

**PVI-3.0-OUTD**  
**PVI-3.6-OUTD**  
**PVI-4.2-OUTD**

## GENERAL SPECIFICATIONS OUTDOOR MODELS

PVI-3.0-OUTD-US  
PVI-3.0-OUTD-S-US

PVI-3.6-OUTD-US  
PVI-3.6-OUTD-S-US

PVI-4.2-OUTD-US  
PVI-4.2-OUTD-S-US

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AURO

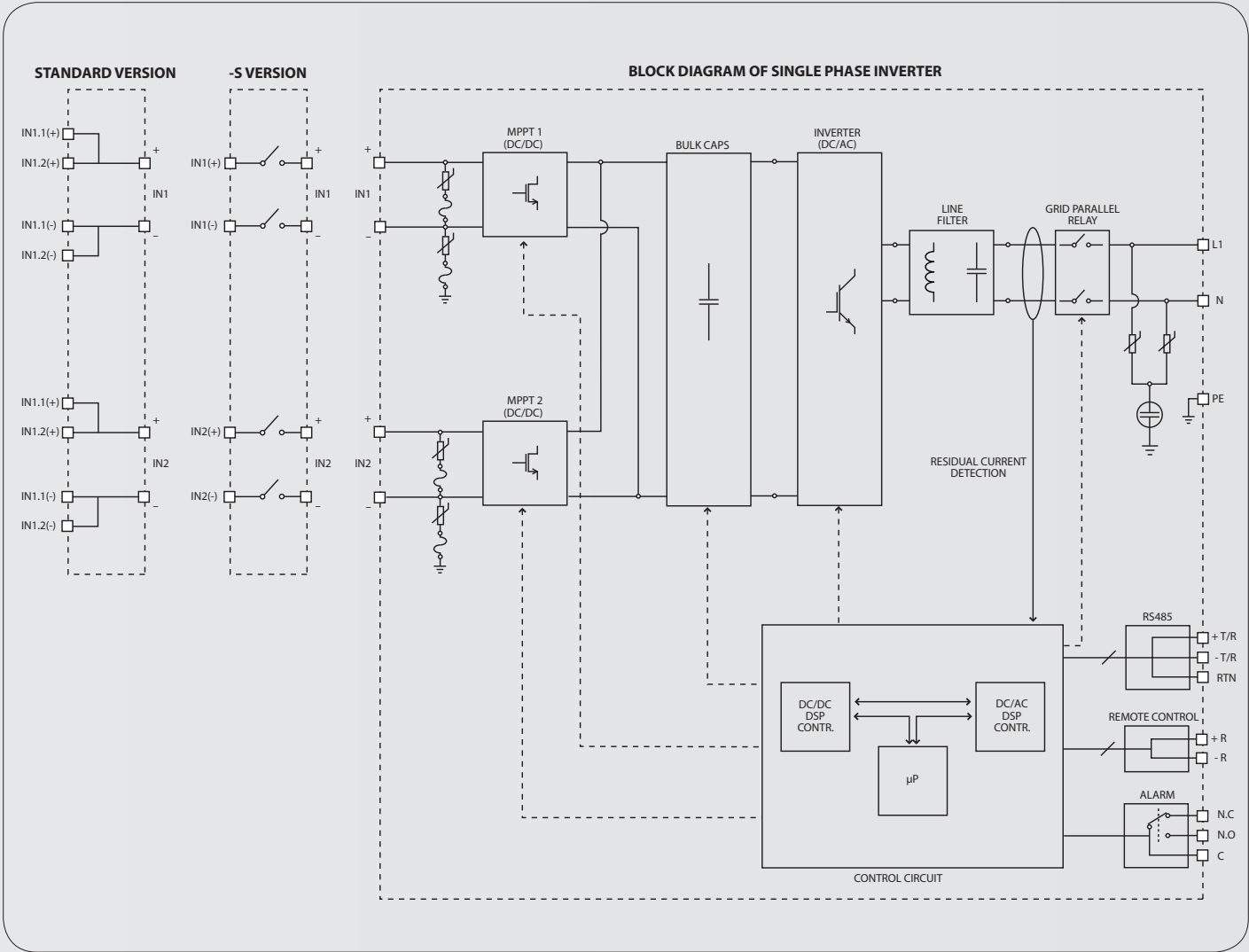
The most common residential inverter is the ideal size for an average-sized family home. This family of single-phase string inverter complements the typical number of rooftop solar panels, allowing home-owners to get the most efficient energy harvesting for the size of the property. This rugged outdoor inverter has been designed as a completely sealed unit to withstand the harshest environmental conditions.

One of the key benefits of the Uno family of inverters is the dual input section to process two strings with independent MPPT especially useful for rooftop installations with two different orientations (ie East and West). The high speed MPPT offers real-time power tracking and improved energy harvesting.

