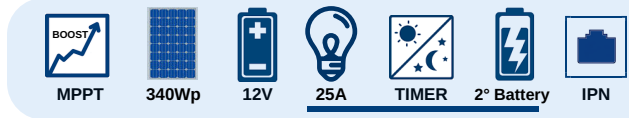


SOLAR BOOST SB2512i-HV SOLAR BOOST SB2512iX-HV



Multi-Stage MPPT Solar Charge Controller

Meet the SB2512i-HV, our most affordable MPPT controller option available for off-grid electrification or use with off-grid inverters (for AC load). The SB2512iX-HV's additional features, such as an auxiliary output for charging a second battery, make it suitable for many applications, including RVs and Marine. The SB2512iX-HV can manage a 25A load output for small off-grid electrification applications. When programmed with an IPN Pro Remote or UCM, it will provide dusk-to-dawn load control for PV street lighting. It is compatible with FLA, AGM, and Gel batteries, and Lithium batteries when programmed by an IPN ProRemote 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.



Product features

- Patented MPPT technology charges batteries faster
- Fuller charges and longer battery life with advanced multi-stage charging (FLA,AGM,GEL)
- **Additional features for SB2512iX-HV:**
- 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 Pro Remote (click icon for timer programming)
- Battery Temperature Compensation (with external battery temperature sensor)
- Protects battery from deep discharge (via load output)
- Automatically reconnects load when power is available
- Networks with other Blue Sky controllers for higher power and better charging

Display

- LED display status charge
- Remote Display optional
- **Additional features for SB2512iX-HV:**
- LED display status DC load output

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
- **Additional features for SB2512iX-HV:**
- External battery temperature sensor

Warranty

- Full 5 Year Limited Warranty (Tech. Bulletin #100218)



| SB2512i-HV(iX-HV) | | |
|--|---|--|
| Specifications | SB2512i-HV | SB2512iX-HV |
| Battery Voltage | @12V | |
| PV Input Current | 25A with 36 cell PV ; 20A with 60 cell PV | |
| Maximum PV Power | 340W with 36 cell PV ; 270W with 60 cell PV | |
| Conversion Efficiency | 96% typical @ 14V / 20A Output | |
| Power Consumption | 0.30W typical standby | |
| PV Input Voltage (Voc) | 40V maximum at STC | |
| Battery Charging | | |
| Charge Algorithm | 3-Stage Bulk/Absorption/Float | |
| Absorption Voltage | 14.2V | |
| Float Voltage | 13.2V | |
| Equalization Voltage | --- | 15.2V Automatic fixed at 2h each 30 days |
| DC Output | | |
| Auxiliary Output | --- | Aux. Batt. Charge 2A Load control 25A Dusk-to-Dawn Control |
| Load Control | --- | LVR 12.6V LVD 11.5V |
| Operation Conditions | | |
| Temp. Compensation (by optional temp sensor) | --- | -5.00 mV/°C/cell correction factor -60 to +80°C |
| Environmental | -40 to + 45°C | |
| Mechanical | | |
| Degree of Protection | IP 20 | |
| Dimension (X,Y,Z) | (5.3, 5.3, 2.5)" (13.5, 13.5, 6.35)cm | |
| Weight | 0.87lb (395g) | |

