

General Specifications

Outdoor models

PVI-3.0-OUTD / PVI-3.0-OUTD-S

PVI-3.6-OUTD / PVI-3.6-OUTD-S

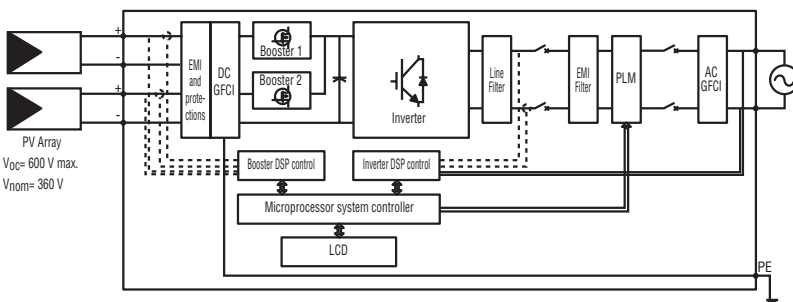
PVI-4.2-OUTD / PVI-4.2-OUTD-S / PVI-4.2-OUTD-DS

AURORA[®] BENEFITS

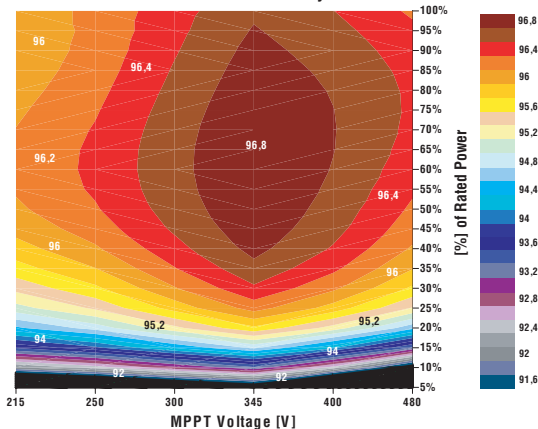
- Dual input section to process two strings with independent MPPT
- IP65 (NEMA 4) ruggedized and sealed unit to stand the harshest environmental conditions
- High speed MPPT for real time power tracking and improved energy harvesting
- Front heatsink keeps the unit cleaner and more efficient over time
- Transformerless operation for highest efficiency: up to 96,8% (Euro 96%)
- Reverse polarity protection minimizes chance of damage due to mis-wiring
- Excellent thermal behaviour: nominal continuous output power guaranteed up to 50°C ambient
- 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 and USB
- Integrated DC switch in compliance with VDE 0100-712 (Germany) and CEI 64-8 V4 (Italy)
- Standard DC Multi-Contact terminals (model MC4), includes an integrated DC switch (PVI-X.X-OUTD-S), also available in combination with blocking diodes (PVI-X.X-OUTD-DS) for the use with parallel connected PV arrays (see block diagram on the back side)



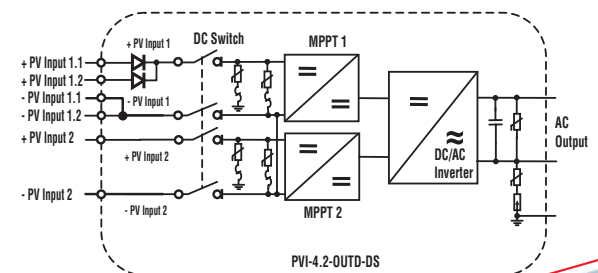
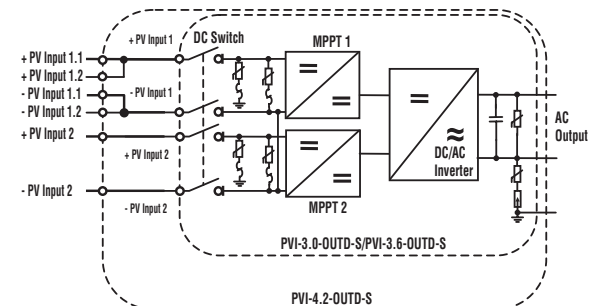
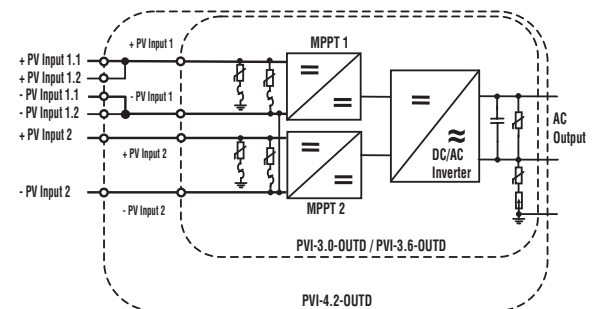
BLOCK DIAGRAM AND TYPICAL EFFICIENCY



