

# PWM CONTROLLERS - 12/24/48V

## KEY FEATURES



- Safe and reliable pulse-width modulation charging with 4-stage control, giving your batteries the protection they need.
- Compatible for PV projects in 12, 24 or 48V systems.
- 3 programmable modes as battery charger, DC load controller, and diversion charge controller.
- **Large array PV array support up to 3KW.**
- Maximum charging current up to **45A.**
- Allows peer parallel connections up to 10 units.
- Over-temperature protection of circuitry when used in hot climates (over 80°C).
- LEDs and LCD screen to display device modes and important system information (PV power input, input current, battery voltage, battery SOC, DC load, and voltage setting).
- 8-position DIP switch allows user to program all major system parameters.
- System protections include: over-temperature, battery reverse polarity, short circuit, output overload, PV input overload, and LVD/LVR.
- Support remote LCD meter up to 500ft away (LCD meter is optional)
- Battery compensation functionality available (BTS is optional).
- Manual or automatic equalization for flooded batteries.

## ARM-P-4548

ELECTRICAL SPECIFICATIONS	
Characteristic	PWM algorithm
Operating Modes	Battery Charging, DC Diversion, Load Control
Nominal System Voltage	12 / 24 / 48V
Max PV Input Voc	140V
Max PV Power	3000W
Max Charging Current	45A
Max Operating Voltage	68V
Charging Voltage	8 Standard Charging Programs (See User Manual)
LCD Indicator	DC Power Input, DC Load, Battery Voltage, Battery Ah, Charging Voltage Settings, Fault
LED Indicator	4 LED (Equalization, Charging, Load Control, Fault)
Protections	Over Temperature, Battery Reverse Polarity, Short Circuit, Input/Output Overload, LVD/LVR
Self-Consumption Current	≤ 3mA (Idle) / ≤ 25mA (Operating)
Parallel	Max 10 sets

GENERAL SPECIFICATIONS	
Operating Temp.	-20°C~45°C
Storage Temp.	-40°C~70°C
Enclosure	Indoor Only
Working Humidity	20~90% RH(NC)
Dimension	266*127*75mm
Weight	1.5Kg
BATTERY TEMPERATURE SENSOR (Optional)	
Temp. Compensation	-5mV/°C/Cell
Compensation Range	0°C~50°C
Terminal Wire Size	16~24AWG (1.0~0.25mm <sup>2</sup> )
SURGE PROTECTION	
Pulse Power Rating	4500W
Response Time	<5ns

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