

GENERAL SPECIFICATIONS OUTDOOR MODELS PVI-3.0-OUTD-XX-W PVI-3.6-OUTD-XX-W PVI-4.2-OUTD-XX-W



Wind Interface Box
optional



AURORA® BENEFITS

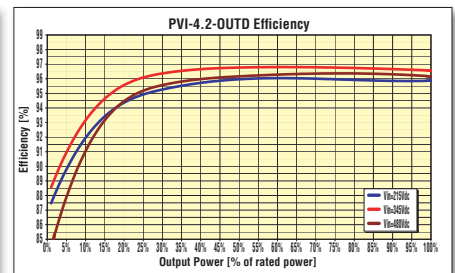
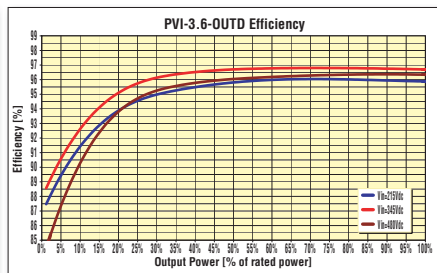
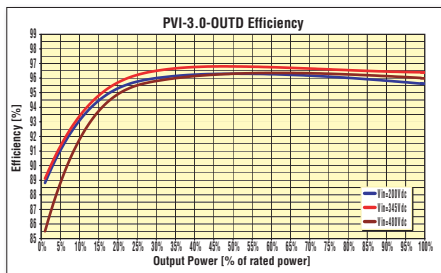
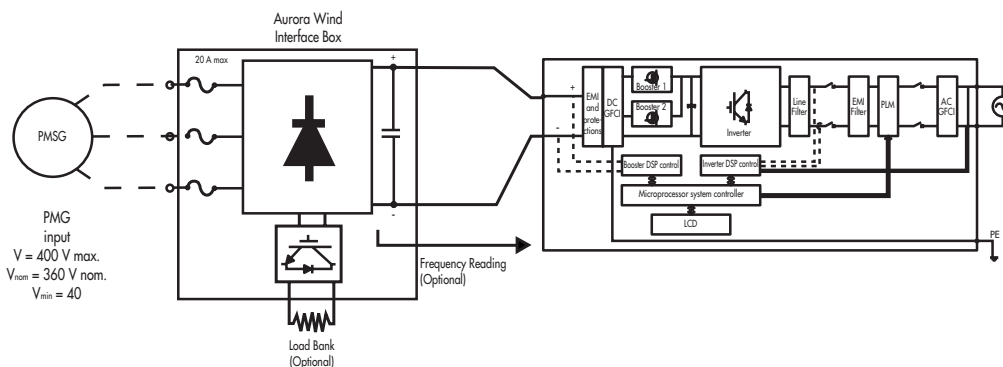
- Transformerless operation for highest efficiency: up to 96,8% (96% Euro; 96% CEC)
- IP65 (NEMA 4), completely sealed unit to withstand the harshest environmental conditions
- Compact size and high power density: up to 4.2KW of output power in a box just 547mm x 325mm x 208mm and 17Kg weight.
- Optimized real time power curve tracking algorithm and improved energy harvesting
- Heatsink keeps the unit cleaner and more efficient over time
- 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 the power max limits under most ambient conditions
- True Sine Wave Output
- Anti-islanding Protection
- Certified grid connected operation according to the International standards
- LCD Display on the front to monitor the main parameters
- Integrated RS-485 serial communication
- WIND INTERFACE BOX is optional

HIGH PERFORMANCE REDEFINED

The revolutionary switching technology utilized in the Aurora inverter includes state-of-the-art silicon Power devices such as CoolMOS™ and Insulated Gate Bi-polar Transistors (IGBT's) to reduce switching losses. Aurora has been designed with substantial de-rating of all critical components, achieving an extremely robust and reliable inverter, designed to last for 25 years and to deliver rated maximum output power on a continuous basis. With this design concept we achieve peak efficiencies of over 96,8%.

Best in class with an outstanding input voltage range (50V to 580V) and ambient temperature range (-25°C to +60°C). Dedicated software to upload the wind generator power curve (16 points interpolation). WIND INTERFACE BOX is optional

Block Diagram and typical efficiency



CHARACTERISTICS	PVI-3.0-OUTD-XX-W	PVI-3.6-OUTD-XX-W	PVI-4.2-OUTD-XX-W
Output Power Rating Ac [W]	3000	3600	4200
Absolute Max Input Voltage [Vdc]	600	600	600
Max. Power Tracking Window range [Vdc]	50 to 580 (360 nominal)	50 to 580 (360 nominal)	50 to 580 (360 nominal)
Max Input current [Aac]	20	32	32
Max Power Voltage Range	180Vdc-530Vdc	180Vdc-530Vdc	180Vdc-530Vdc
Input Configuration	Two channes parallel with common power curve	Two channes parallel with common power curve	Two channes parallel with common power curve
Nominal AC Voltage (Range) [Vrms]	Single-phase 200-245 Vac (180-264Vac)	Single-phase 200-245 Vac (180-264Vac)	Single-phase 200-245 Vac (180-264Vac)
Nominal AC Frequency [Hz]	50	50	50
Line Power Factor	1	1	1
Maximum AC Line Current [Arms]	14.5	17.2	20
AC Current Distortion [%]	<2% THD at rated power with finewave voltage	<2% THD at rated power with finewave voltage	<2% THD at rated power with finewave voltage
Max Efficiency [%]	96,8% (96,0% Euro; 96,0% CEC)	96,8% (96,0% Euro; 96,0% CEC)	96,8% (96,0% Euro; 96,0% CEC)
Operating Ambient Temperature [°C]	-25 to +60 Derating per Tamb>55°C	-25 to +60 Derating per Tamb>55°C	-25 to +60 Derating per Tamb>45°C
Losses [W]	<8	<8	<8
Enclosure Environmental Rating	IP65	IP65	IP65
Relative Humidity	0-100% condensing	0-100% condensing	0-100% condensing
Elevation	derated above 2.000 m (6.600ft)	derated above 2.000 m (6.600ft)	derated above 2.000 m (6.600ft)
Audible Noise [dBA]	<50@ 1m	<50@ 1m	<50@ 1m
Size (height x width x depth) [mm]	547 x 325 x 208	547 x 325 x 208	547 x 325 x 208
Weight [kg]	17	17	17

SMART CONTROLS

Aurora controls are DSP (Digital Signal Processor) based with sophisticated control and self-diagnostics algorithms. An LCD shows the main operational parameters. Three LED's indicate the operating status.

BEST IN CLASS COMMUNICATION CAPABILITIES

Aurora features an integrated RS485 Communication link and a USB port. An RS485 to RS232 converter (optional) is available to monitor the unit. AURORA Easy-Communicator (optional) allows remote monitoring via internet, GSM or analog modem.

STANDARDS AND CODES

Aurora inverters comply with standards set for grid-tied operation, safety and electromagnetic compatibility including: CSA- C22.2 N.107.1-01, UL1741, G83/1, CEI 11-20 IV ed, DK5940, IEC61683, IEC61727, EN50081, EN50082, EN61000, Certification CE, EI Real decreto RD 1663/200 De Espana, EN50438.

