

PVI-6000-OUTD-W

GENERAL SPECIFICATIONS
WIND MODELS

PVI-6000-OUTD-W-US



AURORA

Aurora grid-tie transformerless wind inverters offer a unique combination of ultra-high efficiencies, installer-friendly designs and long service life. A major selling point of the Aurora Wind inverter is its very wide input voltage range ensuring power is continuously harvested from the lightest breeze to the strongest wind.

The competitive initial acquisition costs matched with the high efficiencies of up to 97% significantly increase return on investment on wind-power installations.

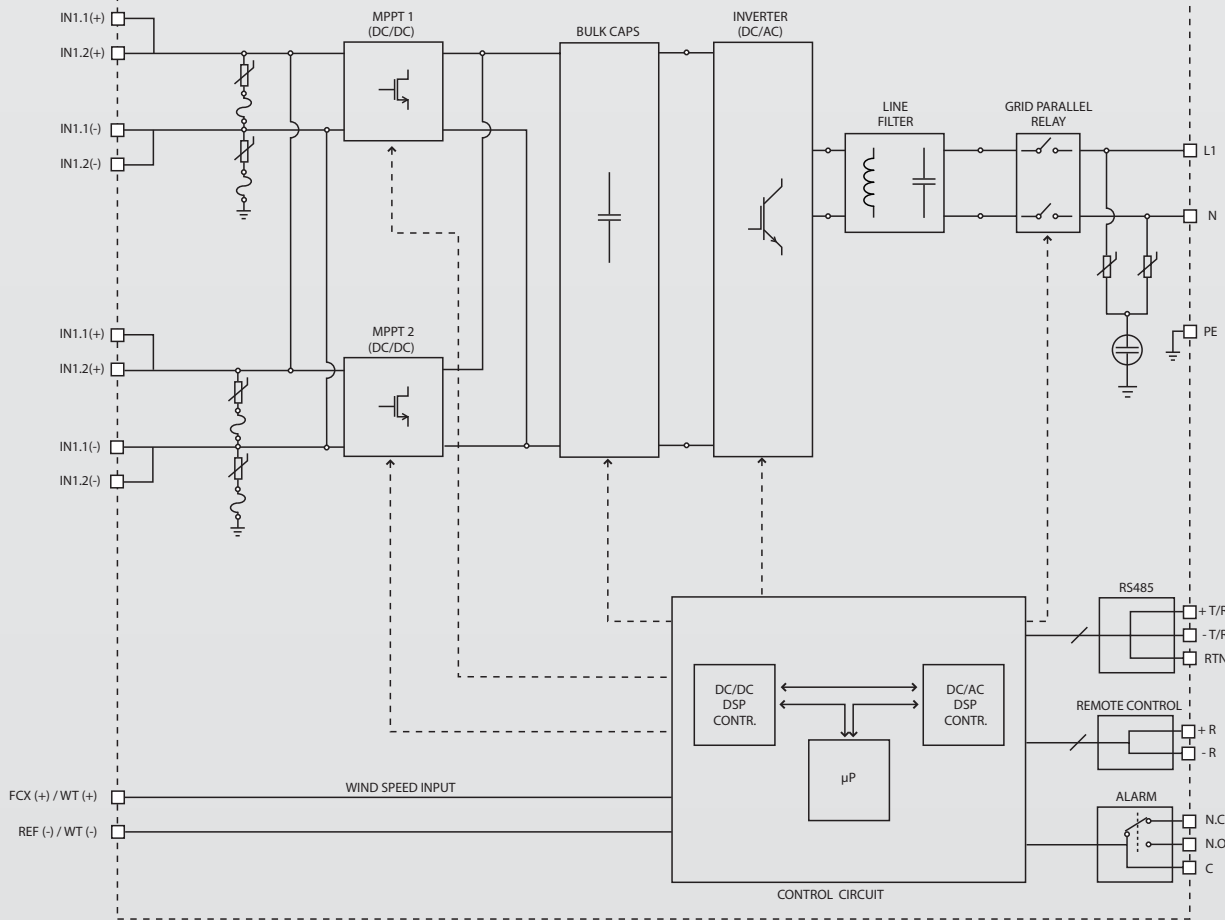
This compact, weather-sealed inverter has a 16-point profile to best match the power curve of each wind turbine.

