

# SB2512i(X)-HV | SB2512iX-HV-Li

## 25A/20A, @12V, MPPT



### Marine | RV | PV Street Lighting | Solar Traffic Signal

The SB2512iX-HV(-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. The SB2512iX-HV(-Li), can manage a 25A @12V DC Load Output for medium size 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 **SB2512iX-HV**, is programmed for Lead Acid batteries while the **SB2512iX-HV-Li** is programmed for charging a 4S LiFePO4 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 charges batteries faster
- Surface or Flush Wall Mounting
- Longer battery life with advanced multistage charging (FLA, AGM, GEL, LFP)
- 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, UCM 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)

## Electronic 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

96% peak efficiency •

Fast MPP Tracking •

Excellent performance •

IPN Network compatible •

Great for Boats and RV's •



Specifications:	SB2512i-HV (Discontinued)	SB2512iX-HV	SB2512iX-HV-Li
Maximum PV Power:		340 W with 36-cell PV panel <sup>(1)</sup> 270 W with 60-cell PV panel <sup>(1)</sup>	
Rated Battery (Output) Current:		25 A with 36-cell PV panel <sup>(1)</sup> 20 A with 60-cell PV panel <sup>(1)</sup>	
Min. Battery Voltage for Operation:		9 V	
Conversion Efficiency:		96% (typical @14V / 20A output)	
Power Consumption:		0.30 W (typical standby)	
Recommended Max Panel Voc at STC:		40 V (Max Panel Input 50 V)	
Display:		w/ IPN ProRemote, ProTouch, or IPN Remote (optional)	
Charge Profile:		Multi-Stage charging <sup>(2)</sup>	
Battery Chemistry:		Lead Acid	4S LiFePO <sub>4</sub>
Absorption Voltage:		14.2V <sup>(2)</sup>	14.4V <sup>(2)</sup>
Absorption Time:		2.0 Hr <sup>(2)</sup>	0.5 Hr <sup>(2)</sup>
Float Voltage:		13.2V <sup>(2)</sup>	13.6 V <sup>(2)</sup>
Equalization Voltage (if enabled):	--	15.2V <sup>(2)</sup>	Disabled
Auxiliary Output (option A, B, or C):	--	A) Auxiliary Battery Charge 2 A B) DC Load Control with LVD C) Dusk-to-Dawn (IPN ProRemote, UCM or BT Connect)	
Load (LVD) Disconnect/Reconnect Voltage:	--	11.5 V / 12.6 V <sup>(2)</sup>	11.0 V / 12.0 V <sup>(2)</sup>
Maximum Auxiliary Output current (option B or C):	--	25 A	25 A
Temperature Compensation (by optional Battery Temperature Sensor):	--	-5.00 mV/°C/cell correct factor (Range 0.00 to -8.00 mV/°C/cell) <sup>(2)</sup>	Disabled
Operating Temperature:		-40°C - 45°C	
Maximum Full Power Ambient:		45 °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)	
Dimensions and Weight:		5.3 x 5.3 x 2.5" (13.5 x 13.5 x 6.35 cm) ; 0.87 lb. (395 g)	
Warranty:		5 years	
Certifications:		CE, RoHS, FCC	

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

