

Solaron® 250 kW PV Inverter

250 kW PV inverter enables the lowest LCOE for commercial, grid-tie photovoltaic installations

Benefits

Achieve the lowest levelized cost of energy (LCOE)

Generate high energy output in any outdoor environment

Reduce balance-of-system (BoS) costs

Monitor and control with flexible, integrated communications

Rely on worldwide service and support

Features

250 kW, transformerless, bipolar design

Compact, self-contained for commercial applications

Single core engine—with the industry's smallest footprint and lightest weight in its class

Integrated IDS™ data monitoring and communications

97.5% CEC efficiency

Nearly three decades of experience in solar PV industry

24 x 7 x 365 global service and support

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

AE Solaron® solutions enable the lowest levelized cost of energy (LCOE) for commercial grid-tie PV installations. With 97.5% CEC and 98.1% peak efficiencies, the 250 kW model offers integrators and independent power producers higher energy harvests, lower balance-of-system (BoS) costs, and lower operations and maintenance (O&M) costs. Both local and remote communications and control are always available for greater performance insight, and the AE SafeGuard® program offers proactive service that goes far beyond the standard warranty.

Increase Energy Output and Optimize BoS

The field-proven, bipolar, transformerless Solaron® PV inverter platform enables the lowest LCOE, driving higher energy harvests, reduced BoS costs, and lower O&M costs. The Solaron 250 kW inverter is compact and self-contained, making it ideal for commercial PV installations.

With its robust controls, closed-loop cooling, and patented, soft-switching technology, the Solaron inverter repeatedly achieves breakthrough 97.5% CEC and 98.1% peak efficiencies. Higher total system efficiency means better cost-per-kWh over the life of your PV system. The reliable design and single-core engine—with the industry's smallest footprint and lightest weight in its class—reduce BoS costs.

Monitor and Control Your System

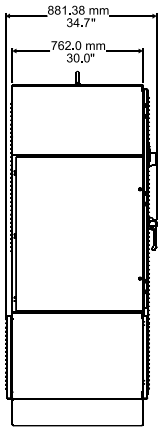
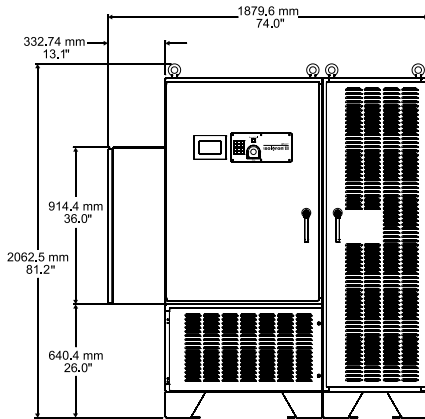
A secure, integrated LCD and keypad provide fundamental unit data on the exterior inverter cabinet. In addition, the on-board Integrated Data System (IDS™) software—included at no additional charge—provides Internet connectivity and collects and stores a wide range of real-time data, including detailed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

Rely on AE's Worldwide Service and Support to Lower O&M

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® 250 kW Dimensional Drawing



Solaron® 250 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 NEMA 4 (electronics)
Connector and Cable Specifications	
Output Power Connectors	2 x 500 MCM wires (Cu or Al)
Input Power Connectors	16x2/0
User Display	Front panel LCD and keypad; security lock-outs; emergency shutdown button
Electrical	
Output Power	
Max Power	250 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	300 A typical 334 A max at 86°F (30°C) and low-line voltage; can be limited with field-adjustable settings 315 A max at 122°F (50°C)
Peak & CEC Efficiency	98.1% and 97.5%
Input Power	
Array Configuration	Separable bipolar using standard PV modules
Voltage	\pm 330 to \pm 600 VDC
DC MPP Current	375 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%

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



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