



Sunny Boy 2500



Sunny Boy Control Unit

SMA America

Sunny Boy

The Sunny Boy line of inverters are applicable for 700 W to 1 MW of PV grid tie power with a conversion efficiency > 93%. The basic principle of the Sunny Boy inverters is that one inverter is used per string of modules; where typical configurations use several strings of modules in parallel to achieve rated power, the Sunny Boy uses modules wired in series at a high DC voltage. String inverters are also easily paralleled to increase energy efficiency. The result is increased efficiency and great savings in wire costs, eliminating the losses due to mismatching and the need for a combiner box, blocking diodes, and high current DC breakers or fuses. UL listed and CE certified. Five-year warranty.

If you need monitoring, nothing could give you more options than the Sunny Boy inverter and control unit. The inverter can be purchased with a two line LCD display with backlight that will give you all the relevant PV data (model SBD). The inverter also automatically reads real time data, at a 132.45kHz frequency, over the 60Hz sinewave. This is called power line transmission, and it means no additional cabling needed. To input this data into a PC, buy the SWR-COM socket modem that plugs into any outlet and broadcasts the power line transmission to a PC com port. Supply voltage, 0-260V, 50-60Hz.

Data logging requires purchasing one of the three control units, the Sunny Boy Control Light, the Sunny Boy Control, or the Sunny Boy Control Plus. The control units can receive data via the power line transmission, RS232 or RS485 connection. The control units will allow you to store data from 1 to 50 inverters, monitor the data and, via an external customer supplied modem, send data or fault alarms to an email, a FAX, or a pager. LCD display. Ambient temperature 0°C to 40°C.

Software to monitor either the inverter power line transmission output or the control unit's output is provided free of charge. The software provides an excellent GUI for monitoring small, 5-module systems to large-scale power stations.

Model	Efficiency	DC Voltage Input	Continuous Power	AC Volts Output	Dimensions	Weight	MSRP
SWR 2500U	93%	275-550 V	2500 W	240 VAC	8.4" x 11.6" x 17"	70.5 lbs	\$2,750.00
SWR 2500U SBD (with LCD display)	93%	275-550 V	2500 W	240 VAC	8.4" x 11.6" x 17"	70.5 lbs	\$2,950.00
SWR 2500U SBD 208 (with LCD display, for connection to 3 phase utility systems)	93%	275-550 V	2100 W	208 VAC	8.4" x 11.6" x 17"	70.5 lbs	\$3,050.00
SWR 1800U	93%	150-400 V	1800 W	120 VAC	8.4" x 11.6" x 17"	59.5 lbs	\$2,350.00
SWR 1800U SBD (with LCD display)	93%	150-400 V	1800 W	120 VAC	8.4" x 11.6" x 17"	59.5 lbs	\$2,550.00

Communication Accessory Equipment

SBD	2 line LCD display with back light for Sunny Boy inverters	\$289.00
SBSL	Cover lid for Sunny Boy inverters	\$139.00
SB RS-232-N	RS-232 Module for use in Sunny Boy inverters	\$179.00
SB RS-485-N	RS-485 Module for use in Sunny Boy inverters	\$179.00
SB 232 SERV	Sunny Boy PC Service cable	\$229.00
SB NLM-N	Power Line Carrier Module for use in Sunny Boy Inverters	\$159.00
XPCP	Power line carrier phase coupler for 120/208/240 VAC circuits	\$79.00
PZZ001	Power line carrier coupler for 208/240 VAC 3-phase circuits	\$109.00
XPPF	Plug-in filter for 120 VAC wall sockets, 5A	\$62.00
XPF	In-line noise filter for 120/240 VAC circuits	\$123.00

Monitoring and Data Collection Equipment

SBC Light	Sunny Boy Control Light	\$669.00
SBC	Sunny Boy Control	\$1,125.00
SBC-485	Sunny Boy Control with RS-485 communication card	\$1,295.00
SBC Plus	Sunny Boy Control Plus with 8 analog inputs and additional port	\$2,250.00
SBC Plus-485	Sunny Boy Control Plus w/ RS-485 communication card	\$2,395.00
RS232 Cable	RS232 Communication Cable, 15 meter	\$110.00
RS485 Cable	RS485 Cable Communication Cable, 15 meter	\$110.00