

# GreatVolt 14.6V 20A Charger for 12.8V LiFePO4 Batteries

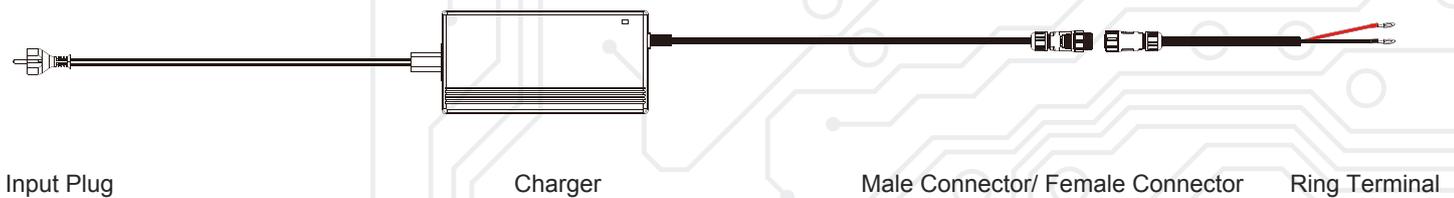
Model No.: CDQ-GV-14.6V20A



## Product Overview

The GreatVolt Smart Charger is a reliable and efficient AC-to-DC battery charger designed for LiFePO4 and other lithium-based batteries. With a wide input range (100–240V AC, 50/60Hz) and an advanced CC/CV charging algorithm, it provides stable and safe charging performance across different applications. Compact in size yet powerful, the charger offers high conversion efficiency, multiple protection features, and clear status indicators, making it well-suited for RVs, marine equipment, golf carts, and energy storage systems.

## Charger connection diagram



## Physical parameters

- Shell material: Aluminum Casting
- Overall Size: 182\*105\*68mm
- Protection Level: IP66
- Net Weight: 1.7Kg
- Noise:  $\leq 40$ dB
- Cooling mode: Fan
- Operating Temperature:  $-30 \sim +65$  °C
- Storage Temperature:  $-40 \sim +95$  °C

## Input Parameters

- AC Input Operating Voltage Range: 85V-265V
- AC Input Frequency Range: 40~70Hz
- Input Plug & Wire: Standard Plug, Length 2.5m

## Output Parameters

- Suitable for batteries: 12.8V 4S LiFePO4 Battery
- Max Output Voltage: 14.6V
- 12V Supply Power: /
- Output Plug & Wire: Ring Terminal
- Max Efficiency: MAX  $\geq 93\%$
- Max Output Current: Max20A @ 220V / Max20A @ 110V
- Communication Function: /

## Light

Connect to power (standby)	Green light
Charging	Green light flashing
Fully Charged	Green light
Error Code	<ol style="list-style-type: none"> <li>1. Input power failure (red light flashes quickly) (red light flashes quickly)</li> <li>2. Output short circuit or battery connection reversed (red and green flashing alternately) (red and green flashing alternately)</li> <li>3. Charger overheat alarm (red light flashes twice quickly, 1 second later, then flashes twice quickly)</li> <li>4. Output overcurrent alarm (red light flashes 3 times quickly, 2 seconds later, then flashes 3 times quickly)</li> <li>5. Output overvoltage alarm (red light flashes 4 times quickly, 2 seconds later, and then flashes 4 times quickly)</li> </ol>

## Main functions

- Input low-voltage & over-voltage protection  
When the input voltage is lower than 85V or higher than 265V, the charger stops working.
- Output short/reverse protection  
If the charger detects a short circuit or reverse connection at the output, it will lock the output. After the fault is resolved, you need to plug in or unplug the AC plug to restart the charger.
- Output over-current / over-voltage protection  
When the charger detects that the output voltage/current/power exceeds the set value, the charger locks the output. After the fault is eliminated, the charger can be manually restarted to charge.