

### General Specifications

#### Isolated outdoor models US version

#### PVI-3000-I-OUTD-US

#### AURORA<sup>®</sup> BENEFITS

- Dual input section to process two strings with independent MPPT (3000W max models)
- NEMA 4 (IP65) ruggedized, completely sealed unit to stand the harshest environmental conditions
- High speed MPPT for real time power tracking and improved energy harvesting
- Compact size and high power density: 2500W (3000W max) of output power in a box just 420mm x 326mm x 232mm (16.5in x 12.83in x 9.13in)
- Front heatsink keeps the unit cleaner and more efficient over time
- Isolation with 60Hz high efficiency, low weight toroidal transformer for seamless grid-tied operation
- Reverse polarity protection minimizes chance of damage due to mis-wiring
- High overload capability: works up to 3000W under most ambient conditions
- True Sine Wave Output
- Anti-islanding Protection
- UL 1741 certified grid connected operation
- LCD Display on the front to monitor the main parameters
- Integrated Power Line Modem (PLM) for communication over AC wires
- Integrated RS485 serial link

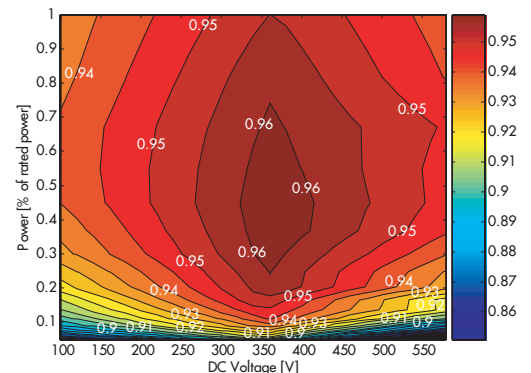
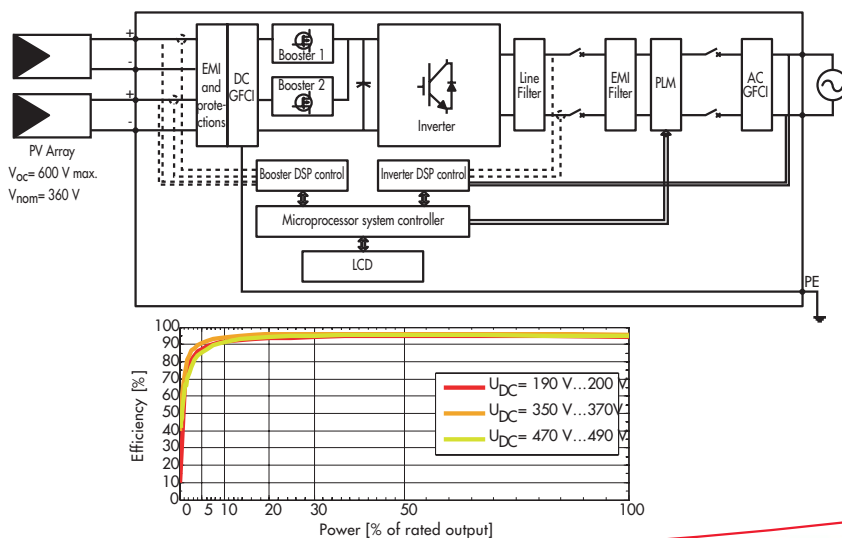


#### HIGH PERFORMANCE REDEFINED

The switching technology utilized in the Aurora inverters includes state-of-the-art for silicon Power Devices such as Silicon Carbide Diodes, CoolMOS<sup>™</sup> and Insulated Gate Bi-polar Transistors (IGBT's) to reduce switching losses.

Aurora has been designed with large de-rating criteria on all critical components, achieving an extremely robust and reliable inverter designed to last for 25 years and more. With this design concept we achieve peak efficiencies of over 94%. Total current harmonic distortion, on the other hand, is typically less than 2% through the use of high-frequency switching techniques. Another exclusive advantage is Aurora's two source circuit inputs, each with its own MPPT (Max Power Point Tracker) for installations with multiple arrays.

