected by temperature 40°C 101% O°C 90% 90% -10°C 75% 75% Mechanical Length 523±2mm (20.59inch) Width 269±2mm (10.59inch) Width 269±2mm (10.59inch) Width 269±2mm (10.59inch) Height 218±2mm (8.74inch) Total height 224±2mm (8.82inch) Terminal type T16 Total height 224±2mm (8.82inch) Terminal type T16 Total height 39.90kg (87.96lbs)±4% Water & Dust resistance IP65 Battery container ABS UL94-HB V-0 optional Cell strings 8 strings Temperature Nominal operating temperature 25°C±3 (77±5°F) Operating temperature 25°C±3 (77±5°F) Charging Charge 0°C~45°C (32°F~113°F) Standard charge mode (25°C±2°C, <75%RH)	Energy		5120Wh	
Approx. internal resistance (25°C) \$200 mΩ Cycle life / 0.2C 100% D.O.D >3000 cycles Capacity affected by temperature 40°C 101% O°C 90% 75% Mechanical Length 523±2mm (20.59inch) Midth 269±2mm (10.59inch) Height 218±2mm (8.74inch) Total height 224±2mm (8.82inch) Terminal type T16 Torque 12.3±2.5N.m Weight 39.90kg (87.96ibs)±4% Water & Dust resistance IP65 Battery container ABS UL94-HB V-0 optional Cell strings 8 strings Temperature 25°C±3 (77±5°F) Nominal operating temperature 25°C±3 (77±5°F) Charge 0°C~45°C (32°F~113°F) Storage 0°C~40°C (22°F~113°F) Charging Charge 0°C~40°C (32°F~104°F) Charging voltage at 25°C 29.2V Standard charge mode (25°C±2°C, <75%RH)	Charge Efficiency at 0.2C (25°C)		99.5%	
Cycle life / 0.2C 100% D.O.D	Discharge Efficiency at 1C (25°C)		96-99%	
A0°C	Approx. internal resistance (25°C)		≤200 mΩ	
Capacity affected by temperature Direction Dimensions Length	Cycle life / 0.2C 100% D.O.D		>3000 cycles	
affected by temperature	Capacity affected by temperature	40°C	101%	
Dimensions		25°C	100%	
-10°C 75%		0°C	90%	
Length S23±2mm (20.59inch) Width 269±2mm (10.59inch) Height 218±2mm (8.74inch) Total height 224±2mm (8.82inch) Total height 224±2mm (8.82inch) Torque 12.3±2.5N.m Weight 39.90kg (87.96lbs)±4% Water & Dust resistance IP65		-10°C	75%	
Width 269±2mm (10.59inch) Height 218±2mm (8.74inch) Total height 224±2mm (8.74inch) Total height 224±2mm (8.82inch) Torque 12.3±2.5N.m Weight 39.90kg (87.96lbs)±4% Water & Dust resistance IP65 Battery container ABS UL94-HB V-0 optional Cell strings 8 strings Temperature Nominal operating temperature 25°C±3 (77±5°F) Charge 5torage 0°C~40°C (32°F~113°F) Storage 0°C~40°C (32°F~104°F) Charging Charging voltage at 25°C 29.2V Charging voltage at 25°C 29.2V Charging current 40A Maximum charging current 200A Maximum pulse discharge current (<100ms) 650A Discharge rate (25°C) 33%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC Bluetooth SOC Sock and surrous Soc	Mechanical			
Dimensions Height 218±2mm (8.74inch) Total height 224±2mm (8.82inch) Terminal type T16 Torque 12.3±2.5N.m Weight 39.90kg (87.96lbs)±4% Water & Dust resistance IP65 Battery container ABS UL94-HB V-0 optional Cell strings 8 strings Temperature Nominal operating temperature 25°C±3 (77±5°F) Operating temperature Charge 0°C~45°C (32°F~1140°F) Storage 0°C~40°C (32°F~113°F) Storage 0°C~40°C (32°F~104°F) Charging Charging voltage at 25°C 29.2V Standard charge mode (25°C±2°C, <75%RH) Maximum charging current 40A Maximum charging current 100A Charging cut-off voltage 29.2V Discharge 29.2V Discharge 29.2V Discharge 29.2V Discharging Continuous discharge current 200A Maximum pulse discharge current (<100ms) 650A Discharge rate (25°C) \$3%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC Bluetooth	Dimensions	Length	523±2mm (20.59inch)	
Height Total height Torque Torq		Width	269±2mm (10.59inch)	
Terminal type Torque		Height	218±2mm (8.74inch)	
Torque Weight Weight Water & Dust resistance Battery container ABS UL94-HB Cell strings Temperature Nominal operating temperature Operating temperature Torage Charge Charge Charge Charge Charging Charging voltage at 25°C Standard charge mode (25°C±2°C, <75%RH) Standard charging current Mominal charging current Charging current Charging current Auximum charging current Maximum pulse discharge current Maximum pulse discharge current Comunication & connection Comunication protocol (optional) SCC Poptional Strings V-0 optional Cov-40°C (32°F~104°F) Charge O°C~45°C (32°F~104°F) Charge O°C~40°C (32°F~104°F) Charge O°C~40°C (32°F~104°F) Charge O°C~40°C (32°F~104°F) Charge O°C~40°C (32°F~104°F) O.2CA Constant Current to 29.2V Uo.2CA Constant Current to 29.2V until the current drops to 0.02CA. Rest 30 minutes, before use. Nominal charging current 40A Maximum charging current 100A Continuous discharge current 200A Maximum pulse discharge current Self discharge rate (25°C) Sa%/month Comunication & connection Communication protocol (optional) RS485 (standard none)		Total height	224±2mm (8.82inch)	
