

SUNNY BOY 700U

- > Certified to the new UL 1741/IEEE 1547
- > 10-year comprehensive warranty standard
- > Rugged stainless steel enclosure
- > Exceptional reliability and energy capture ratio
- > Easy to install three-point mounting system
- > Comprehensive communications and data collection options
- > Modular string inverter design is easily expandable



SUNNY BOY 700U

The versatile choice for any system configuration

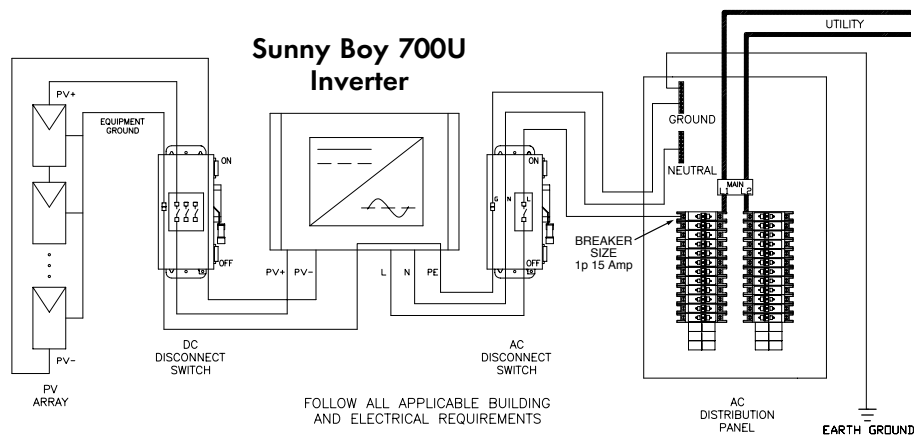
The SMA Sunny Boy 700U was SMA's first mass-produced string inverter and it continues to enjoy immense popularity in today's solar market. Its compact size and economical price make it ideal for starter or demonstration systems. It is also perfectly suited for adding a bit more power to an existing solar system. Its modular design makes expansion to almost any size system easy. Three different configurable input voltage ranges make the Sunny Boy 700U a versatile choice, whatever your system configuration.



Technical Data

SUNNY BOY 700U

	SB 700U 150 V _{DC}	SB 700U 200 V _{DC}	SB 700U 250 V _{DC}
Recommended Max. PV Power (Module STC)	575 W	750 W	875 W
Max. DC Voltage	150 V	200 V	250 V
Peak Power Tracking Voltage	77 - 120 V	100 - 160 V	125 - 200 V
DC Max. Input Current	7 A	7 A	7 A
DC Voltage Ripple	< 5%	< 5%	< 5%
Number of Fused String Inputs	2	2	2
PV Start Voltage	95 V	125 V	150 V
AC Nominal Power	460 W	600 W	700 W
AC Maximum Output Power	460 W	600 W	700 W
AC Maximum Output Current	4 A	6 A	7 A
AC Nominal Voltage / Range	106 - 132 V	106 - 132 V	106 - 132 V
AC Frequency / Range	60 Hz / 59.3 Hz - 60.5 Hz	60 Hz / 59.3 Hz - 60.5 Hz	60 Hz / 59.3 Hz - 60.5 Hz
Power Factor	0.99 @ nominal power	0.99 @ nominal power	0.99 @ nominal power
Peak Inverter Efficiency	93.6 %	93.6 %	93.6 %
CEC weighted Efficiency	91.5 %	91.5 %	91.5 %
Dimensions W x H x D in inches	12.7 x 12.6 x 7.1	12.7 x 12.6 x 7.1	12.7 x 12.6 x 7.1
Weight / Shipping Weight	51 lbs / 57 lbs	51 lbs / 57 lbs	51 lbs / 57 lbs
Ambient temperature range	- 13 to +113 °F	- 13 to +113 °F	- 13 to +113 °F
Power Consumption: standby / nighttime	< 4 W / 0.1 W	< 4 W / 0.1 W	< 4 W / 0.1 W
Topology	Low frequency transformer, true sinewave	Low frequency transformer, true sinewave	Low frequency transformer, true sinewave
Cooling Concept	Convection	Convection	Convection
Mounting Location Indoor / Outdoor (NEMA 3X)	●/●	●/●	●/●
LCD Display	●	●	●
Lid Color: aluminum / red / blue / yellow	-/●/○/○	-/●/○/○	-/●/○/○
Communication: RS485 / Wireless	○/○	○/○	○/○
Warranty: 10-year	●	●	●
Compliance: IEEE-929, IEEE-1547, UL 1741, UL 1998, FCC Part 15 A & B	●	●	●
Specifications for nominal conditions	● Included ○ Option – Not available		



Sunny Boy's unsurpassed reliability and efficiency are 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 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.