PVI-4.2-OUTD Efficiency



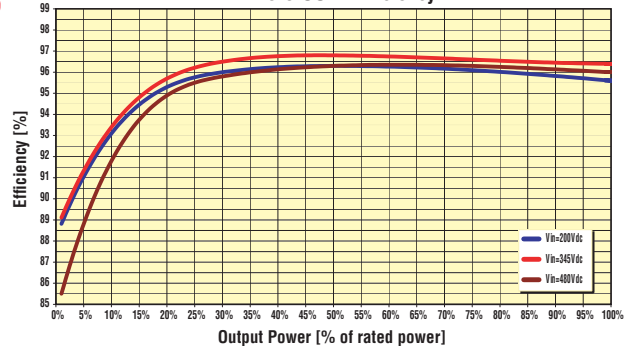
CONFIGURATION



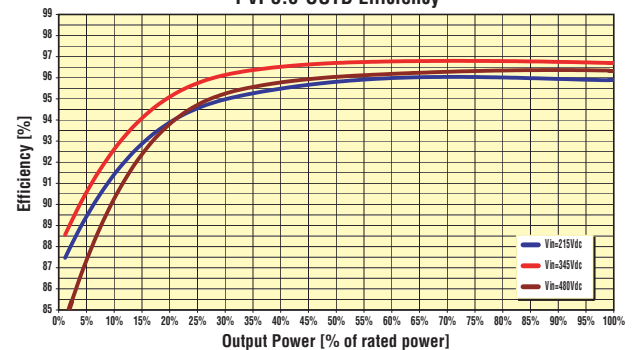
CARATTERISTICHE

	PVI-3.0-OUTD/-S	PVI-3.6-OUTD/-S	PVI-4.2-OUTD/-S/-DS
INPUT PARAMETERS (DC Side)			
Nominal DC Power [kW]	3,12	3,75	4,38
Total Max. Recommended DC Power [kW]	3,5	4,15	4,82
Operating MPPT Input Voltage Range [V]	90 to 580 (360 nominal)		
Full Power MPPT Range [V]	160-530	120-530	140-530
Max. Input Voltage [V]	600		
Activation voltage [V]	200 nominale (adjustable within 120-350)		
No of independent MPPT trackers	2		
Max. Input Power, each MPPT [kW]	2	3	3
No. of DC Inputs	2 (1 each MPPT)	2 (1 each MPPT)	3 (2 for MPPT1, 1 for MPPT2)
Max. DC Current, each MPPT [A]	10 (12,5 short circuit)	16 (20 short circuit)	16 (20 short circuit)
Thermally Protected DC side varistor	4 (2 for each MPPT)		
DC Switch	Integrated (Rating: 600Vdc/25A)		
DC Connections	4 (2 positive, 2 negative) MultiContact Ø 4mm (male - positive input / female - negative input) 6 (3 positive, 3 negative) Mating cable connector included Conductor cross section: 4-6mmq/AWG12-10 - Cable Ø w/insulator: 3-6mm		
OUTPUT PARAMETERS (AC Side)			
Nominal AC Power [kW]	3	3,6	4,2
Max. AC Power [kW]	3,3	3,96	4,6
AC Grid Connection	single phase (Live, Neutral, PE)		
Nominal AC Voltage Range [V]	230		
Maximum AC Voltage Range [V]	180-264		
Nominal AC Frequency [Hz]	50		
Max. AC Line Current [A]	14,5 (16 short circuit)	17,2 (19 short circuit)	20 (22 short circuit)
AC side varistor	2 (Live - Neutral / Live - PE)		
AC Connection	Screw terminal block Conductor cross section: Solid 0,5-16mmq / Stranded: 0,5-10mmq / AWG20-6 Cable Gland: M25 - Cable Ø 10-17mm		
Line Power Factor	1		
AC Current Distortion (THD)	<3,5% at rated power with sine wave voltage		
Max. Efficiency	96,8%		
Euro Efficiency	96%		
Feed In Power Threshold [W]	20		
Night Time consumption [W]	< 2		
Isolation	Transformer-less		
ENVIRONMENTAL PARAMETERS			
Cooling	Natural cooling		
Ambient Temp. Range [°C]	-25 / + 60 (output power derating above 50°C)		
Operating Altitude [mt]	2000		
Acoustical Noise [dBA]	< 50 @ 1mt		
Environmental IP Rating	IP65		
Relative Humidity	0-100% condensing		
MECHANICAL			
Dimensions (HxWxD) [mm]	547 x 325 x 208		
Weight [kg]	17		
OTHER			
Display	YES (Alphanumeric 2 lines)		
Communication	RS485 (Screw terminal block - Conductor cross section: 0,08-1,5mmq/AWG28-16) USB connection (Service) "Aurora Easy-Control" system for remote control (Optional)		

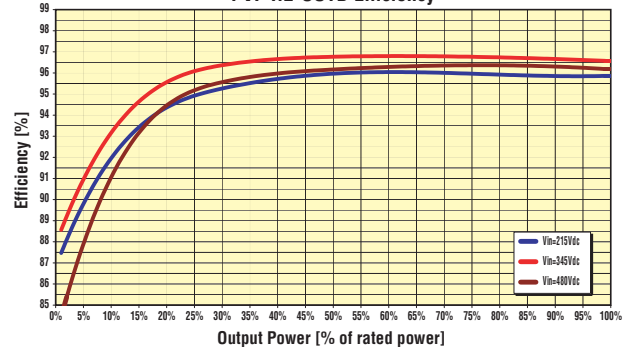
PVI-3.0-OUTD Efficiency



PVI-3.6-OUTD Efficiency



PVI-4.2-OUTD Efficiency



MODEL SUMMARY(*)

Model Number	Output AC Power
PVI-3.0-OUTD/-S	3000W
PVI-3.6-OUTD/-S	3600W
PVI-4.2-OUTD/-S/-DS	4200W

(*) Standard version includes integrated DC disconnect switch

STANDARDS AND CODES

Aurora inverters comply with standards set for grid-tied operation, safety and electromagnetic compatibility including: UL1741(in progress), VDE0126, CEI 11-20, DK5940, CEI 64-8, IEC 61683, IEC 61727, EN50081, EN50082, EN61000, CE certification, El Real Decreto RD1663/2000 de España.

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