

Solaron® 333 kW PV Inverter

*333 kW PV inverter with high efficiency and reliability
for commercial, grid-tie photovoltaic installations*

Benefits

Increase system ROI
Reduce balance-of-system (BoS) costs
Expect high energy output in various outdoor environments
Monitor and control with flexible, integrated communications
Rely on worldwide service and support

Features

333 kW, transformerless, bipolar design
Single core engine—with the industry's smallest footprint and lightest weight in its class
97.5% CEC efficiency
Integrated IDS™ data monitoring and communications
Remote PV Tie (RPT™) accessory
Nearly three decades of experience in solar PV industry
24 x 7 x 365 global service and support

Awards

2009 recipient of ECN Magazine Reader's Choice Tech Award in the Energy Efficiency category
2009 Solar Awards winner in the Energy Usage category
2009 recipient of EE Times ACE Award in the Most Innovative Renewable Energy category
2008 recipient of Frost & Sullivan North American Product Innovation Award

The Solaron® 333 kW inverter is a truly advanced photovoltaic inverter for commercial grid-tie PV installations. With 97.5% CEC and 98.3% peak efficiencies, the 333 kW model offers integrators and independent power producers higher PV system ROI and better BoS optimization. Both local and remote communications and control are always available via the IDS™ integrated data system for greater performance insight. An optional Remote PV Tie (RPT™) accessory can cut your BoS costs even further, and our SafeGuard® program offers proactive service that goes far beyond the standard warranty.

Increase ROI with the Field-Proven Solaron® PV Inverter

The Solaron® 333 kW PV inverter, with its reliable design and upgraded features, is ideally suited for commercial PV installations. This field-proven bipolar, transformerless inverter helps you increase energy harvest and realize a substantial return on your solar technology investment.

With its robust controls, closed-loop cooling, and patented, soft-switching technology, the Solaron inverter repeatedly achieves breakthrough 97.5% CEC and 98.3% peak efficiencies. Higher total system efficiency means better cost-per-kWh over the life of your PV system.

Monitor and Control Your System

A secure, integrated LCD and keypad provide fundamental unit data on the exterior inverter cabinet. In addition, the on-board Integrated Data System (IDS™) software—included at no additional charge—provides Internet connectivity and collects and stores a wide range of real-time data, including detailed unit configuration monitoring and control information.

Connect to any Solaron inverter with your web browser to view a suite of built-in graphical representations

of minute-by-minute temperature, current, and voltage data—or gather data in Modbus® or CSV format to configure your own custom data and analysis reports.

Cut PV System Wiring Costs with Optional Remote PV Tie (RPT™) Accessory

With the addition of an AE Solaron Remote PV Tie (RPT™) accessory, you can further reduce BoS installation costs and achieve even higher system efficiency. The RPT accessory reduces large-diameter copper cables as well as I²R losses for up to 4% more power during operation. This eliminates common inverter installation obstacles and provides greater energy output per panel count.

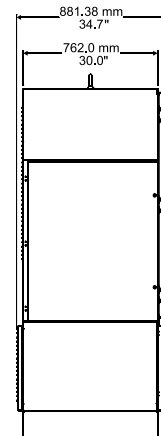
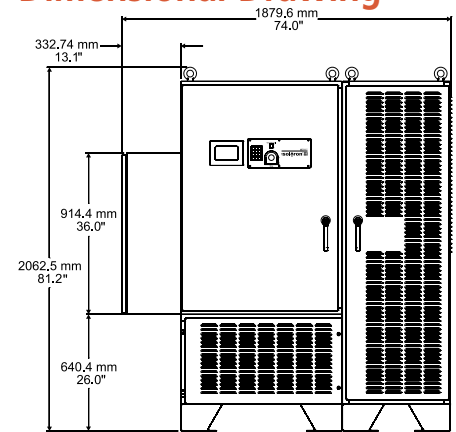
Rely on Our Worldwide Service and Support

If needed, AE's worldwide service organization is available 24 x 7 x 365 for support. We also offer proactive services, including extended warranties (up to 20 years) and SafeGuard® programs to help you maximize uptime and power generation. Our highly trained specialists can perform routine system queries, remote testing and diagnostics, and annual on-site inspections, all at a nominal cost.

Solaron® 333 kW Summary Specifications

Physical	
Dimensions	81.2" (H) x 74.0" (W) x 34.7" (D) 206.2 cm (H) x 188.0 cm (W) x 88.1 cm (D) Dimensions include cabinet handles and connection box.
Enclosure	Modular cabinet design with sturdy e-coat steel enclosures for transportability and strength
Weight	2045 lb (927.5 kg) unit weight 2344 lb (1063.2 kg) shipping weight
Environmental Rating	NEMA3R with NEMA4 (electronics)
Connector and Cable Specifications	
Output Power Connectors	2 x 500 MCM wires (Cu or Al)
Input Power Connectors	4 x 500 MCM wires (Cu or Al)
User Display	Front panel LCD and keypad; security lock-outs; emergency shutdown button
Electrical	
Output Power	
Max Power	333 kW at 480 VAC
Voltage Range	432 to 528 VAC, 3 Φ , 60 Hz, grounded Wye connection
Frequency	60 Hz
Line Power Factor	> 0.99 typical
AC Current Distortion/TDD	< 5%
AC Line Current	400 A typical 445 A max at 86°F (30°C) and low-line voltage; can be limited with field-adjustable settings 420 A max at 122°F (50°C)
Peak & CEC Efficiency	98.3% and 97.5%
Input Power	
Array Configuration	Separable bipolar using standard PV modules
Voltage	\pm 330 to \pm 600 VDC
DC MPP Current	500 ADC max
Open-Circuit Wake-Up Voltage	\pm 425 VDC default (configurable)
Standby Tare Losses	< 100 W
MPPT Window	\pm 330 to \pm 600 VDC
Reactive Power Range	+ 100 to -125 kVAR max
Factory-Installed Communication Interfaces	RS-232, RS-422, and RS-485 Ethernet PCMCIA
Data Storage	> 10 years / 2 GB SD card (upgradeable)
Environmental	
Ambient Operating Temperature	-4°F to 122°F (-20°C to 50°C) Cold weather option to -31°F (-35°C)
Storage Temperature	-22°F to 158°F (-30°C to 70°C)
Relative Operating Humidity	0% to 95% non-condensing
Atmospheric Pressure	800 to 1060 mbar (80 to 106 kPa)
Elevation	6000' (1828.8 m) derate max ambient above 6000'
Cooling Requirements	
Cooling Medium	Combination air and liquid cooling (closed loop system)
Regulatory	
Directives and Standards	NRTL certified to UL 1741-2005 by CSA International IEEE 519, 929, 1547/1547.1 NEC Article 690 (compatible) CEC eligible – 97.5%

Solaron® 333 kW Dimensional Drawing



For more information on Solaron inverters, visit: www.aesolaron.com
Specifications are subject to change without notice.



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