Blue Sky Energy

Industry Leaders In MPPT Solar Charge Controllers

Solar Boost™ charge controllers are deployed world wide in battery based off-grid systems. Used in a wide variety of applications from industrial, telecom, pumping and traffic signals, to RV, marine, homes and lighting, Solar Boost charge controllers have earned a solid reputation for performance, proven reliability and consistent quality at affordable prices.

Blue Sky Energy has been a pioneer in MPPT technology and offers a wide range of products to provide you with the best match of performance and price for each application. The recently introduced Solar Boost 3024iL DUO combines solar MPPT control with Diversion control for Hydro/Wind in the same product. Our latest introductions include the 24V/15A Solar Boost 1524iX, and the Universal Communication Module which provides Modbus, Modbus/IP and worldwide access via the Internet to Blue Sky Energy's IPN network based charge controllers.

For more information visit our web site at blueskyenergyinc.com.

Pump Systems

Combining Wind & Solar

Marine & Recreational

Telcommunications

Solar Lighting

QUALITY....RELIABILITY....BLUE SKY ENERGY, CHANGING THE WAY SOLAR IS USED EVERYDAY

Blue Sky ENERGY

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Selector guide – Solar Boost™ Maximum Power Point Tracking (MPPT) Solar Charge Controllers & Accessories

Charge Controllers	Nominal Battery Voltage	Nominal PV Input Voltage①	Maximum PV Power② at Spec. Vbat	Maximum Output Current	Charge Algorithm	Digital Display	Remote Display Option	Load Control	Lighting Control	Agency Approvals	Typical Applications
Solar Boost 2000E	12V	12V	350W	25A	2-stage, plus Equalization	Yes	No	No	No	—	Small to medium 12V systems; RV's, boats, small off grid cabins & small industrial
Solar Boost 50L	12/24V	12/24V	700W (12V) 1400W (24V)	50A	3-stage, plus Equalization	Optional	Yes	No	No	ETL/cETL CE, FCC	Medium to large 12/24V systems; larger RV's & Boats, on or off grid homes & larger industrial
Solar Boost 3048L	24/48V	24/48V	800W (24V) 1600W (48V)	30A	3-stage, plus Equalization	Optional	Yes	No	No	ETL/cETL CE, FCC	Medium to large 24/48V systems; on or off grid homes, larger industrial & telecomm
Solar Boost 3024iL	12/24V	12/24V	540W (12V) 800W (24V)	40A (12V) 30A (24V)	3-stage, plus Equalization	Optional	Yes	20A Voltage or AH based	Post-dusk & Pre-dawn timers	ETL/cETL CE, FCC	Medium 12/24V systems; RV's, boats, cabins & industrial. Aux. output for load control or 2nd battery charge. IPN™ network coordinates multiple units for larger systems.
Solar Boost 1524iX	12/24V	12/24V	270W (12V) 400W (24V)	20A (12V) 15A (24V)	3-stage, plus Equalization	No	Yes	20A / 15A Voltage or AH based	Post-dusk & Pre-dawn timers	—	Smaller 12/24V systems; RV's, boats, cabins & industrial. Aux. output for load control or 2nd battery charge. IPN™ network coordinates multiple units for larger systems.
Solar Boost 2512i	12V	12V	350W	25A	3-stage	No	Yes	No	No	—	Small to medium 12V systems; RV's, boats, cabins & industrial. Includes limited IPN network interface to support IPN displays.
Solar Boost 2512iX	12V	12V	350W	25A	3-stage, plus Equalization	No	Yes	25A Voltage or AH based	Post-dusk & Pre-dawn timers	—	Small to medium 12V systems; RV's, boats, cabins & industrial. Aux. output for load control or 2nd battery charge. IPN™ network coordinates multiple units for larger systems.

① PV V_{OC} at STC should not exceed controller maximum PV voltage rating ÷1.25. See Typical 12V module provides V_{MP}≈18V & V_{OC}≈22V at STC. Technical Bulletins 100214.
② Approximate maximum PV power handling capability after applying National Electrical Code (NEC) 1.25 current derating. See Technical Bulletin 100214

Options/Accessories	Compatible Charge Controller	Approvals	Typical Applications and Features
SB50 Display	SB50L SB3048L, SB6024HL	ETL/cETL CE, FCC	Available installed in product enclosure (append 'D' to p/n) and/or as a remote charge control display. Provides simple display of Input/Output current, Battery Voltage and Charge System Status.
IPN-ProRemote	SB3024i(L), SB2512i(X) SB1524iX & future IPN based charge controllers	ETL/cETL CE, FCC	Full featured remote display combines both charge controller monitoring/setup and complete battery system monitoring. Includes highly accurate "fuel gauge" type battery capacity display. The IPN-ProRemote can monitor up to 8 IPN based charge controllers.
IPN-Remote	SB3024i(L), SB2512i(X) SB1524iX & future IPN based charge controllers	ETL/cETL CE, FCC	Low cost remote display provides a simple Battery Voltage and Solar Charge Current display for IPN base charge controllers. The IPN-Remote can monitor up to 8 charge controllers on the IPN network.
DUO-Option	SB3024i(L)	ETL/cETL CE, FCC	Converts 20 amp auxiliary output into separate diversion type charge controller. Provides both diversion control for wind//hydroelectric, and PV MPPT in the same unit. Configurable for minimum or maximum possible power to the dump load. Available as factory option or field upgrade.
CBM4070	SB3024i(L), SB2512iX, SB1524iX	CE	External high current MOSFET switch Current Booster Module. Increases DC load current capability of SB3024i(L) and 2512iX to 70 amps for lighting or similar DC load applications. Increases SB3024i(L) DUO-Option diversion PWM current capability to 40 amps.
Battery Temp Sensor	All Solar Boost charge controllers	ETL/cETL CE, FCC	Allows charge controller to automatically adjust charge voltage setpoints based on measured battery temperature.
Universal Communication Module	SB3024i(L), SB2512i(X) SB1524iX & future IPN based charge controllers		Provides a gateway between the charge controller IPN network and standard communication interfaces including Modbus RTU via RS-485, Modbus I/P, and internet connectivity via embedded Ethernet HTTP web site and FTP data upload. Also provides 128 days of datalogging.

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