ViewStar -BN series
PWM solar charge controller

This Viewstar BN series is common negative controller, with LCD display, working data programmable, It has communication function via RS485 port to PC monitoring software, realizing real-time monitoring and battery management parameter setting.

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
Real-time energy statistics
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 overload protection
Load short circuit protection
Controller overheating protection

Application

PRODUCT FAMILY
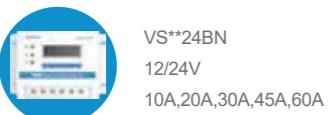
VS**24BN
12/24V
10A,20A,30A,45A,60A

VS**48BN
12/24/36/48V
20A,30A,45A,60A

eBox-BLE-01
Bluetooth adapter
with 2m
communication cable

eBox-WIFI-01
WIFI adapter
with 2m
communication cable
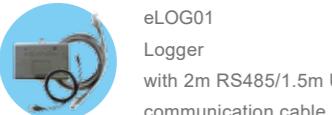
eLOG01
Logger
with 2m RS485/1.5m USB
communication cable

MT50
Remote meter
with 2m
communication cable

PC
software

Mobile APP

RTS300R47K3.81A
Remote temperature
sensor(3m)

CC-USB-RS485-150U
PC communication
cable (1.5m)

OTG-12CM
OTG cable
(12cm)

TECHNICAL SPECIFICATIONS

| Model | VS1024BN | VS2024BN | VS3024BN | VS4524BN | VS6024BN |
		VS2048BN	VS3048BN	VS4548BN	VS6048BN
Nominal system voltage	12/24V auto work	VS**24BN 12/24V auto work VS**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	12V/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/℃/2V (default)				
Communication	RS485(RJ45 interface)				
Grounding	Common negative				
Enclosure	IP30				
Working environment temperature	-25℃~+55℃				
Relative humidity	≤95% (N.C.)				

※Technical data for 12V system at 25℃, twice in 24V system, triple in 36V system and quadruple in 48V system.
※Programmable voltage value by PC , MT50 and APP.

Model	VS1024BN	VS2024BN	VS3024BN VS2048BN	VS4524BN VS3048BN	VS4548BN	VS6024BN	VS6048BN
Dimension	162×85×40mm	162×100×50mm	200×103×58mm	201×109×59mm	205×119×67mm	205×129×67mm	205×174×64mm
Net weight	0.2kg	0.4kg	0.7kg	0.9kg	1.2kg	1.3kg	1.5kg

MT

eBox

Mobile APP

eLog

PC