

SB1524iX

20A/15A, @12V/@24V, MPPT

Marine | RV | Off-Grid | PV Street Lighting | Solar Traffic Signal

Flexible, reliable, and ready to work! The SB1524iX, featuring our patented MPPT technology, with a second battery output and IPN connector for remote display, is ideal for RVs and Marine applications. The SB1524iX can manage a 20A at 12V (or 15A at 24V) load output for small off-grid electrification applications. When programmed with an IPN Pro Remote or UCM, it is also ideal for PV street lighting with its dusk-to-dawn load control. It can also charge Lithium batteries when programmed with the IPN Pro Remote or UCM. Its IPN Network interface can communicate with other Blue Sky Energy charge controllers as a single charging system, allowing increased flexibility and optimization in system design.



97% peak efficiency •

Fast MPP Tracking •

Excellent performance •

IPN Network compatible •

Great for PV Street Lighting •



Product Features

- Patented MPPT technology charges batteries faster
- Hassle-free auto-detection for 12V or 24V systems
- Networks with other Blue Sky controllers for higher power
- Fuller charges and longer battery life with advanced multistage charging (FLA,AGM,GEL)
- Equalize batteries automatically or manually
- Charge a second battery or control a DC load output
- Program for Dusk-to-Dawn Lighting Control with the IPN ProRemote
- Battery Temperature Compensation (with external battery temp. sensor)
- Protects battery from deep discharge (via load output)
- Automatically reconnects load when power is available

Display


- LEDs for charge and load status
- Remote Display optional (IPN ProRemote, IPN Remote)

Protection

- PV array overload
- PV array reverse polarity
- Battery reverse polarity

Accessories

- IPN Remote - remote display for monitoring one or more controllers
- IPN ProRemote - remote display w/ programming and battery monitoring
- UCM - monitor and program controllers online
- External battery temperature sensor

Specifications:	SB1524iX @12V	SB1524iX @24V
Maximum PV Power:	270W with 36-cell PV panel ^(*) 200W with 60/72-cell PV panel ^(*)	400W with 72-cell PV panel ^(*)
Rated Battery (Output) Current:	20A with 36-cell PV panel ^(*) 15A with 60/72-cell PV panel ^(*)	15A with 72-cell PV panel ^(*)
Conversion Efficiency:	97% (typical @28V / 12A output)	
Power Consumption:	0.20W (typical standby)	
Recommended Max Panel Voc at STC:	45.6V (Max Panel Input 57V)	
Charge Profile:	Multi-Stage plus Manual or Automatic Equalization	
Absorption Voltage:	14.2V ⁽¹⁾	28.4V ⁽¹⁾
Float Voltage:	13.2V ⁽¹⁾	26.4V ⁽¹⁾
Equalization Voltage (if enabled):	15.2V ⁽¹⁾	30.4V ⁽¹⁾
Auxiliary Output (option A, B, or C):	A) Auxiliary Battery Charge 2A (2nd battery) B) Load Control C) Dusk-to-Dawn (by IPN ProRemote)	
Load (LVD) Disconnect/Reconnect Voltage:	11.5V/12.6V ⁽¹⁾	23.0V/25.2V ⁽¹⁾
Maximum Auxiliary Output current (option B or C):	20A	15A
Display LCD:	optional IPN ProRemote or IPN Remote	
Temperature Compensation (by optional Battery Temperature Sensor):	-5.00mV/°C/cell correct factor (Range 0.00 to -8.00mV/°C/cell) ⁽¹⁾	
Operating Temperature:	-40°C - 50°C	
Maximum Full Power Ambient:	50°C	
Environmental Protection:	IP20	
Connection:	Battery and PV terminals #20-10 AWG (tightened 9 in-lb, 1 nm) Auxiliary Output terminals #20-10 AWG (tightened 9 in-lb, 1 nm) IPN Network terminals #24-14 AWG wire (tightened 2.1 in-lb, 0.24 nm)	
Weight:	1.15 lb. (525 g)	
Dimensions:	5.3 x 5.3 x 2.75" (13.5 x 13.5 x 6.9 cm)	
Warranty:	5 years (Tech. Bulletin #100218)	
Certifications:		

^(*) 36-cell panels are typically referred to as "12V panels" providing Vmp/Voc of -18V/22V at STC, 60-cell panels refers to "20V panels" (Vmp/Voc -30V/37V), 72-cell panels refers to "24V panels" (Vmp/Voc -36V/44V). ⁽¹⁾ Factory default voltages unless programmed with an IPN ProRemote display or UCM.

