ADVANCED ENERGY®

AE 333NX

(Formerly known as Solaron 333)

Reliable inverter solution with higher efficiency for large commercial and utility-scale projects

Achieve higher, faster PV system return on investment (ROI) for large commercial projects with Advanced Energy's AE 333NX inverter. With a true 97.5% weighted efficiency without carve-outs for auxiliary power or other adjustments, the AE 333NX generates more power and value for project developers, owners and financiers. Energy harvest is maximized further with fleet availability in excess of 99%.

Eliminate the need for enclosures even in harsh environments with its robust, outdoor ready design that reduces upfront balance of system (BoS) costs. Plus, being the lightest inverter per kW as well as having the smallest footprint per kW means the AE 333NX is simple to maneuver and put in place ensuring your project stays on schedule. The stable, high-voltage, tranformerless engine allows several units to be connected in parallel to a single medium-voltage transformer reducing the upfront balance of system (BoS) costs and improving LCOE. No step-up transformer and fewer medium-voltage transformers are required when you select AE inverters.

AE's product development process ensures the Service and Reliability departments are involved to simplify ongoing operations and maintenance (O&M). The AE 333NX design is used in a variety of environments from the high desert mountains to the Pacific tropics. It runs reliably day in and day out with a NEMA 3R construction and a completely sealed electronics cabinet, that is continuously cooled by a self-contained, liquid-to-air system.

SCADA connectivity, collecting and storing a wide range of inverter real-time data, and connecting to many third-party data services is achieved with the integrated data monitoring solution included at no additional charge.

The AE 333NX is backed with a complete 5-year warranty so there are no surprises during the warranty period. An extended 20-year warranty is available as an option. The AE warranty options provide peace of mind and are backed by the best service and support team in the business.

Lower Operational LCOE

- Increased energy harvest with with 97.5% weighted efficiency
- Increased availability with >99% monitored fleet availability
- Legendary service and response

Reduce BoS Component of LCOE

- Lightest weight per kW reduces shipping costs to the site
- Smallest footprint per kW reduces site preparation costs
- Parallel connections to a single, medium-voltage transformer

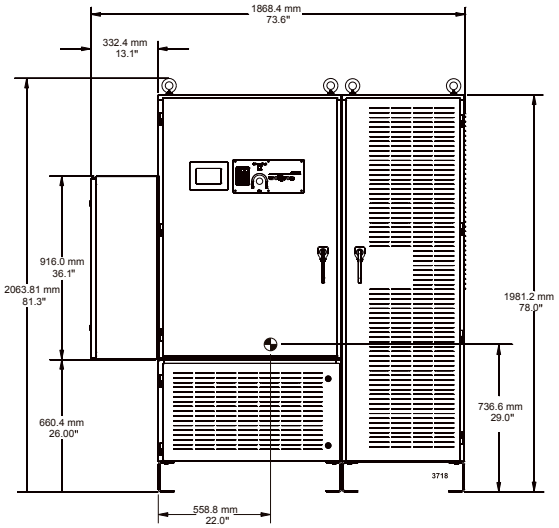
Minimize Ongoing O&M Component of LCOE

- Robust, outdoor-ready construction
- Simplify site maintenance with SiteGuard® (available option)

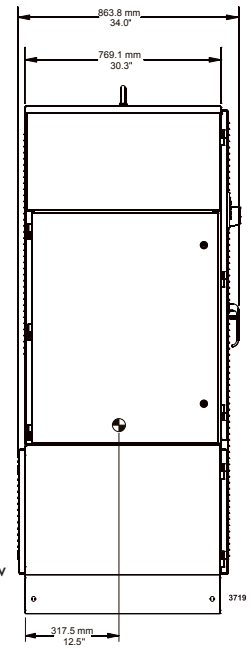
Take Control and Support the Grid

- Integrated data monitoring solution transmits inverter data for secure collection
- Integrated data monitoring solution receives and acts upon a host of utility level commands

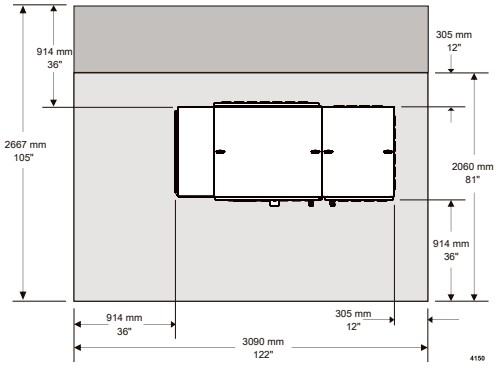
AE Solar Energy is a US based company.



Front View



Side View



Top View: shown with clearance

AE 333NX Summary Specifications*

Physical	
Weight	2045 lb (927.5 kg) unit weight, 2344 lb (1063.2 kg) shipping weight
Construction	Outdoor-ready cabinet design with electrostatically applied paint
Environmental Rating	NEMA 3R with sealed electronics cabinet
DC Input Power Connectors	Compression type terminal block with up to (4) 500 MCM wires (Cu or Al)
AC Output Power Connectors	Compression type terminal block with up to (2) 500 MCM wires (Cu or Al)
User Interface	Front panel LCD, keypad, and shut-down button, and web interface
Electrical	
DC Inputs	
Array Configuration	Separable dual arrays with 600 VDC strings
Maximum Operating Input Current	500 ADC Imp maximum, self-limiting in operation
MPPT Voltage Range	± 600 Voc maximum, ± 330 to ± 550 Vmp
Open-Circuit Turn-On Voltage	± 425 VDC default
AC Output	
Continuous Output Power	333 kW at 480 VAC
Operating Voltage Range	480 VAC ± 10%
Electrical Service Compatibility	3 phase, 3 wire, grounded Wye connection
Maximum Continuous Current	445 Arms (field adjustable)
Nominal Frequency	60 Hz
Total Harmonic Distortion	< 5% at 333 kW, 480 VAC
Efficiency	
Peak Efficiency	98.3% (includes brown power such as all standby, controls, and housekeeping losses)
Weighted Efficiency	97.5% (CEC method)
Standby Losses	< 100 W
Inverter Controls and Monitoring	
Active Power Range	333 kW to 1 kW; remotely adjustable set point at 1kW increments
Communication Interfaces and Protocols	RS-232, RS-422, and RS-485, Ethernet, PCMCIA expansion slot Modbus/TCP and Modbus/RTU
Inverter Monitoring Options	Integrated inverter data monitoring solution, compatible with third-party services
Data Storage	10 years at 1 minute invervals with SD card
Environmental	
Operating Ambient Temp.Range	-4 °F to 122 °F (-20 °C to 50 °C)
Standby / Storage Temp. Range	-22 °F to 158 °F (-30 °C to 70 °C)
Cooling	Self-contained, closed-loop, liquid to air
Relative Humidity	0% to 95% non-condensing
Elevation	6562' (2000 m) maximum
Regulatory	
Agency Approvals / Regulatory Compliance	NRTL certified to UL 1741-2010 by CSA International IEEE 519, 929, 1547/1547.1 NEC Article 690 (compatible)

Subject to change without notice. Refer to user manual for detailed specification.

*Note: Not all performance window specifications can be achieved simultaneously. Performance varies per site. Consult your AE sales or service representatives for specific PV system design questions at sales.support@aei.com.

Options

- 2, 3 or 4-unit PowerStation
- Remote PV Tie
- 20-year extended warranty
- Inverter installation verification
- SafeGuard® PM program
- SafeGuard Plus℠ availability program
- SiteGuard O&M services

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