BLUE SKY ENERGY

SB1524iX | SB1524iX-Li

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

Marine | RV | PV Street Lighting | Solar Traffic Signal

The SB1524iX(-Li) features our patented MPPT technology, a second auxiliary battery output and IPN connector for remote display or Bluetooth adapter, is ideal for RVs and Marine applications. The SB1524 can manage a 20A @12V (or 15A @24V) DC Load Output for small off-grid electrification applications and with an IPN ProRemote, BT Connect, or UCM, the DC Load Output can be programmed with its dusk-to-dawn load control for PV street lighting. The **SB1524iX** is programmed for Lead Acid batteries and the **SB1524iX-Li** is programmed for charging $LiFePO_4$ batteries. Both versions can be programmed with a remote display, UCM, or BT Connect for a custom charge profile for any type of batteries.

Product Features

- Patented MPPT technology, 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)
- Surface or Flush Wall Mounting
- Charge a second battery or control a DC load output with Low Voltage Disconnect (LVD)
- Program for Dusk-to-Dawn Lighting Control with the IPN ProRemote, UCM, or BT Connect
- Battery Temperature Compensation (with external battery temp. sensor)
- Programmable for Lithium batteries with the IPN ProRemote, ProTouch, or BT Connect
- IPN Networks up to 8 Blue Sky Energy controllers for higher power (Master-Followers)

Display

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

Elctronic Protections

- PV array overload and reverse polarity
- Battery reverse polarity

Accessories

- IPN Remote - remote display for monitoring
- IPN ProRemote - remote display w/ programming and battery monitoring
- ProTouch - touchscreen remote display for monitoring and basic programming
- BT Connect - Bluetooth adapter for programming and battery monitoring
- UCM - gateway for monitoring and programming via the Internet
- External battery temperature sensor

97% peak efficiency •

Fast MPP Tracking •

Excellent performance •

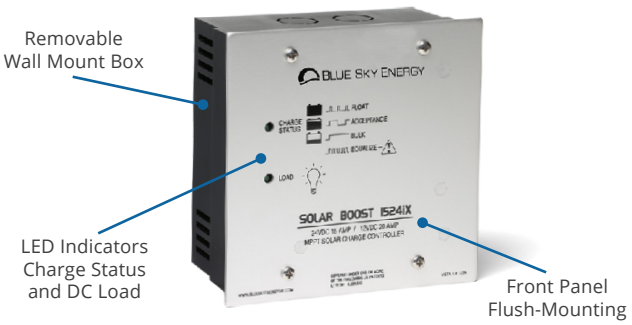
IPN Network compatible •

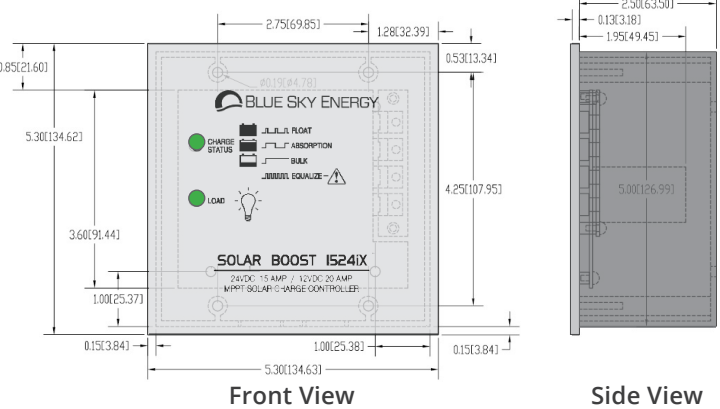
Great for PV Street Lighting •

Specifications:

	SB1524 @12V	SB1524 @24V
Maximum PV Power:	270 W with 36-cell PV panel (1) 200 W with 60/72-cell PV panel (1)	400 W with 72-cell PV panel (1)
Rated Battery (Output) Current:	20 A with 36-cell PV panel (1) 15 A with 60/72-cell PV panel (1)	15 A with 72-cell PV panel (1)
Conversion Efficiency:	97% (typical @28V / 12 A output)	
Power Consumption:	0.20 W (typical standby)	
Recommended Max Panel Voc at STC:	45.6 V (Max Panel Input 57 V)	
Min. Battery Voltage for Operation:	9 V	
Auxiliary Output (option A, B, or C):	A) Auxiliary Battery Charge 2A (2nd battery) B) DC Load Control with LVD C) Dusk-to-Dawn (by IPN ProRemote, UCM, BT Connect)	
Maximum Auxiliary Output current (option B or C):	20 A	15 A
Load (LVD) Disconnect/Reconnect Voltage:	11.5 V / 12.6 V (iX version) (2) 11.0 V / 12.0 V (iX-Li version) (2)	23.0 V / 25.2 V (iX version) (2) 22.0 V / 24.0 V (iX-Li version) (2)
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)	
Operating Temperature:	-40°C – 50°C	
Maximum Full Power Ambient:	50 °C	
Environmental Protection:	IP20	
Dimensions and Weight:	5.3 x 5.3 x 2.5" (13.5 x 13.5 x 6.35 cm) ; 1.15 lb. (525 g)	
Warranty:	5 years	
Certifications:	CE, RoHS, FCC	
	SB1524iX	
Battery Chemistry:	12 V Lead Acid	24 V Lead Acid
Absorption Voltage:	14.2V (2)	28.4V (2)
Float Voltage:	13.2V (2)	26.4V (2)
Equalization Voltage (if enabled):	15.2V (2)	30.4V (2)
Temperature Compensation (by optional Battery Temp. Sensor)	-5.00 mV/°C/cell correct factor (Range 0.00 to -8.00 mV/°C/cell) (2)	
	SB1524iX-Li	
Battery Chemistry	4S $LiFePO_4$	8S $LiFePO_4$
Absorption Voltage	14.4 V (2)	28.8 V (2)
Absorption Time	0.5 Hr (2)	0.5 Hr (2)
Float Voltage	13.6 V (2)	27.2 V (2)
Temperature Compensation	Disabled	

(1) 36-cell panels are typically referred to as "12 V panels" providing V_{mp}/V_{oc} of ~18 V / 22 V at STC, 60-cell panels refers to "20 V panels" (V_{mp}/V_{oc} ~30 V / 37 V), 72-cell panels refers to "24 V panels" (V_{mp}/V_{oc} ~36 V / 44 V). (2) Factory default voltages unless programmed with an IPN ProRemote, ProTouch, BT Connect, or UCM.





Front View Side View

BLUE SKY ENERGY BY SUNFORGE

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