Blue Sky ENERGY

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

Charge Controllers	Nominal Battery Voltage	Nominal PV Input Voltage ①	Maximum PV Input power ②	Maximum Output Current	Charge Algorithm	Digital Display	Remote Display Capability	Typical Applications
Solar Boost 2000E	12V	12V	350W	25A	2-stage +Equalization	Yes	No	Small to medium 12V systems; RV's, boats, small off grid cabins, small industrial & agricultural
Solar Boost 50	12/24V	12/24V	1400W	50A	3-stage +Equalization	Optional	Yes	Medium to large 12/24V systems; larger RV's & Boats, medium to large on or off grid homes, larger industrial & agricultural
Solar Boost 3048	24/48V	24/48V	1600W	30A	3-stage +Equalization	Optional	Yes	Large 24/48V systems; large on or off grid homes, larger industrial & agricultural, 48V output for telecommunications
Solar Boost 6024H	12/24V	36/48V	1600W	60A	3-stage +Equalization	Optional	Yes	Large 12/24V systems where higher 36/48V input is desired to reduce wire size/cost; large on or off grid homes, larger industrial and agricultural
Solar Boost 3024i	12/24V	12/24V	800W	30A	3-stage +Equalization	Optional	Yes	Medium to large 12/24V systems; larger RV's & Boats, larger on or off grid cabins or homes, larger industrial and agricultural. Includes auxiliary output for 20A load control or 2nd battery charge, and IPN™ network interface to easily combine multiple units for very large systems.
Solar Boost 2512i	12V	12V	350W	25A	3-stage	No	Yes	Small to medium 12V systems; RV's, Boats, small off grid cabins, small industrial and agricultural. Includes limited IPN network interface to support IPN displays only.
Solar Boost 2512iX	12V	12V	350W	25A	3-stage +Equalization	No	Yes	Small to medium 12V systems; RV's, Boats, small off grid cabins, industrial and agricultural. Includes auxiliary output for 25A load control or 2nd battery charge, and IPN™ network interface to easily combine multiple units for larger systems.

① PV voltage must be greater than or equal to battery voltage. Cannot charge higher voltage battery with lower voltage PV. Typical 12V PV provides V_{MP}=17V & V_{OC}=21V at STC. Maximum PV V_{OC} at STC should be less than controller rating ÷1.25. See operators manual.

② Approximate maximum PV power handling capability at higher nominal battery voltage after accounting for 1.25 NEC derating. Power handling capability is ½ at lower battery voltage. See operators manual and Technical Bulletin 100210 for proper sizing based on PV module I_{SC}.

Charge Controller Displays	Compatible Charge Controller	Typical Applications and Features
SB50 Display	SB50, 3048, 6024H	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, 2512i, 2512iX & future IPN based charge controllers	This easy to use full featured system monitor makes living on a renewable energy system a breeze. The IPN-ProRemote display combines the best in both charge control monitoring and complete battery system monitoring. It includes a variety of easy to use amp-hour counters, data capture functions, and a highly accurate "fuel gauge" remaining battery capacity display that learns from use to continuously improve accuracy. The IPN-ProRemote can monitor up to 8 IPN based charge controllers.
IPN-Remote	SB3024i, 2512i, 2512iX & future IPN based charge controllers	The very low cost IPN-Remote 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.

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