

## PVI-5000-TL-W PVI-6000-TL-W

### GENERAL SPECIFICATONS

PVI-5000-TL-OUTD-W  
PVI-6000-TL-OUTD-W

Aurora grid-tie transformerless wind inverters offer a unique combination of 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 97.0% 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.

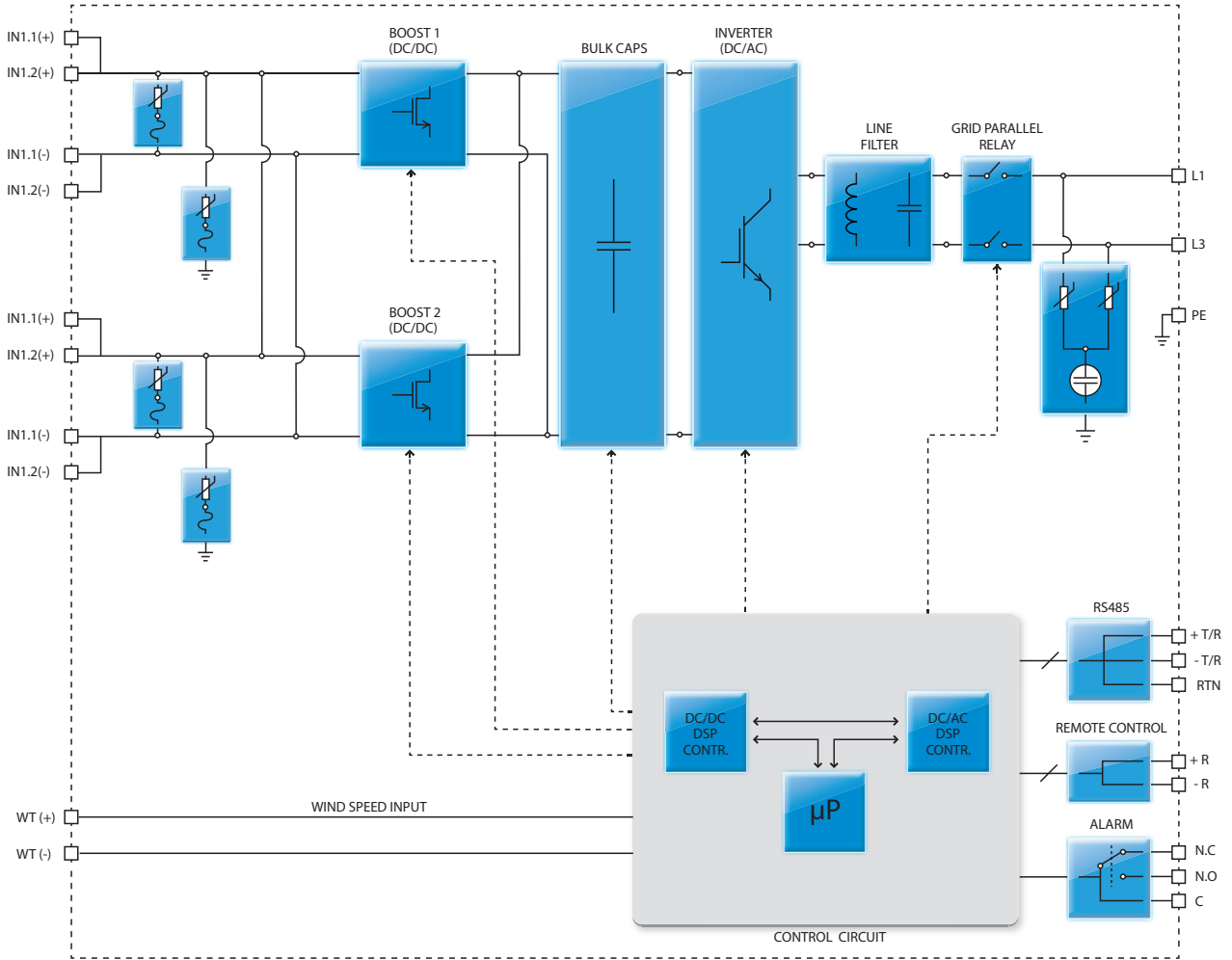


AURORA WIND

## Features

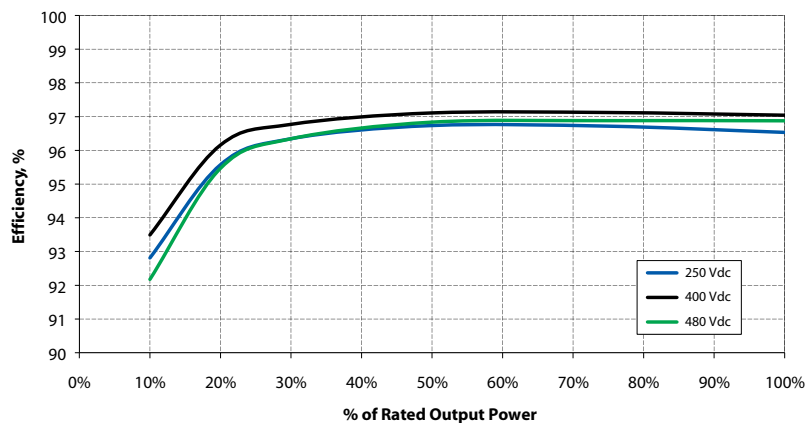
- Single Phase Output
- Transformerless operation for highest efficiency
- Power curve customization with high granularity to reach high level of power production yield
- Outdoor enclosure for unrestricted use under any environmental conditions
- Compact size and high power density
- Optimized real time power curve tracking algorithm and improved energy harvesting
- High overload capability: works up the power max limits under most ambient conditions
- Compatible with 25kW Wind Interface
- Compatible with 7200 Wind Interface