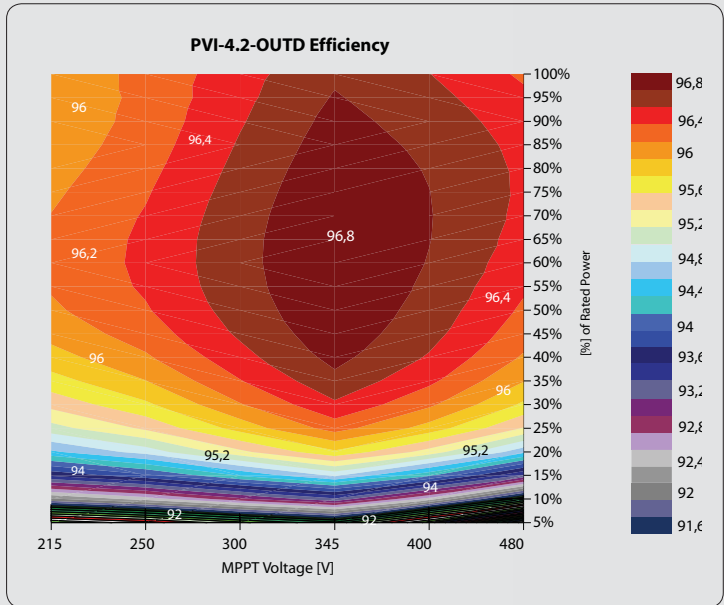
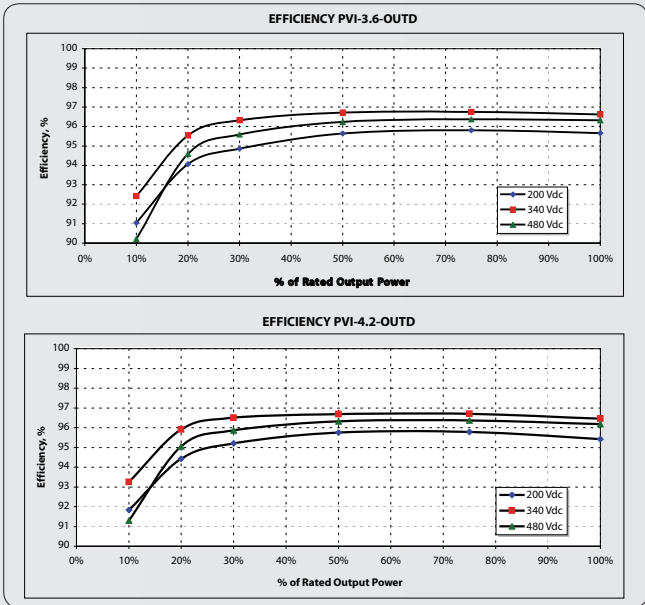
The transformerless operation gives the highest efficiency of up to 97.0%. The wide input voltage range makes the inverter suitable to low power installations with reduced string size.

## Features

- Single Phase 208/240/277 Vac
- Dual input section to process two strings with independent MPPT, optimize energy harvesting from multiple arrays oriented in different directions
- Widest input range in industry
- High speed and precise MPPT algorithm for real time power tracking and improved energy harvesting
- High efficiencies deliver more energy. Flat efficiency curves to ensure consistent and stable performance across the whole input voltage and output power range
- Transformerless operation for highest efficiency
- Anti-Islanding Protection
- Watertight NEMA 4X (IP65) enclosure
- Integrated DC switch in compliance with US Standards (-S Versions)
- RS-485 communication interface (for connection to laptop or datalogger)
- Compatible with PVI-RADIOMODULE for wireless communication with Aurora PVI-DESKTOP



