

Description

report

CN3722 Solar MPPT Charger Module | 1S 2S 3S 4S Li-ion/LiFePO4 Battery | 2A Charging Current | Maximum Power Point Tracking

Product Description:

This advanced solar charging module features Maximum Power Point Tracking (MPPT) technology, delivering superior efficiency by extracting up to 90W from solar panels (7V-24V input). Designed for 1-4S Li-ion, LiFePO4, or lead-acid batteries, it provides complete CC-CV charging management with adjustable output voltage and external resistor-configurable current (2A). The robust design includes a solid copper inductor (7A saturation current) and dual LED status indicators.

Key Features:

- **True MPPT Technology:** Boosts output current > solar input current (7-24V input, 90W max)
- **Multi-Chemistry Support:** Li-ion/LiFePO4/lead-acid (1-4 series)
- **Programmable Charging:**
 - Constant current: 2A default
 - Float charging for deeply discharged batteries
- **Visual Status Indicators:**
 - **Red LED:** Charging in progress
 - **Green LED:** Charging complete
 - **Red blink + Green steady:** No battery detected
- **Protections:** Soft-start, battery over-voltage protection
- **High-Frequency Operation:** 300kHz PWM for compact design

Specifications:

- Input Voltage: 7V-24V (solar panel)
- Output Voltage: Adjustable (see chemistry table below)
- Max Solar Power: 90W
- Charging Current: 2A default
- Dimensions: 50×30×12mm

Battery Voltage Settings:

Chemistry	1-Cell	2-Cell	3-Cell	4-Cell
Li-ion (4.2V)	4.2V	8.4V	12.6V	16.8V
LiFePO4 (3.6V)	3.6V	7.2V	10.8V	14.4V
Lead-Acid	-	-	-	13.6V (12V system)

Installation Notes:

1. **Heatsinking Required** for currents >2A (attach to aluminum chassis)
2. **Critical Settings:**
 - MPPT voltage must be ≥7V and > output voltage
 - Factory preset: MPPT≈18V, Output≈4.2V
3. **Do not** set MPPT voltage <7V or below output voltage

Setup Guide (Follow Strictly):

1. Connect solar panel (no battery). If no output, **counterclockwise** adjust MPPT pot until voltage appears.
2. **Counterclockwise** adjust output pot until LEDs blink, then set to battery's full voltage (see table).
3. Connect battery + ammeter. Fine-tune MPPT pot for **max current** (or match solar panel's nominal voltage).
4. Verify cutoff voltage with multimeter and adjust output pot if needed.

Warning:

- Use **precision screwdriver** for pots—rough adjustment may damage module!
- For high-current applications ($\geq 3A$), use heatsink

Package Includes:

- CN3722 charging module