Weight Water & Dust resistance Battery container ABS UL94-HB Cell strings Temperature Nominal operating temperature Charge range Charging Charging Charging voltage at 25°C Standard charge mode (25°C±2°C, <75%RH) Maximum charging current Maximum pulse discharge current (<100ms) Discharge cut-off voltage Comunication & connection Comunication & connection IP65 V-0 optional Coccupations Coccupation Current to 29.2V 0.2CA Constant Current to 29.2V, then Constant Voltage 29.2V until the current drops to 0.02CA. Rest 30 minutes, before use. Nominal charging current 40A Maximum charging current 100A Charging cut-off voltage 29.2V Discharge cut-off voltage Self discharge rate (25°C) Salf month RS485 (standard none) SOC	Terminal type		T16	
Water & Dust resistance Battery container ABS UL94-HB Cell strings Temperature Nominal operating temperature Operating temperature Therefore any container and a strings Temperature Nominal operating temperature Operating temperature Charge Charge Charge O°C~45°C (32°F~113°F) Storage Charging Charging Charging voltage at 25°C Standard charge mode (25°C±2°C, <75%RH) Standard charge mode (25°C±2°C, <75%RH) Nominal charging current Maximum charging current Maximum charging current Charging cut-off voltage Discharge current A0A Maximum pulse discharge current A0A Maximum pulse discharge current Maximum pulse discharge current (<100ms) Discharge cut-off voltage Self discharge rate (25°C) Communication & connection Communication protocol (optional) RS485 (standard none) SOC	Torque		12.3±2.5N.m	
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Nominal operating temperature Operating temperature range Charge Charge Charge O°C~45°C (32°F~113°F) Storage Charging Charging Charging Charging voltage at 25°C Standard charge mode (25°C±2°C, <75%RH) Nominal charging current Maximum charging current Charging cut-off voltage Discharge current Auximum pulse discharge current (<100ms) Discharge cut-off voltage 25°C 25°C±2°C, <75%RH) 29.2V 0.2CA Constant Current to 29.2V, then Constant Voltage 29.2V until the current drops to 0.02CA. Rest 30 minutes, before use. Nominal charging current 40A Maximum charging current 100A Charging cut-off voltage 29.2V Discharging Continuous discharge current (<100ms) 650A Discharge cut-off voltage 22.4V Self discharge rate (25°C) ≤3%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC	Cell strings		8 strings	
Operating temperature range Charge Charge Charge O°C~45°C (32°F~113°F) Storage O°C~40°C (32°F~104°F) Charging Charging voltage at 25°C Charging voltage at 25°C Standard charge mode (25°C±2°C, <75%RH) Nominal charging current Maximum charging current Charging cut-off voltage Continuous discharge current (<100ms) Discharge rate (25°C) Standard charge rate (25°C) Standard charge mode (25°C±2°C, <75%RH) O.2CA Constant Current to 29.2V until the current drops to 0.02CA. Rest 30 minutes, before use. Nominal charging current 100A Charging cut-off voltage 29.2V Discharging Continuous discharge current (<100ms) Discharge cut-off voltage Self discharge rate (25°C) S3%/month Comunication & connection Communication protocol (optional) RS485 (standard none)	Temperature			
Charge range Charge Charge Charging Charging Charging voltage at 25°C Standard charge mode (25°C±2°C, <75%RH) Standard charging current Maximum charging current Charging cut-off voltage Continuous discharge current Maximum pulse discharge current (<100ms) Discharge cut-off voltage Self discharge rate (25°C) Charging cut-off voltage Self discharge rate (25°C) Communication & connection Communication protocol (optional) SOC Core 45°C (32°F~113°F) O°C~45°C (32°F~113°F) Self-20°C, (32°F~113°F) Co.20°C 45°C (32°F~113°F) Self-20°C, (32°F~113°F) Co.20°C~40°C (32°F~113°F) Self-20°C, (32°F~113°F) D.20°C~45°C (32°F~113°F) D.20°C~45°C (32°F~113°F) D.20°C~40°C (32°F~113°F) D.20°C~45°C (32°F~113°F) D.20°C~45°C (32°F~113°F) D.20°C~45°C (32°F~113°F) D.20°C~40°C (32°F~113°F) D.20°C~45°C (32°F~113°F) D.20°C~45°C (32°F~113°F) D.20°C~40°C (32°F~113°F) D.20°C~40°C~40°C (32°F~113°F) D.20°C~40°C~40°C~110°F D.20°C~110°C~110°C (32°F~110°C (32°F) D.20°C~110°C~110°C	Nominal operating temperature		25°C±3 (77±5°F)	