# Block Diagram and Typical Efficiency



CHARACTERISTICS	PVI-3.0-OUTD-US			PVI-3.6-OUTD-US			PVI-4.2-OUTD-US		
<b>INPUT PARAMETERS</b>									
Rated DC Power	3120 Wp			3750 Wp			4380 Wp		
Rated Input Voltage				360V					
Operating Input Voltage Range				0.7 x Vstart - 580 V <sup>(1)</sup>					
Activation Voltage "Vstart"	200 V (adj. 120-350 V)			200 V (adj. 120-350 V)			200 V (adj. 120-350 V)		
Maximum Absolute Input Voltage (Input OV Threshold)				600 V					
No. of Independent MPPT Trackers				2					
No. of DC Inputs				2 pairs (Standard Version) or 1 pairs (-S Version) for each MPPT					
Maximum DC Rated Current for Each Input DC Connector				20.0 A					
Maximum DC Current, each MPPT	10.0 A						16.0 A		
Max. Input Power, each MPPT	2000 W			3000 W			3000 W		
Input Voltage Range for Power Operation with Parallel Configuration of MPPT	160 - 530 V			120 - 530 V			140 - 530 V		
Input Voltage Range for Power Operation with Independent Configuration of MPPT	200 - 530 V (@2000 W) / 120 - 530 V (@1120 W)			190 - 530 V (@3000 W) / 90 - 530 V (@750W)			190 - 530 V (@3000W) / 90 - 530 V (@1380 W)		
DC Connections				Screw Terminal Block 3 Knock-Outs: 1 ½" or 1" (w/ ring red.)					
<b>INPUT PROTECTION</b>									
Reverse Polarity Protection				Yes					
Maximum DC Overcurrent Protection	12.5 A						20.0 A		
DC Side Varistor				4 (2 for each MPPT)					
Allallowable Array Ground Reference				Floating Array Only - Ground Reference not Allowed					
PV Array Isolation Control				GFDI <sup>(2)</sup>					
DC Switch (-S Suffix Version Only)				600 V / 25 A					
<b>OUTPUT PARAMETERS</b>									
	<b>208 V</b>	<b>240 V</b>	<b>277 V</b>	<b>208 V</b>	<b>240 V</b>	<b>277 V</b>	<b>208 V</b>	<b>240 V</b>	<b>277 V</b>
AC Grid Connection				Single Phase / Split Phase					
Rated AC Power	3000 W			3600 W			4200 W		
Maximum AC Power	3000 V	3300 V	3300 V	3600W	4000 W	4000 W	4200 W	4600 W	4600 W
Rated AC Voltage	208 V	240 V	277 V	208 V	240 V	277 V	208 V	240 V	277 V
Maximum AC Voltage Range	183-228 V	211-264 V	244-304 V	183-228 V	211-264 V	244-304 V	183-228 V	211-264 V	244-304 V
Rated AC Frequency	60 Hz			60 Hz			60 Hz		
Maximum AC Line Current	14.5 A	14.5 A	12.0 A	17.2 A	16.0 A	16.0 A	20.0 A	20.0 A	20.0 A
Power Factor	> 0.99			> 0.99			> 0.99		
AC Current Distorsion (THD)	< 2%			< 2%			< 2%		
AC Connection				Screw Terminal Block 3 Knock-Outs: 1 ½" or 1" (w/ ring reducer)					
<b>OUTPUT PROTECTION</b>									
AC Side Varistor				2 (L - N / L - PE)					
Maximum AC Overcurrent Protection	20.0 A	20.0 A	15.0 A	25.0 A	20.0 A	20.0 A	25.0 A	25.0 A	25.0 A
Anti Islanding Protection	According to UL 1741/IEE1547			According to UL 1741/IEE1547			According to UL 1741/IEE1547		
<b>CONVERSION EFFICIENCY</b>									
Maximum Efficiency	96.9%			97.0%			97.0%		
CEC Efficiency	96.0%	96.0%	96.0%	96.0%	96.0%	96.0%	96.0%	96.0%	96.0%
<b>ENVIRONMENTAL PARAMETERS</b>									
Cooling				Natural Cooling					
Ambient Temperature Range	-25/+60°C (-13/+140°F) with derating above 55°C (131°F)						-25/+60°C (-13/+140°F) with derating above 45°C (113°F)		
Operating Altitude				6000 ft					
Acustical Noise				< 50 dB					
Environmental Protection Rating				NEMA 4X (IP65)					
Relative Humidity				< 100% Condensing					
<b>MECHANICAL</b>									
Dimensions (H x W x D)				21.5" x 12.8" x 8.3" 31" x 12.8" x 8.3" (-S version)					
Weight				38 lb 47 lb (-S Version)					
<b>OTHERS</b>									
Stand -By Consuption				< 8W					
Feed In Power Threshold				20.0 W					
Night Time Consumption				< 0.3 W					
Isolation Level				NONE due Transformerless Topology					
Display				Alphanumeric -2 Lines					
Communication				RS 485 Wireless (Optional, AURORA® PVI-RADIOMODULE for communication with AURORA® PVI-DESKTOP)					
<b>AVAILABLE PRODUCT VARIANTS</b>									
Standard - No Options	PVI-3.0-OUTD-US			PVI-3.6-OUTD-US			PVI-4.2-OUTD-US		
With DC Switch	PVI-3.0-OUTD-S-US			PVI-3.6-OUTD-S-US			PVI-4.2-OUTD-S-US		
<b>STANDARD &amp; CODES</b>									
UL 1741, IEEE 1547, CSA - C22.2 N. 107.1-01									

(1) Each MPPT is activated when its input voltage exceeds Vstart and operates within the limits defined by "Operating Input Voltage Range". Default factory setting 200 V, adjustable from 120 to 350 V.

(2) GFDI - Ground Fault Detector Interrupter