

Sunny Boy 2500U



The leading grid-tied photovoltaic inverters in Europe and America

UL 1741 Listed
for grid
interactive
inverters

5-year
comprehensive
warranty

Rugged NEMA
4X stainless steel
outdoor
enclosure
standard

Exceptional
reliability
and energy
capture ratio

Easy to install
three-point
mounting system

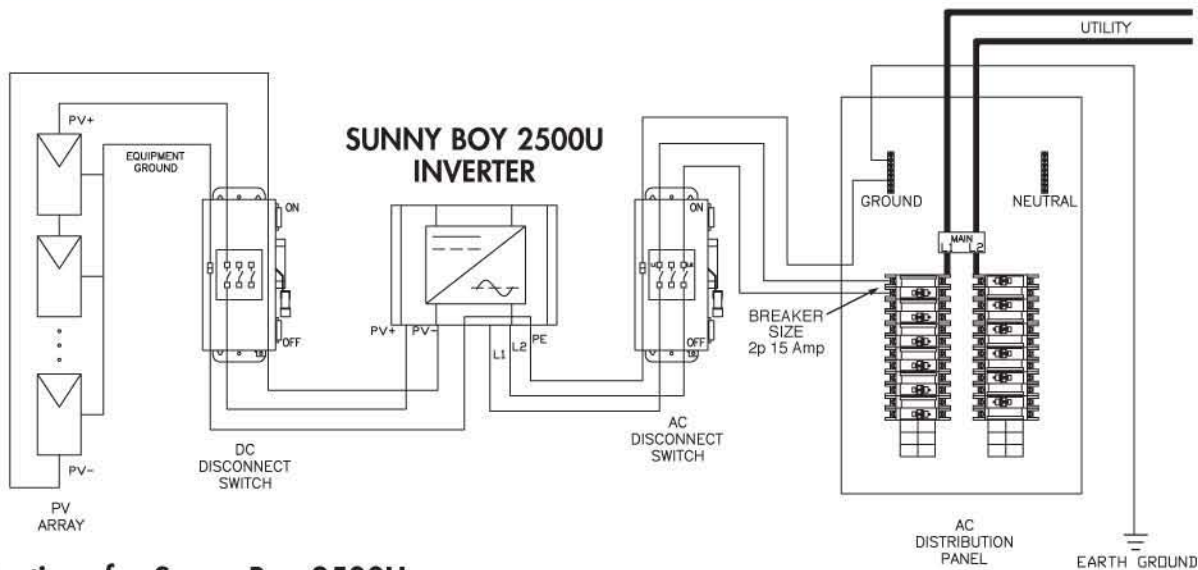
Comprehensive
communications
and data
collection
options

SMA's Modular
String inverter
design is
expandable to
virtually any
system size



Shown with optional display

The SMA Sunny Boy inverter, the most popular grid-tied photovoltaic inverter in Europe, is now UL 1741 Listed and available in North America. Sunny Boy's extensive track record in some of the world's most demanding markets has made it the favorite among PV professionals everywhere. Over 200,000 Sunny Boy inverters have been installed worldwide. Having achieved the highest reliability of any PV inverter, Sunny Boy gained immediate acceptance in the US and Canadian markets. Superior design, rock-solid German engineering, and exceptional real-world efficiency have made Sunny Boy the top choice for American solar designers. These professionals know that Sunny Boy is a grid-tied inverter that they can recommend without reservation and install with confidence.



Specifications for Sunny Boy 2500U

Inverter Technology	Real sine-wave, current source, high frequency PWM
AC Input Voltage	213–262 (240 V AC) or 183–229 (208 V AC)
AC Input Frequency	59.3–60.5 (60 Hz), 50 Hz also available
DC Input Voltage	250–600 V DC
Peak Power Tracking Voltage	234–550 V DC (at 240 V AC)
PV Start Voltage	300 V DC
Minimum DC Input Voltage	207–256 V dependent on available line voltage
Maximum Array Input Power (DC @ STC)	3000W (240 AC), 2600W (208 V AC)
Maximum AC Power Output	2500 W (240 V AC), 2200 W (208 V AC)
Current THD	Less than 4%
Power Factor	Unity
Peak Inverter Efficiency	94.1%
Cooling	Convection cooling (no fan)*
Maximum AC Output Current	12.0 A
Maximum DC Input Current	13 A
DC Voltage Ripple	Less than 5%
Power Consumption	0 W nighttime, < 0.25 W standby
Ambient Temperature Rating	45 °C
Enclosure	NEMA 4X stainless steel
Size	17.1 W x 11.6 H x 8.4 D inches (434 W x 295 H x 214 D mm)
Weight	71 lbs (32 kg)
Compliance	United States: UL 1741, E210376, UL 1998, IEEE 519, IEEE 929 ANSI C62.41 C1 & C3, FCC part 15 A&B International: DIN EN50082 Part 1, 61000-32, 50081, 50014, 600055 Part 2, 55011 Group 1 Class B, 50178, 60146 Part 1-1

ALL SPECS MAY CHANGE WITHOUT NOTICE

Sunny Boy's unsurpassed reliability and efficiency is the result of SMA's manufacturing philosophy that combines simple design with robust execution. SMA's state-of-the-art maximum power point tracking performance results in greater real-world energy capture than any other grid-tied PV inverter. Sunny Boy's safety and reliability record is also exceptional due, in part, to the inverter's redundant grid monitoring and built-in ground fault detection and interruption protection. The inverter's IGBT power stage generates a nearly perfect sine wave with the lowest harmonic distortion in the industry and meets ultra-strict FCC EMC standards. SMA's unique String Inverter technology makes future system expansion simple. SMA advanced communication options are available to satisfy almost any application.

*Optional external fan (Sunny Breeze) available

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**Solar Today...
Energy Tomorrow**

