

General Specifications PVI-3600-OUTD-W

Magnetek offers our Aurora PVI-3600 Outdoor Wind Inverter that features revolutionary switching technology. Our Aurora wind inverter includes state-of-the-art silicon power devices that help reduce switching losses. Power devices include:

- Silicon Carbide Diodes
- CoolMOS™
- Insulated Gate Bi-polar Transistors (IGBT's)

Robust and reliable, Aurora was designed to last up to 25 years, and features large derating criteria on all critical components. It delivers true maximum output power on a continuous basis. With this design concept we achieve peak efficiencies of over 96%. Total current harmonic distortion, on the other hand, is typically less than 2% through the use of high-frequency switching techniques. Exclusive to Aurora, is its power curve in software that optimizes the wind turbine's output.

AURORA[®] BENEFITS

- PMG (Permanent Magnet Generator) Power Curve implemented in high speed MPPT
- IP65 (NEMA 4X) – The completely sealed, rugged unit can withstand the harshest environmental conditions
- High speed MPPT for real time power tracking and improved energy harvesting
- Compact size and high power density: 3000W (3600W max) of output power in a box just 420mm x 326mm x 141mm (16.5in x 12.8in x 5.55in)
- Front heatsink keeps the unit cleaner and more efficient over time
- Transformerless operation for highest efficiency – up to 96%
- Reverse polarity protection minimizes chance of damage due to incorrect wiring
- High overload capability – works up to 3600W under most ambient conditions
- True Sine Wave Output
- Anti-islanding Protection
- Certified grid connected operation according to the international standards
- LCD on the front to monitor the main parameters
- Wind Interface Box (Optional)

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/RS232 communication link to access our built in Data Logger (Optional)



Optional Wind Interface Box



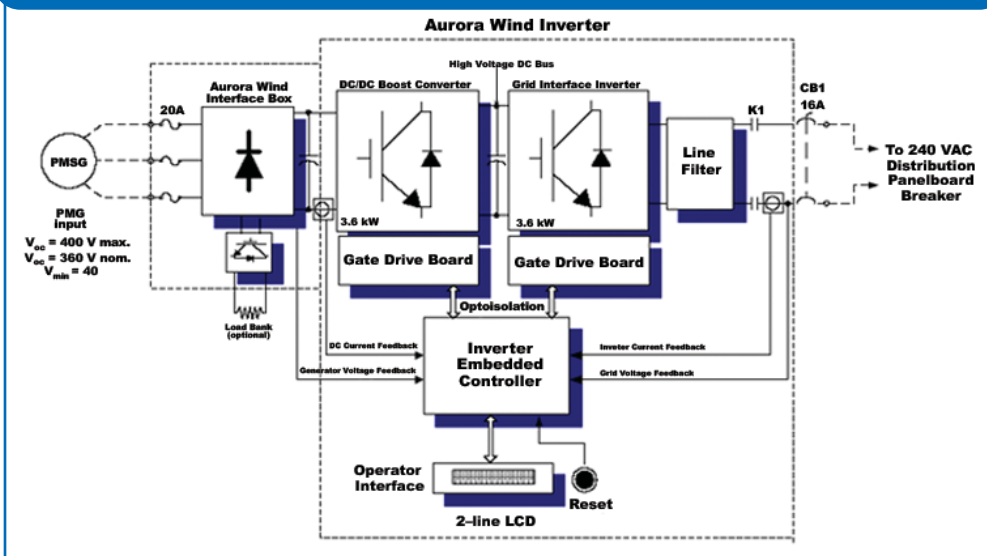


CHARACTERISTICS

PVI-3600-OUTD-W

Max Power Rating [W]	3600
Absolute Max Voltage Range [Vdc]	0 to 600
Max: Power Tracking Window Range [Vdc] UL	40–400 (360 nominal)
Power Curve Max. Idc=20A VAC, 3-phase	One or two arrays with common negative and independent MPPT
Nominal AC Voltage (Range) [Vrms]	Single-phase 184–264 (may vary to comply with regulations in each country)
Nominal AC Frequency [Hz]	50/60
Line Power Factor	1
Maximum AC Line Current [Arms]	16
AC Current Distortion [%]	<2.5% THD at rated power with sinewave voltage
Max Efficiency [%] Peak	96 (Euro 95)
Tare Losses [mW]	<200
Operating Ambient Temperature [°C]	-25 to +60
Enclosure Environmental Rating	IP65/NEMA 4X
Relative Humidity	0–100% condensing
Elevation	Derated above 6,600ft (2000m)
Audible Noise [dBA]	<40
Size (height x width x depth) [mm]	420mm x 326mm x 141mm (16.5in x 12.8in x 5.55in)
Weight [kg]	13

BLOCK DIAGRAM



MODEL SUMMARY

Model Number	Power
PVI-3600-OUTD-W	3600W

OPTION LIST

Options Suffix	Description
-SC	Screw Terminal Blocks

STANDARDS AND CODES

Aurora inverters comply with standards set for grid-tied operation, safety and electromagnetic compatibility including: VDE0126, CEI 11–20 IV ed, DK5950, IEC 61683, IEC 61727, EN50081, EN50082, EN61000, CE Certification, CSA, and UL1741.