

Overview

VS-BN series is the PWM charge controller with dot matrix LCD display and RS485 communication interface. It is widely applied to off-grid system which needs high reliability and quality products, such as small power systems, mobile lighting, monitoring system, etc.

Features

- Series PWM charging mode
- Dot-matrix LCD display, integrated menu display, and operation
- Excellent EMC design
- Multiple load control modes
- Real-time energy statistics
- Extensive electronic protection
- Real-time data monitoring and parameters setting
- Standard Modbus communication protocol with RS485 interface



Solar Car



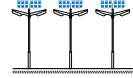
Solar Home



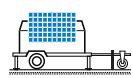
Solar Backpack



Solar Boat



Solar Street Light



Solar Power Generator

Technical Specifications

Model	VS1024BN	VS2024BN	VS3024BN	VS4524BN	VS6024BN	VS4548BN	VS6048BN
Nominal system voltage	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24/36/48VDC/Auto	12/24/36/48VDC/Auto
Battery type	Sealed(Default)/Gel/Flooded/User						
Battery input voltage range	8V ~ 32V	8V ~ 32V	8V ~ 32V	8V ~ 32V	8V ~ 32V	8V ~ 64V	8V ~ 64V
Rated charge current	10A	20A	30A	45A	60A	45A	60A
Rated discharge current	10A	20A	30A	45A	60A	45A	60A
Max. PV open circuit voltage	48V	48V	48V	48V	48V	96V	96V
Equalization voltage	Sealed:14.6V,Flooded:14.8V,User-defined:9-17V						
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V,User-defined:9-17V						
Float 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	$\leq 15\text{mA@12V}$; $\leq 13\text{mA@24V}$; $\leq 9\text{mA@36V}$; $\leq 8\text{mA@48V}$						
Temperature compensation	$\text{-}3\text{mV/}^{\circ}\text{C/2V}$ (Default)						
Relative humidity	$\leq 95\%$ (N.C.)						
Enclosure	IP30						
Communication interface	RS485(RJ45)						
Grounding	Common negative						
Operating temperature range	$\text{~}25^{\circ}\text{C} \sim +55^{\circ}\text{C}$						
Dimensions(LxWxH)(mm)	162×87×39.5	162×102×49.5	200.6×105.8×57.7	200.6×111.8×58.6	204.8×131.9×67	204.8×122×66.6	204.8×173.9×63.8
Net Weight	0.3Kg	0.4Kg	0.7Kg	0.8Kg	1.3Kg	1.2Kg	1.6Kg