temperature range Charge Storage O°C~45°C (32°F~113°F) Storage O°C~40°C (32°F~104°F) Charging Charging Charging Charging Charging Charging Charging Charge O°C~40°C (32°F~104°F) 29.2V 0.2CA Constant Current to 29.2V, then Constant Voltage 29.2V until the current drops to 0.02CA. Rest 30 minutes, before use. Nominal charging current 40A Maximum charging current 100A Charging cut-off voltage 29.2V Discharging Continuous discharge current Amaximum pulse discharge current (<100ms) Discharge cut-off voltage 22.4V Self discharge rate (25°C) ≤3%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC	Operating	Discharge	-20°C~60°C (-4°F~140°F)	
Charging Charging voltage at 25°C Standard charge mode (25°C±2°C, <75%RH) Standard charge mode (25°C±2°C, <75%RH) Nominal charging current Maximum charging current Charging cut-off voltage Discharging Continuous discharge current Maximum pulse discharge current (<100ms) Discharge cut-off voltage Self discharge rate (25°C) Communication & connection Communication protocol (optional) SOC Suze A C (52 F×104 F) 0 C×40 C	temperature range	Charge	0°C~45°C (32°F~113°F)	
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O.2CA Constant Current to 29.2V, then Constant Voltage 29.2V until the current drops to 0.02CA. Rest 30 minutes, before use. Nominal charging current 40A Maximum charging current 100A Charging cut-off voltage 29.2V Discharging Continuous discharge current 200A Maximum pulse discharge current (<100ms) 650A Discharge cut-off voltage 22.4V Self discharge rate (25°C) ≤3%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC Bluetooth	Charging			
29.2V, then Constant Voltage 29.2V until the current drops to 0.02CA. Rest 30 minutes, before use. Nominal charging current 40A Maximum charging current 100A Charging cut-off voltage 29.2V Discharging Continuous discharge current 200A Maximum pulse discharge current (<100ms) 650A Discharge cut-off voltage 22.4V Self discharge rate (25°C) ≤3%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC Bluetooth	Charging voltage at 25°C		29.2V	
Maximum charging current 100A Charging cut-off voltage 29.2V Discharging Continuous discharge current 200A Maximum pulse discharge current (<100ms)	Standard charge mode (25°C±2°C, <75%RH)		29.2V, then Constant Voltage 29.2V until the current drops to 0.02CA. Rest 30	
Charging cut-off voltage Discharging Continuous discharge current Maximum pulse discharge current (<100ms) 650A Discharge cut-off voltage 22.4V Self discharge rate (25°C) ≤3%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC Bluetooth	Nominal charging current		40A	
Discharging Continuous discharge current 200A Maximum pulse discharge current (<100ms)	Maximum charging current		100A	
Continuous discharge current Maximum pulse discharge current (<100ms) Discharge cut-off voltage Self discharge rate (25°C) Comunication & connection Communication protocol (optional) RS485 (standard none) SOC Bluetooth	Charging cut-off voltage		29.2V	
Maximum pulse discharge current (<100ms) 650A Discharge cut-off voltage 22.4V Self discharge rate (25°C) ≤3%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC Bluetooth	Discharging			
Discharge cut-off voltage 22.4V Self discharge rate (25°C) ≤3%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC Bluetooth	Continuous discharge current		200A	
Self discharge rate (25°C) ≤3%/month Comunication & connection Communication protocol (optional) RS485 (standard none) SOC Bluetooth	Maximum pulse discharge current (<100ms)		650A	
Comunication & connection Communication protocol (optional) SOC RS485 (standard none) Bluetooth	Discharge cut-off voltage			
Communication protocol (optional) RS485 (standard none) SOC Bluetooth	Self discharge rate (25°C)		≤3%/month	
SOC Bluetooth	Comunication &	connection		
Diddiod	Communication protocol (optional)		RS485 (standard none)	
Maximum modules in paralel / series 4 in string / 6 in parallel	SOC		Bluetooth	
, , , , , , , , , , , , , , , , , , ,	Maximum modules in paralel / series		4 in string / 6 in parallel	

