

Dual Battery MPPT Solar Controller

DuoRacer 10A-30A



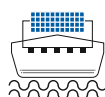
DuoRacer is an MPPT solar charge controller which functioned for charging a living battery and a start-up battery at the same time. This charge controller is designed for the camper, RV, and boat users, etc, also supports **MANY** types of battery, includes sealed, gel, liquid, and lithium batteries. DuoRacer auto-identify the start-up battery system voltage, trickle charge (1A constant current) in possible condition. LED/LCD display with buttons or special designed touch button display MT11 to set the parameter easily. The low-power consumption design reduces the power loss for decreasing the battery power waste. This product is water and dust proofed with high ingress protection rating IP33 to keep the system safe, efficient and extend the product life.

Features

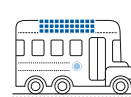
- MPPT charging algorithm for storage battery(Battery 1)
- Constant current charging for starter battery(Battery 2)
- Automatic charging for Battery 1 and Battery 2
- Support AES vehicle refrigerator signal
- Lithium battery or lead-acid battery selectable for Battery 1
- Low-temperature protection for Lithium battery
- Advanced MPPT technology, with efficiency no less than 99.5%
- Maximum DC/DC conversion efficiency of 98%
- Accurate recognition and tracking of multiple-peaks maximum power point
- Battery temperature compensation(only for Lead-acid battery)
- Real-time data record
- RS-485 port with industrial standard Modbus open architecture
- Monitor or set the parameters via mobile phone APP or PC software
- Software upgrade supported
- Low-power consumption design (PV is under 5V, and no operation order received)
- LED and LCD selectable



Solar Backpack



Solar Boat



Solar Car

Technical Parameters

Model	DR1206N	DR2210N	DR3210N
Electrical parameters			
Nominal System Voltage	12/24V		
Rated Charge Current(Battery1/2)	10A/1A	20A/1A	30A/1A
Battery Voltage Range	8~32V		
Max. PV Open Circuit Voltage	60V ^① 46V ^②	100V ^① 92V ^②	
MPP Voltage Range	(Battery voltage +2V)~36V	(Battery voltage +2V)~72V	
Max.PV Input Power	130W/12V 260W/24V	260W/12V 520W/24V	390W/12V 780W/24V
Self-consumption	≤17mA(12V)≤10mA(24V)		
Temperature Compensate Coefficient ^③	-3mV/°C/2V(Default)		
Grounding	Common Negative		
Lcd Backlight Time	60s(default)		
Environmental Parameters			
Working Environment Temperature	-25°C ~+45°C (full-load working)		
Storage Temperature Range	-30°C ~+70°C		
Relative Humidity	≤95%(N.C.)		
Enclosure	IP33		
Mechanic Parameters			
Dimension	227.2×143×58.1mm	243.7×158×63mm	247.2×165×68.5mm
Mounting Dimension	160x134mm	180x149mm	180x156mm
Mounting Hole Size	∅5mm		
Terminal	12AWG/4mm ² (BAT1) 12AWG/4mm ² (BAT2)	6AWG/16mm ² (BAT1) 12AWG/4mm ² (BAT2)	6AWG/16mm ² (BAT1) 12AWG/4mm ² (BAT2)

- ① When a lithium battery is used, the system voltage can't be identified automatically
- ② At minimum operating environment temperature
- ③ At 25°C environment temperature

Accessories



Remote Meter
MT11



Remote Temperature Sensor
RTS300R47K3.81A



Bluetooth Adapter
eBox-BLE-01



WiFi Adapter
eBox-WIFI-01