


# PVI-6000-OUTD-W

## GENERAL SPECIFICATIONS WIND MODELS

PVI-6000-OUTD-W-US



The background of the entire page is a close-up, slightly angled photograph of a white Aurora Wind inverter. The word "AURORA" is printed in large, dark, sans-serif capital letters on a diagonal band across the top half of the unit. Below this, the front panel features a series of horizontal ventilation slats. On the right side of the front panel, there is a control interface with three buttons labeled "UP", "DOWN", and "ENTER".

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.

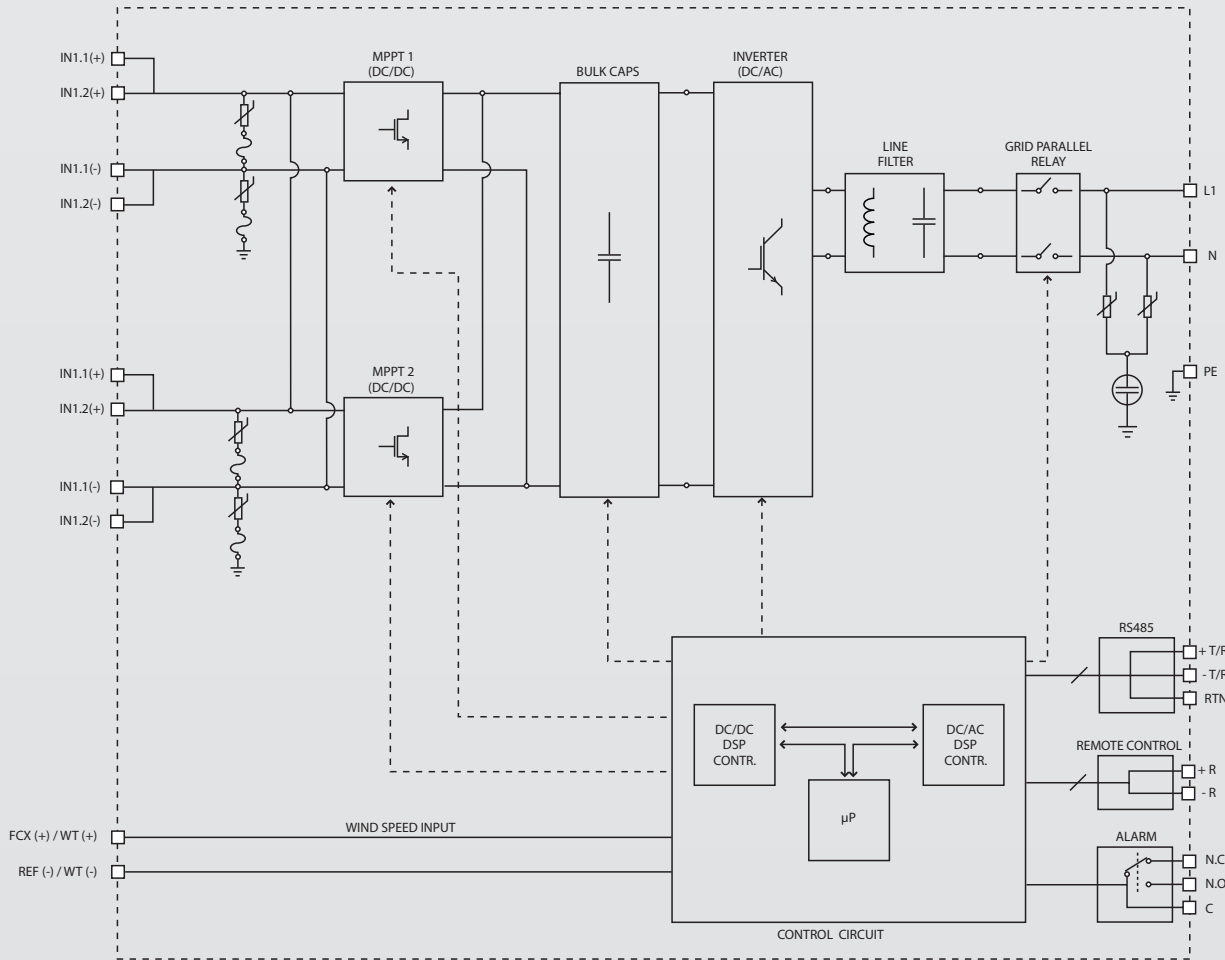
The competitive initial acquisition costs matched with the high efficiencies of up to 97% significantly increase return on investment on wind-power installations.

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

## Features

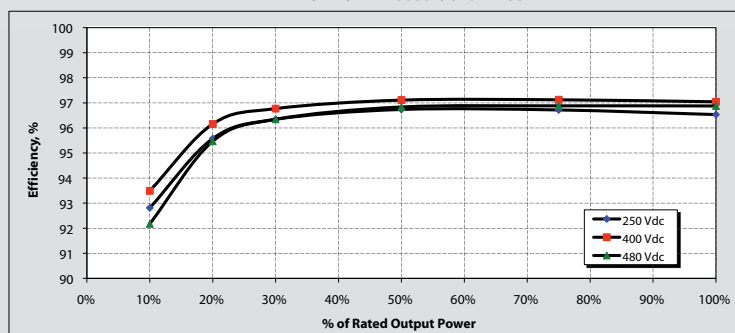
- Single Phase 208/240/277 Vac
- Transformerless operation for highest efficiency
- Power curve customization with high granularity to reach high level of power production yield
- Watertight NEMA 4X (IP65) enclosure
- Compact size and high power density
- Optimized real time power curve tracking algorithm 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

**BLOCK DIAGRAM OF SINGLE PHASE WIND INVERTER**



## Block Diagram and Typical Efficiency

**EFFICIENCY PVI-6000-OUTD-W-US**



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 ½” or 1” (w/ ring red.)		
INPUT PROTECTION			
Maximum DC Overcurrent Protection	44 A		
DC Side Varistor	4 Thermally Protected		
Isolation Control	GFDI <sup>(1)</sup>		
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 ½” 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 Consuption	< 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