Overview

NPP Power Lithium-Iron Phosphate batteries offer superb improvement in characteristics compared to lead-acid technology. Due to the extreme cycle and calendar life, LiFePO4 batteries are an excellent long-term investment for your applications. Powerful, lightweight, safe, and smart, the Lithium-Iron Phosphate batteries are the future of the energy storage you can have right now.

Features

Longer cycle life - Up to 15 times longer cycle life and 5 times longer float/calendar life than lead-acid batteries.

More capacity - Provides up to 100% of usable energy.

Lightweight - 60% lighter than lead-acid batteries.

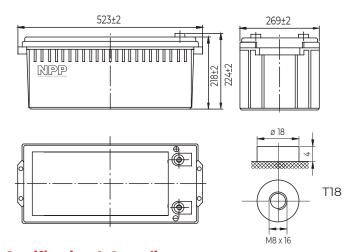
High discharge rate - Ability to fully discharge the battery at a high rate of discharge.

Fast charging - Charges much faster than conventional sealed lead-acid batteries.

Long cycle life - More than 3000 cycles at 100% depth of discharge.

Intelligent BMS - The battery management system monitors and adapts to battery conditions to maximize performance and safety.

Dimensions & Terminal Type (mm)



Certification & Compliances













Compliant to: IEC 62133-2

The data in this document is subject to change without notice and become contractual only after written confirmation. Please contact NPP Power for the latest available version.

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Guangzhou NPP Power Co., Ltd.

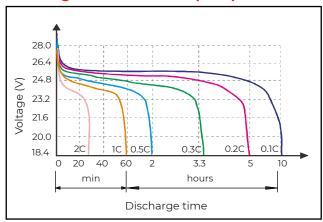
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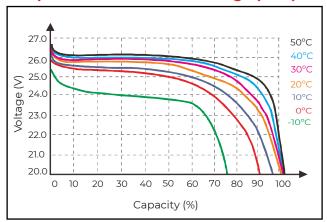


SERIES

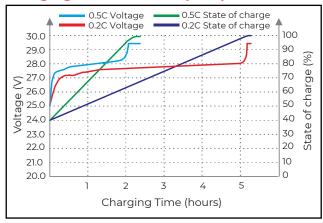
Discharge characteristics (25°C)



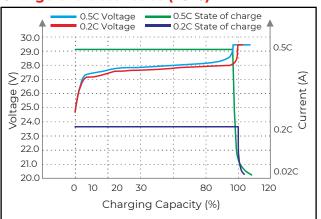
Temperature effects on discharge (0.5C)



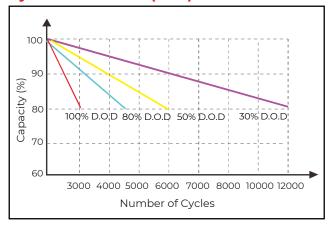
Charging Time on S.O.C. (25°C)



Charge characteristics (25°C)



Cycle life on D.O.D. (25°C)



D.O.D. - depth of discharge S.O.C. - state of charge

Self discharge characteristics