Features

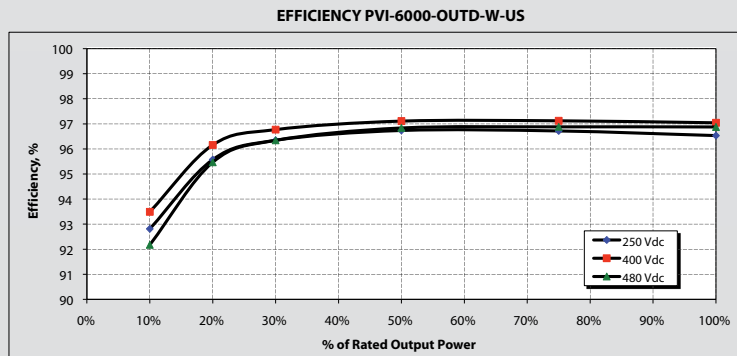
- Single Phase 208/240/277 Vac
- Transformerless operation for highest efficiency
- Power curve customization with high granularity to reach high level of power production yield
- Watertight NEMA 4X (IP65) enclosure
- Compact size and high power density
- Optimized real time power curve tracking algorithm and improved energy harvesting
- Anti-Islanding Protection
- Reverse polarity protection minimizes chance of damage due to incorrect wiring when used in conjunction with Aurora PVI-WIND-INTERFACE BOX.
- High overload capability: works up to the power max limits under most ambient conditions
- Connectivity with Wind Box Interface 25kW
- Connectivity with Wind Box Interface 7200W

AURORA WIND

BLOCK DIAGRAM OF SINGLE PHASE WIND INVERTER



Block Diagram and Typical Efficiency



CHARACTERISTICS

PVI-6000-OUTD-W-US

INPUT PARAMETERS				
Rated DC Power	6180 Wp			
Rated Input Voltage Range	360 V			
Operating Input Voltage Range	50 - 580 V			
Full Power Input Voltage Range	180 - 530V			
Activation Voltage "Vstart"	adj. 50-200 V			
Absolute Maximum Input Voltage	600 V			
Maximum Operating Input Current	36 A			
DC Connections	4 (2 Positive, 2 Negative) Screw Terminal Block 3 Knock-Outs: 1 1/2" or 1" (w/ ring red.)			
INPUT PROTECTION				
Maximum DC Overcurrent Protection	44 A			
DC Side Varistor	4 Thermally Protected			
Isolation Control	GFDI ⁽¹⁾			
OUTPUT PARAMETERS		208 V	240 V	277 V
AC Grid Connection	Single Phase / Split Phase			
Rated AC Power	6000 W			
Maximum AC Power	6000 W			
Rated AC Voltage	208 V	240 V	277 V	
Maximum AC Voltage Range	183-228 V	211-264 V	244-304 V	
Rated AC Frequency	60 Hz			
Maximum AC Line Current	30 A	28 A	24 A	
Line Power Factor	> 0.99			
AC Current Distorsion (TDH)	< 2%			
AC Connection	Screw Terminal Block 3 Knock-Outs: 1 1/2" or 1" (w/ ring red.)			
OUTPUT PROTECTION				
AC Side Varistor	2 (L - N / L - PE)			
Maximum Output Fault Current	40 A	35 A	30 A	
Anti Islanding Protection	According to UL 1741/IEE1547			
CONVERSION EFFICIENCY				
Maximum Efficiency	97.0%			
ENVIRONMENTAL PARAMETERS				
Cooling	Natural Cooling			
Ambient Temperature Range	-25/+ 60°C (-13/140°F) with derating above 50°C (122°F)			
Operating Altitude	6000 ft			
Acustical Noise	< 50 dB			
Environmental Protection Rating	NEMA 4X (IP65)			
Relative Humidity	< 100% Condensing			
MECHANICAL				
Dimensions (H x W x D)	31.9" x 12.8" x 8.3"			
Weight	58 lb			
OTHERS				
Stand -By Consumption	< 8W			
Feed In Power Consumption	20.0 W			
Isolation	None due to Transformerless Topology			
Display	Alphanumeric -2 Lines			
Communication	RS 485 Wireless (Optional)			
AVAILABLE PRODUCT VARIANTS				
Standard - No Options	PVI-6000-OUTD-W-US			
STANDARD & CODES				
UL 1741, IEEE 1547, CSA - C22.2 N. 107.1-01				

(1) GFDI - Ground Fault Detector Interrupter