

# Sunny Central 125U



*The leading grid-tied photovoltaic inverters in Europe and America*



UL 1741 Listed for grid interactive inverters

5-year comprehensive warranty

Rugged and reliable German engineering

Powder coated stainless steel modular rack enclosure

AC and DC disconnects integral and included

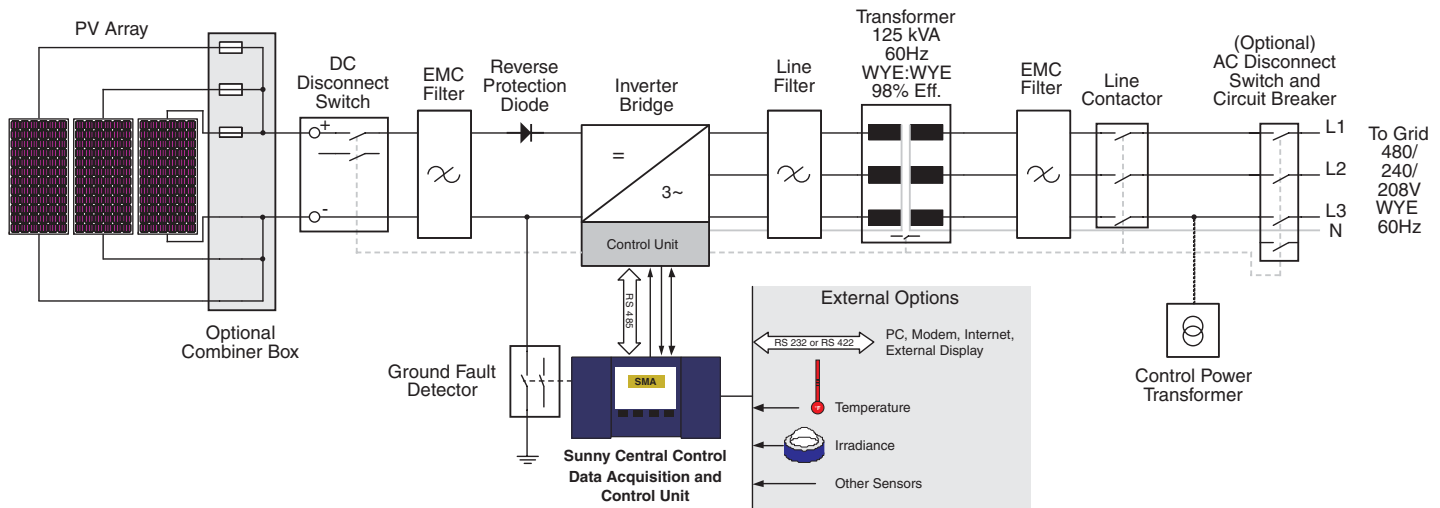
High efficiency isolation transformer **INSIDE THE BOX**

Sunny Boy Control Plus data acquisition system included as user interface

FCC part 15 and IEEE 519/929/1547 compliant

The Sunny Central is the culmination of many years experience with the Sunny Boy and European Sunny Central photovoltaic inverters. The design incorporates the same proven MPP tracker found in more than 250,000 fielded Sunny Boys. The high efficiency power stage produces a perfect AC sine wave that exceeds the latest FCC and IEEE requirements. The AC system isolation transformer is incorporated into the inverter cabinet and is disconnected whenever the inverter is not producing power. This eliminates the unnecessary and costly power losses found in other central PV inverters.





Robust system design allows full power operation with ambient temperatures up to 45°C. In higher ambient temperatures the inverter protects itself by reducing output power to safely regulate internal component temperatures. The enclosure is powder coated stainless steel and aluminum designed for long term outdoor installation in the harshest of environments. The power electronics are sealed in an isolated enclosure and kept cool with an air-to-air heat exchanger. The magnetics and isolation transformer are housed in a separate enclosure, thermally isolated from sensitive electronics. Integrated AC and DC switchgear isolates the Sunny Central from all power sources during periods of non-operation. The Sunny Central is equipped with a special version of the Sunny Boy Control Plus advanced data acquisition and control system. A 4-line display and keypad allow simple system configuration and monitoring. A wide variety of different interfaces for plant monitoring and remote configuration with a PC are also available. The Sunny Central incorporates the same communication protocol found in all SMA photovoltaic products. This allows the Sunny Central to be monitored and controlled with the same advanced software used with the Sunny Boy inverter family.

## Specifications

Inverter Technology	Real sine-wave, current source, high frequency PWM	PV Start Voltage	300V DC (adjustable)
AC Voltage	422-528 (480V AC Nom.) 212-264 (240V AC Nom.) 183-228 (208V AC Nom.)	Maximum DC Current	420A DC
AC Frequency	59.3 - 60.5 (60Hz)	DC Voltage Ripple	< 3% (peak to peak)
AC Output Current Limit	150A AC (480V AC Nom.) 300A AC (240V AC Nom.) 350A AC (208V AC Nom.)	Power Consumption	110W standby
DC Input Voltage	275 - 600V DC	Ambient Temperature Rating	-25° to +50°C
Peak Power Tracking Voltage	234 - 550V DC	Cooling	Temperature controlled forced fan cooling with optional sealed heat exchanger
Nominal AC Power Output	125kW (at 45°C)	Enclosure	Bridge: NEMA 4X Main: NEMA 3R Powder coated stainless steel and aluminum
Current THD	< 4%	Dimensions	93 W x 71 H x 24 D in.
Power Factor	Unity	Weight	3307 lbs (1500 kg)
Peak Inverter Efficiency	95.7% (fans off)	Compliance	IEEE 519, 929, 1547
CEC Weighted Efficiency	94% (480V AC Nom.) 93.5% (208V AC Nom.)	Certifications	UL 1741, FCC part 15

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