

14.6V 20A LiFePO4 Battery Charger for 12.8V 4S LFP Cells Pack Technical Datasheet

Phonix Charger – Custom Smart Battery Charger Manufacturer

LiFePO4 Battery Charger: <https://phonixcharger.com/lifepo4-battery-charger/>

Product Overview

This technical datasheet describes a 14.6V 20A 292W LiFePO4 Battery Charger designed for charging 4S 12.8V LiFePO4 battery packs. The charger provides stable constant current and constant voltage charging optimized for LiFePO4 battery chemistry.

The 14.6V 20A LiFePO4 battery charger is designed for charging 12.8V lithium iron phosphate (LFP) battery packs used in a wide range of applications, including electric scooters, e-bikes, power tools, portable power stations, solar energy storage systems, alarm and security systems, UPS backup power, industrial equipment, robotics, marine electronics, and other devices powered by 4-cell (4S) LiFePO4 batteries. The charger follows a safe multi-stage charging profile including pre-charge, constant current (CC), constant voltage (CV), and automatic charge termination.

Phonix provides OEM and ODM solutions for custom battery charging systems. As a [Custom](#) Battery Charger manufacturer, Phonix also offers custom smart charger design services for [lithium](#), [LiFePO4](#), [lead-acid](#), and [NiMH](#) battery applications.

Key Features

- Multi-stage charging: Pre-charge, CC, CV and automatic cut-off
- Designed for 4S 12.8V LiFePO4 battery packs
- Wide AC input range 100 ~ 240V AC
- LED charging status indicator
- Multiple protections: OVP, OCP, short circuit and reverse protection
- High efficiency design $\geq 93\%$
- Industrial compact design
- OEM / ODM customization available

Technical Specifications

Parameter	Specification
Brand	Phonix
Model	FX146020000
AC Input	100~240V, 50/60Hz
Input Voltage Range	AC 90~264V
Rated Input Current	3A at 100Vac input
Max Input Power	300W
DC Output Voltage MAX	DC 14.6V
Output Voltage Range	DC 12.8V ~ 14.6V, CV Mode: 14.6V
Charging Current	20A \pm 5%
Charging Voltage	14.6V \pm 0.05V
Pre-charge Current	2A
Charge End Current	\leq 2A \pm 10%
Output Max Power	292W
Battery Type	4S 12.8V LiFePO4 Battery (4S 12.8V LFP Cells Pack)
Efficiency	\geq 93%
Ripple Voltage	\leq 150 mV
Operating Temperature	-10°C ~ +40°C
Storage Temperature	-40°C ~ +70°C
Humidity	0 ~ 95% RH
Cooling	Natural cooling
Size	233*108*64mm
Weight	1800g

Parameter	Specification
Safety Certifications	CE / UL / TUV / FCC / PSE / CCC / SAA / RCM / WEEE
MTBF	50000 Hours
Warranty	5 years

Typical Applications

- 4-cell (4S) 12.8V LiFePO4 battery packs
- Electric scooters, e-bikes and light EV batteries
- Portable power stations and mobile power systems
- Solar energy storage and off-grid applications
- Backup power systems and UPS
- Security, alarm and surveillance systems
- Emergency lighting systems
- Industrial automation and robotics equipment
- Marine electronics and RV battery systems
- Portable medical and testing devices
- OEM / ODM custom LiFePO4 battery charging solutions

Manufacturer Information

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Product Page:

<https://phonixcharger.com/14-6v-20a-lifepo4-battery-charger-for-4s-12-8v-lfp-packs/>

Official Website: <https://phonixcharger.com>



图 1: Phonix 14.6V 20A LiFePO4 Battery Charger