#### BLOCK DIAGRAM AND TYPICAL EFFICIENCY



## CHARACTERISTICS

## PVI-3000-I-OUTD

Power Rating Ac [W]	3000
Absolute Max Voltage range [Vdc]	0 to 600 (360 nominal)
Max. Power Tracking Window range [Vdc]	90 to 540 (360 nominal)
Array Configuration (Max. Idc =10A for each channel)	One or two arrays with common negative and independent MPPT
Nominal AC Voltage (Range) [Vrms]	Single-phase 211-264 (may be adjusted to comply with local regulations)
Nominal AC Frequency [Hz]	59.3 to 60.5 (may be adjusted to comply with local regulations)
Line Power Factor	1
Maximum AC Line Current [Arms]	13
AC Current Distortion [%]	<2.5% THD at rated power with sinewave voltage
Max Efficiency [%]	94
Tare Losses [mW]	<0.3
Operating Ambient Temperature [°C]	-25 to +60
Enclosure Environmental Rating	NEMA 4 / IP65
Relative Humidity	0-100% condensing
Elevation	Derated above 6,600ft (2000m)
Audible Noise [dBA]	< 40
Size (height x width x depth) [mm]	420 x 326 x 232
Weight [kg]	32

## MODEL SUMMARY

Model Number	Power
PVI-3000-I-OUTD-US	3000W

## SMART CONTROLS

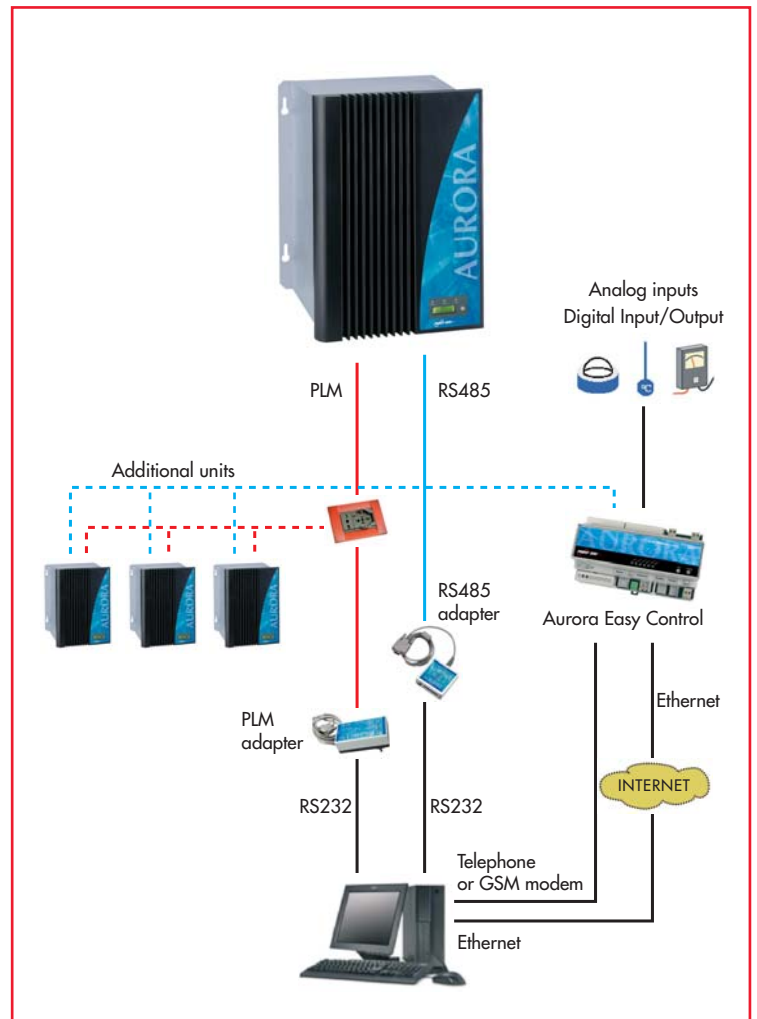
Aurora controls are DSP (Digital Signal Processor) based with sophisticated control and self-diagnostic algorithms. A LCD display shows the main operational parameters. Three LED's indicate the operating status.

## BEST IN CLASS COMMUNICATION CAPABILITIES

Aurora offers the best integrated Power Line Modem (PLM) communication available on the market. PLM allows monitoring of up to 63 units working in parallel for large installations without the need of extra wires, and allows data to flow to our optional external graphical LCD controller Aurora Easy Control or a PC via our Aurora PLM adaptation box. Aurora also comes with integrated RS485 communication link.

## STANDARDS AND CODES

Aurora inverters comply with standards set for grid-tied operation, safety and electromagnetic compatibility including: UL 1741, FCC, NEC690, IEEE929, IEC61683, IEC61727, EN50081, EN50082, EN61000.



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