Sunny Boy 2500U

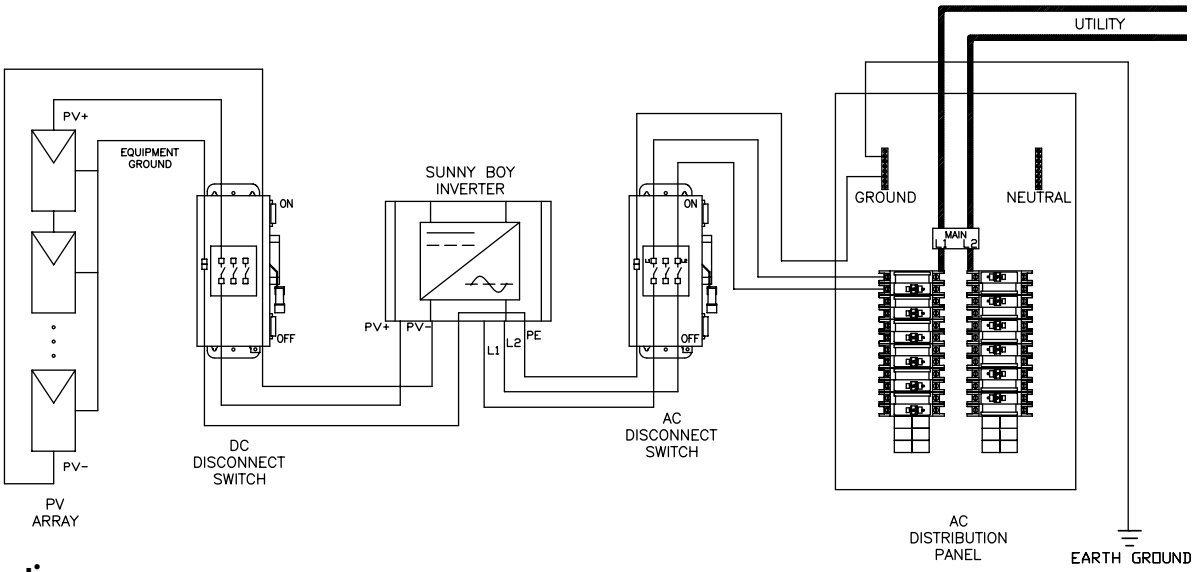
The leading grid-tied photovoltaic inverters in Europe and America

- *UL 1741 Listed for grid interactive inverters*
- *5-year comprehensive warranty standard*
- *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*

UL® LISTED 1741, 1998

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 a favorite among PV professionals everywhere. Over 80,000 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

Inverter Technology	Real sine-wave, current source, high frequency PWM
AC Input Voltage	211–264 (240 V AC) or 183–229 (208 V AC)
AC Input Frequency	59.3–60–60.6 (60 Hz), 50 Hz also
DC Input Voltage	250–600 V DC
Peak Power Tracking Voltage	234–550 V DC (at 240 V AC)
Minimum DC Input Voltage	207–256 V dependent on available line voltage
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	93%–94.4%
Cooling	Convection cooling (no fan)
PV Start Voltage	300 Vdc
Maximum AC Current	10.4 A
Maximum DC Current	13 A
DC Voltage Ripple	Less than 5%
Power Consumption	0 W nighttime, < 0.25 W standby
Ambient Temperature	-25 °C ... +60 °C
Enclosure	NEMA 4X stainless steel
Size	434 W x 295 H x 214 D mm
Weight	32 kg
Certifications	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

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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 new ultra-strict FCC EMC standards. SMA's unique String Inverter technology makes future system expansion simple. Sunny Boy's optional power line carrier communication capability allows for extensive data acquisition from one or many inverters with no additional wiring. (Optional powerline modem required.) Other communication options are available to satisfy almost any application.

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Advanced System Technology for the Successful Photovoltaic Future