



PV Powered solAron siteguard

PV Powered HE String Inverters

PV Powered HE string inverters deliver more energy, advanced system intelligence and lower installed costs in an elegant package from the leader in inverter reliability.

AE, the leader in inverter reliability, introduces our new line of PV Powered HE string inverters. With power ranges from 3.8kW to 7.0kW and an extra wide MPPT input voltage range, the PV Powered HE string inverter line is ideally suited to the needs of North American residential and small commercial rooftop installations, or for use as a building block in larger commercial installations.

Featuring a 97% CEC weighted efficiency, field configurable AC voltages, integrated AC/DC disconnect with fusing and transformer-less architecture; PV Powered HE string inverters provide maximum energy harvest and low installation cost, enabling a quicker return on investment and a profitable solar installation.

The integrated AC/DC disconnect has many unique features not found in other PV inverters and enables a overall lower installation cost. The integrated DC combiner with 4 fused string inputs saves the time and expense of an external combiner box and fuses while the integrated wire raceway and generous wiring space makes professional installations easy, and saves labor and material cost.



Features

Profitable

- 97% CEC efficiency produces more power throughout the day
- Lower installed costs with integrated AC/DC disconnects, combiner and fusing

Dependable

- Advanced Energy is the leader in inverter reliability
- 10 Year Warranty standard and available extensions for up to 20 years
- Industry-leading tech support

Elegant

- Bold design complements the inverter's exceptional performance
- Near silent operation due to transformerless architecture

Smart

- Innovative ZigBee wireless monitoring brings Inverter connectivity to new levels of ease and flexibility
- Large display with fast access to critical operation information
- Simple installation with built in lifting handles and ideally located knockouts

ZigBee Wireless Monitoring

ZigBee wireless makes remote monitoring and control of a PV Powered HE string inverter easy and flexible. ZigBee wireless is the standard for smart grid communications and is highly reliable, offers long range connectivity and enables communication with a wide range of devices. Whether viewing system information on the all new MyPVPower.com or integrating with your smart grid devices or utility smart meter; ZigBee wireless is setup in just minutes and doesn't require any costly external enclosures and wiring.



*Some features not available at launch

Preliminary Specifications

Inverter Model	PVP3.8 HE	PVP5.0 HE	PVP6.0 HE	PVP7.0 HE
Performance				
Continuous Output Power (W)	3800	240VAC & 277VAC: 5000 208VAC: 4600	6000	7000
Peak Efficiency (%)	208: 97.7	208: 97.7	208: 97.5	208: 97.5
	240: 97.7	240: 97.7	240: 97.7	240: 97.6
	277: 97.9	277: 97.9	277: 97.9	277: 97.7
CEC Weighted Efficiency (%)	97	97	97	97
DC Electrical Specifications				
DC Peak Power Tracking (VDC)	225-500	200-500	200-500	200-500
DC Operating Range (VDC)	100-500	100-500	100-500	100-500
DC Input Voltage Maximum (VOC)	600			
DC Minimum Start Voltage(VDC)	150			
DC Input Overvoltage Protection	YES			
DC Input Current Maximum(A)	19	26	32	37
# of Fused DC Inputs	4, rated up to 20A each			
DC Input Terminals # of Wires and Sizes	4 strings / 14-6 AWG			
AC Electrical Specifications				
AC Nominal Voltage (V)	Default: 240V	Default: 240V	Default: 240V	Default: 240V
	Field Adjustable to 208, 240, 277	Field Adjustable to 208, 240, 277	Field Adjustable to 208, 240, 277	Field Adjustable to 208, 240, 277
Continuous AC Output Current (A)	208: 18.3	208: 22.1	208: 28.9	208: 33.7
	240: 15.8	240: 20.8	240: 25.0	240: 29.2
	277: 13.7	277: 18.1	277: 21.7	277: 25.3
AC Operating Range (V)	208: 183-229	208: 183-229	208: 183-229	208: 183-229
	240: 211-264	240: 211-264	240: 211-264	240: 211-264
	277: 244-305	277: 244-305	277: 244-305	277: 244-305
Grid Frequency Range (Hz)	59.3-60.5 in compliance with IEEE1547			
Power Factor	>0.99 at full power			
Total Harmonic Distortion	<3%			
Night Time Power Consumption	<0.2W			
AC Short Circuit Protection	Yes			
AC Input Terminals Wire Sizes	10-6AWG	8-6AWG	8-4AWG	6-4AWG
Installation Features				
Integrated AC/DC Disconnect	Yes			
AC and DC Surge Protection	Yes			
Inverter Architecture	Transformerless			
Mechanical Features				
Mounting	Single Wall Stud Mounting Bracket			
Unit Weight (lbs)	87	91	102	102
Unit Dimensions (HxWxD)	33.5 x 17.5 x 8.5 in / 85.9 x 44.5 x 21.6 cm			
Environmental				
Operating Temp Range (°C)	-25 to 55 / Full power range: -25 to 45			
Storage Temp Range (°C)	-40 to 60			
Enclosure Rating	NEMA 3R			
Cooling	Convection		Convection w/Forced Air on demand	
User Interface				
Inverter User Interface	High-Contrast Alphanumeric 2 line Display with 3 button navigation			
Remote Monitoring Options	ZigBee Wireless, MODBUS TCP, Ethernet (See performance data for free at MyPVPower.com.)			
Agency Approvals/Regulatory Compliance	IEEE1547(2003), IEEE 1547.1(2005), UL1741(2010), CSA C22.2 No.107.1-01, FCC Part 15 Class B, IEC 61000-6-2, IEC 61000-6-3			
Warranty	10 Year Standard, Available 15 and 20 year			

Preliminary specifications. Subject to change without notice.



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