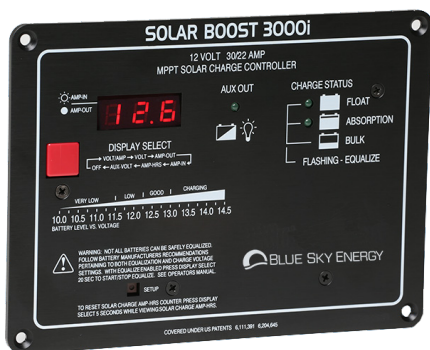


SB3000i

30A/22A, @12V, MPPT



97% peak efficiency •

Fast MPP Tracking •

Excellent performance •

IPN Network compatible •

Fully Programmable •



Marine | RV | Industrial | PV Street Lighting

Compact, reliable, and fully programmable! The SB3000i, featuring our patented MPPT technology, is ideal for RVs and Marine applications with a second battery output and IPN connection for remote display and networking. This controller can be programmed from its onboard display or in conjunction with an IPN ProRemote, ProTouch, or BT Connect. This gives maximum flexibility when operating PV street lighting or using for smallscale offgrid electrification. Compatible with FLA, AGM, Gel, and Lithium batteries. 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.

Product Features

- Patented MPPT technology charges batteries faster
- Flush-Mounting (Surface wall mounting with optional metal box)
- Full monitoring and programming via its onboard display
- Longer battery life with advanced multi-stage charging (FLA, AGM, GEL) or 2-stage (Lithium)
- Charge a second battery or control a DC load output with Low Voltage Disconnect (LVD)
- Programmable for Dusk-to-Dawn Lighting Control via onboard display
- Battery Temperature Compensation (with external battery temp. sensor)
- Networks with other Blue Sky Energy controllers for higher power (SB3000i only master)

Display

- LEDs for charge and DC load output status
- LED display for battery voltage, charge current, power input and more...
- Remote Display optional (IPN ProRemote, ProTouch, IPN Remote)

Electronic Protections

- PV array overload and reverse polarity
- Battery reverse polarity

Accessories

- IPN ProRemote - remote display w/ programming and battery monitoring
- ProTouch - touchscreen remote display for monitoring and basic programming
- UCM - gateway for monitoring and programming via the Internet
- BT Connect - Bluetooth adapter for programming and battery monitoring
- External battery temperature sensor
- Mounting Wall Box (720-0011-01)

Specifications:

SB3000i @12V

Maximum PV Power:	400 W with 36-cell PV panel (*) 290 W with 60-cell PV panel (*)
Rated Battery (Output) Current:	30 A with 36-cell PV panel (*) 22 A with 60-cell PV panel (*)
Conversion Efficiency:	97% (typical @28V / 24 A output)
Power Consumption:	0.36 W (typical standby)
Recommended Max Panel Voc at STC:	40V (Max Panel Input 50 V)
Charge Profile:	Multi-Stage plus Manual or Automatic Equalization
Absorption Voltage:	14.4V ⁽¹⁾
Float Voltage:	13.2V ⁽¹⁾
Equalization Voltage (if enabled):	15.2V ⁽¹⁾
Min. Battery Voltage for Operation:	9 V
Auxiliary Output (option A, B, or C):	A) Auxiliary Battery Charge 2 A (2nd battery) B) DC Load Control with LVD C) Dusk-to-Dawn and PWM dimming ⁽¹⁾
Load (LVD) Disconnect/Reconnect Voltage:	11.5 V / 12.6 V ⁽¹⁾
Maximum Auxiliary Output current (option B or C):	20 A
Display:	Yes
Temperature Compensation \by optional Battery Temperature Sensor):	-5.00m V/°C/cell correct factor (Range 0.00 to -8.00 mV/°C/cell) ⁽¹⁾
Operating Temperature:	-40°C – 45°C
Maximum Full Power Ambient:	45 °C
Environmental Protection:	IP20
Connection:	Battery and PV terminals #16-8 AWG (tightened 15.9 in-lb, 1.80 nm) Auxiliary Output terminals #26-12 AWG (tightened 6 in-lb, 0.67 nm) IPN Network terminals #26-14 AWG wire (tightened 2.1 in-lb, 0.24 nm)
Weight:	1.08 lb. (493 g)
Dimensions:	6.35 x 4.6 x 2.2" (16.1 x 11.7 x 5.6 cm)
Warranty:	5 years
Certifications:	CE, RoHS, FCC

(*) 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).

(1) Factory default voltages unless programmed via its onboard display or with an IPN ProRemote display, BT Connect, ProTouch, or UCM.