## BLOCK DIAGRAM OF PVI-5000-TL-OUTD-W AND PVI-6000-TL-OUTD-W



## Block Diagram and Efficiency Curves

### PVI-6000-OUTD-US-W



PARAMETER	PVI-5000-TL-OUTD-W	PVI-6000-TL-OUTD-W
<b>Input Side</b>		
Maximum Absolute DC Input Voltage $V_{(dc,abs)}$	600 V	600 V
Operating DC Input Range ( $V_{dcmin...V_{dcmax}}$ )	50...580 V	50...580 V
DC Input range at full power ( $V_{fp,min...V_{fp,max}}$ )	150...530 V	180...530 V
Dc Power Limitation	Linear Derating From MAX to Null [ $530V \leq V_{dc} \leq 580V$ ]	Linear Derating From MAX to Null [ $530V \leq V_{dc} \leq 580V$ ]
Maximum DC Input Current ( $I_{dc,max}$ )	36 A	36 A
Maximum Input Short Circuit Current	44 A	44 A
DC Connection Type	Screw Terminal Block Cable Glands	Screw Terminal Block Cable Glands
<b>Input Protection</b>		
Reverse Polarity Protection	No	No
Input Over Voltage Protection - Varistor	4	4
Generator Isolation Control	Yes	Yes
<b>Output Side</b>		
AC Grid Connection	Single Phase	Single Phase
Rated AC Power ( $P_{acr}$ )	5000 W <sup>(3)</sup>	6000 W
Maximum AC Output Power ( $P_{ac,max}$ )	5000 W	6000 W
Rated Grid AC Voltage ( $V_{acr}$ )	230 V	230 V
AC Voltage Range	180...264 V <sup>(1)</sup>	180...264 V <sup>(1)</sup>
Maximum Output AC Current ( $I_{ac,max}$ )	25 A	30 A
Rated Frequency (f.)	50 Hz	50 Hz
Frequency Range ( $f_{min...f_{max}}$ )	47...53 Hz <sup>(2)</sup>	47...53 Hz <sup>(2)</sup>
Nominal Power Factor ( $\cos\phi_{i_{acr}}$ )	> 0.995	> 0.995
Total Harmonic Distortion	< 2%	< 2%
AC Connection Type	Screw Terminal Block Cable Glands	Screw Terminal Block Cable Glands
<b>Output Protection</b>		
Anti-islanding protection	According to local standard	According to local standard
Maximum AC Overcurrent Protection	32 A	40 A
Output Over Voltage Protection - Varistor	2 (L-N/L-PE)	2 (L-N/L-PE)
<b>Operating Performance</b>		
Maximum Efficiency ( $\eta_{max}$ )	97.0%	97.0%
Stand-by Consumption	< 8W	< 8W
<b>Communication</b>		
Wired Local Monitoring	PVI-USB-RS485_223 (opt.), PVI-DESKTOP (opt.)	PVI-USB-RS485_223 (opt.), PVI-DESKTOP (opt.)
Remote Monitoring	PVI-AEC-EVO (opt.), AURORA-UNIVERSAL (opt.)	PVI-AEC-EVO (opt.), AURORA-UNIVERSAL (opt.)
Wireless Local Monitoring	PVI-DESKTOP (opt.) with PVI-RADIOMODULE (opt.)	PVI-DESKTOP (opt.) with PVI-RADIOMODULE (opt.)
User Interface	16 characters x 2 lines LCD display	16 characters x 2 lines LCD display
<b>Environmental</b>		
Ambient Temperature Range	-25...+ 60°C / -13...140°F with derating above 50°C/122°F	-25...+ 60°C / -13...140°F with derating above 50°C/122°F
Noise Emission	< 50 dB(A)	< 50 dB(A)
Maximum Operating Altitude with Derating	2000 m / 6560 ft	2000 m / 6560 ft
<b>Physical</b>		
Environmental Protection Rating	IP 65	IP 65
Cooling	Natural	Natural
Dimension (H x W x D)	810mm x 325mm x 228mm / 31.9" x 12.8" x 8.7"	810mm x 325mm x 228mm / 31.9" x 12.8" x 8.7"
Weight	27 kg / 59.5 lb	27 kg / 59.5 lb
<b>Safety</b>		
Isolation Level	Transformerless	Transformerless
Marking	CE	CE
Safety and EMC standard	EN 50178, EN61000-6-1, EN61000-6-3, EN61000-3-11, EN61000-3-12	EN 50178, EN61000-6-1, EN61000-6-3, EN61000-3-11, EN61000-3-12
Grid Standard	VDE 0126-1-1, G59/2, EN 50438	DK 5940, VDE 0126-1-1, G59/2, EN 50438, RD1663, AS4777
<b>Available Products Variants</b>		
Standard	PVI-5000-TL-OUTD-W	PVI-6000-TL-OUTD-W

1. The AC voltage range may vary depending on specific country grid standard

2. The Frequency range may vary depending on specific country grid standard

3. Limited to 4600 W for Germany



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