

PW-BN Series

(PWM Solar Charge Controller)



FEATURES

- PWM charging
- 32 bit MCU with high speed
- Battery type selection: Sealed, Gel, Flooded and User(programmable)
- Intelligent lighting and timer control for solar lighting system
- 12 bit A/D high-precision sampling to ensure accuracy
- Full control parameters setting and modification, diversified load control mode
- Humanized design of browser interface
- Battery temperature compensation
- Adopt graphics dot-matrix LCD screen and 4 buttons for integrated menu displaying and operation
- RS485 port with industrial standard MODBUS open architecture
- Real-time data monitoring and parameters setting with MT50, APP or PC software
- Support firmware upgrade

ELECTRONIC PROTECTIONS

- | | |
|-------------------------------------|-----------------------------------|
| PV short circuit protection | PV reverse polarity protection |
| Battery over voltage protection | Battery over discharge protection |
| Battery reverse polarity protection | Battery overheating protection |
| Load short circuit protection | Load overload protection |
| Controller Overheating protection | |



MECHANICAL CHARACTERISTICS

Model	PW1024BN	PW2024BN	PW3024BN	PW4524BN	PW6024BN
		PW2048BN	PW3048BN	PW4548BN	PW6048BN
Nominal system voltage	12/24V auto work	PW**24BN 12/24V auto work; PW**48BN 12/24/36/48V auto work			
Rated charge current	10A	20A	30A	45A	60A
Rated discharge current	10A	20A	30A	45A	60A
Max. PV open circuit voltage	12/24V 50V; 12/24/36/48V 96V				
Equalize charging voltage	Sealed 14.6V, Flooded 14.8V, User-defined 9-17V				
Boost charging voltage	Gel 14.2V, Sealed 14.4V, Flooded 14.6V, User-defined 9~17V				
Float charging voltage	Gel/Sealed/Flooded 13.8V, User-defined 9~17V				
Low voltage reconnect voltage	Gel/Sealed/Flooded 12.6V, User-defined 9~17V				
Low voltage disconnect voltage	Gel/Sealed/Flooded 11.1V, User-defined 9~17V				
Self-consumption	≤ 15mA(12V); ≤ 10mA(24V); ≤ 9mA(36V); ≤ 8mA(48V)				
Temp.compensation	-3mV/°C /2V				
Communication	RS485 (RJ45 interface)				
Grounding	Common negative				
Enclosure	IP30				
Working environment temp.	-25°C ~ +55°C				
Humidity range	≤ 95%(N.C.)				

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Dimension(mm)	162*85*40	162*100*50	200*103*58	201*109*59	205*119*67mm	205*129*67	205*174*64
Net weight(kg)	0.2	0.4	0.7	0.9	1.2	1.3	1.5

※Technical data for 12V system at 25 °C , twice in 24V system.

※Programmable voltage value by PC, MT50 and App.