

NEOSUN NC1600A - 20A/30A/40A

Features

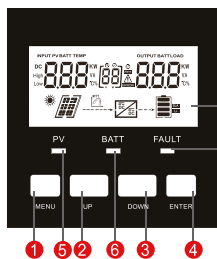
- 20/30/40A MPPT solar charge controller
- PV input up to 100V or 145V
- Voltage Auto Detection – 12V/24V
- MPPT efficiency – 99%
- DSP processors architecture ensure high speed and performance
- Multi-stages charging mode
- Protection: PV array short circuit, PV reverse polarity, battery reverse polarity, overcharging, output short circuit
- Smart battery charging design to optimize battery performance
- LCD Display



Overview

This low current MPPT Solar Charge Controller allows for an efficient, safe and multi-stage recharging process that prolongs battery life and assures peak performance from a solar array. Each Charge Controller grants customized battery recharging.

LCD Display Information



1. MENU: Enter or exit setting mode.
2. UP: Increase the setting data.
3. DOWN: Decrease the setting data.
4. ENTER: Confirm the selection in setting mode.
5. LCD display

LED indicator		System status	
5. PV	Green	On	PV voltage normal
		Flashing every 1s	PV fault is recovering
		Flashing every 2s	PV fault can't recover
		Off	PV is off
6. BATT	Yellow	On	Battery voltage normal
		Flashing every 1s	Battery fault is recovering
		Flashing every 2s	Battery fault can't recover
		Off	Battery is off
7. FAULT	Red	Flashing	Fault
		Off	Normal

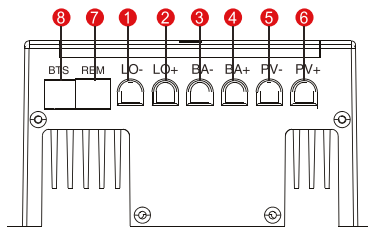


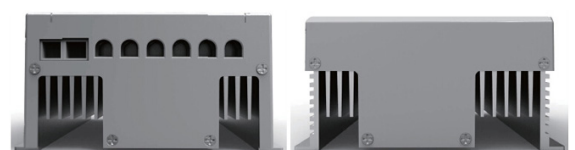
Figure 1 Charge Controller wiring compartment marks

1. LO-: The load negative terminal
2. LO+: The load positive terminal
3. BA-: The battery negative terminal
4. BA+: The battery positive terminal
5. PV-: PV array negative terminal
6. PV+: PV array positive terminal
7. REM: Communication network terminal
8. BTS: Remote external temperature terminal

Solar system connection



Back panel



Controller Input	NC16-2010A	NC16-3015A	NC16-4010A
Default Battery System Voltage	12V/24VDC (Auto Detection)		
PV Open Circuit Voltage	100VDC@12V/145VDC@24V		
PV Array MPPT Voltage Range	16VDC~100VDC/32VDC~130VDC		
Max PV Input Power(12V)	300W	450W	600W
Max PV Input Power(24V)	600W	900W	1200W
Battery			
Absorption Voltage	12.5VDC/25.0 VDC		
Refloat Voltage	13.7VDC/27.4 VDC		
Float Voltage	14.3VDC/28.6 VDC		
Low Voltage Protection Point	10.0VDC/20.0 VDC		
Output (DC)			
Output DC Voltage	10.0~14.5VDC/20.0~29.0VDC		
Peak Conversion efficiency	98% (MPPT Efficiency 99%)		
Max Charging Current	20 amps continuous	30 amps continuous	40 amps continuous
Max Output Current	20 amps continuous		
Low voltage alarm	10.25VDC/20.5 VDC		
Cutoff for low voltage	10.0VDC/20.0 VDC		
Low voltage recovery	11.0VDC/22.0 VDC		
General Specification			
Radiating mode	Automatic cooling		
Display & Protection			
LED indication	Systematic operation, LV indication, LV protection, over charge protection, loads protection, short circuit protection		
LCD display	Charge voltage, charge current, voltage of storage battery, capacity of storage battery, output current		
Alarm Protections	PV array short circuit, PV reverser polarity Battery reverse polarity, Over charging protection Output short circuit protection Low voltage protection for storage battery		
Mechanical Specification			
Mounting	Wall mount		
W/H/D (mm)	154x236x88mm/2Kg		
New Weight(kg)	2.2Kg	2.65Kg	
Other			
Environmental Rating	Indoor		
Operation Temperature Range	-25℃ to +55℃		
Ambient humidity	0~90% relative humidity(non-condensing)		
Altitude	≤3000 m		
Loading (20GP/40GP/40HQ)	2500pcs/5000pcs/5800pcs		

*Product specifications are subject to change without further notice.