

DC-DC MPPT Solar Charger

Smart Buck-Boost Dual Battery Charging

Buck-Boost Charging Series

M2430ND



Product Features

- DC-DC charging equipment, suitable for charging the dual battery systems of RVs.
- Can be charged with external solar modules MPPT, and can be used with DC alternator, with a maximum charging current of 30A.
- Buck-Boost circuit design, support charging between the main battery and secondary battery (no matter how high or low the battery voltages are).
- Support 12/24V battery system, the charging priority of the two batteries can be set.
- With BVS battery voltage detection, ensure the accuracy and reliability of long-distance charging.
- Polyurethane filled inside, protection level IP45, no derating during full load operation.
- Support CAN, RS485 communication. With TFT LCD display, support Bluetooth APP connection operation.



Full-range protection



Dual Battery Charge



Buck-Boost Charge



RV Use



PV Input

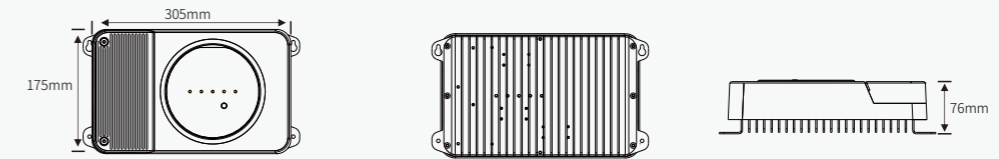


DC Input



Max Charge Current

Product dimension



Parameter	Value
Model No.	M2430ND
No-load Loss	25mA
System Wiring Grounded	Negative Grounded
Operating Temperature	-25°C~45°C
Storage Temperature	-40°C~65°C
Operating Altitude	≤3000m
IP Protection	IP45
Charging Efficiency	>98%
Communication Port	ModBus/RS485/CAN(CAN Optional)
Charging Derating	When the controller temperature reaches above 65°C, the step-down charging starts, and when the temperature drops to 65°C, normal charging is resumed.
Wiring Method	Bare wire terminals (M6)
Max Wire Cross Section Area	10mm ² (7AWG)
LED instructions	PV, BAT1, BAT2, EXT, IGN
Operating Mode	Remote Display
Bluetooth Connection	Built in Bluetooth on display for APP operation
Protection	PV Over-Voltage, PV Reverse Protection, Battery Over-Charge, Battery Reverse Protection, EXT input Over-Voltage, EXT Reverse Protection, Controller Over-Heating, High Ambient Temperature

Battery 1		Battery 2	
Battery	Main Battery (Service Battery)	Battery	Secondary Battery (Starter Battery)
Battery System Voltage	12/24V	Battery System Voltage	12/24V
Battery Voltage Range	8-32V	Battery Voltage Range	8-32V
Battery Type	GEL/SEL/FLD/LI/USER (Optional)	Battery Type	GEL/SEL/FLD/LI/USER (Optional)
Charging Mode	MPPT+CC+CV	Charging Mode	MPPT+CC+CV
Max Current	30A	Max Current	30A
BVS	Yes	BVS	NO

PV	
Charging Mode	Buck MPPT+CC+CV
Max Solar Input Power	450W/900W
Max Solar Input Voltage	60Voc
PV Tracking Efficiency	>99%

EXT(External Charging Equipment)	
Charging Mode	DC-DC Buck-Boost Charging
Equipment Type	DC Alternator, Adapter, Charger, Power Supply, Battery
Max Charging Current	30A
EXT Input Voltage Range	8-32V
Max EXT Input Power	450W/900W