

PVI-2000 PVI-3600

GENERAL SPECIFICATIONS INDOOR MODELS

AURORA UNO

The smallest of Power-One's Aurora PV string inverters, this unit is designed to be housed indoors as opposed to many of its outdoor counterparts.

This small residential string inverter will work most effectively with small photovoltaic residential installations. This very compact, slim, lightweight and easy-to-install inverter offers a very cost effective entry point for users new to photovoltaics or in need of a simple power inverter solution.

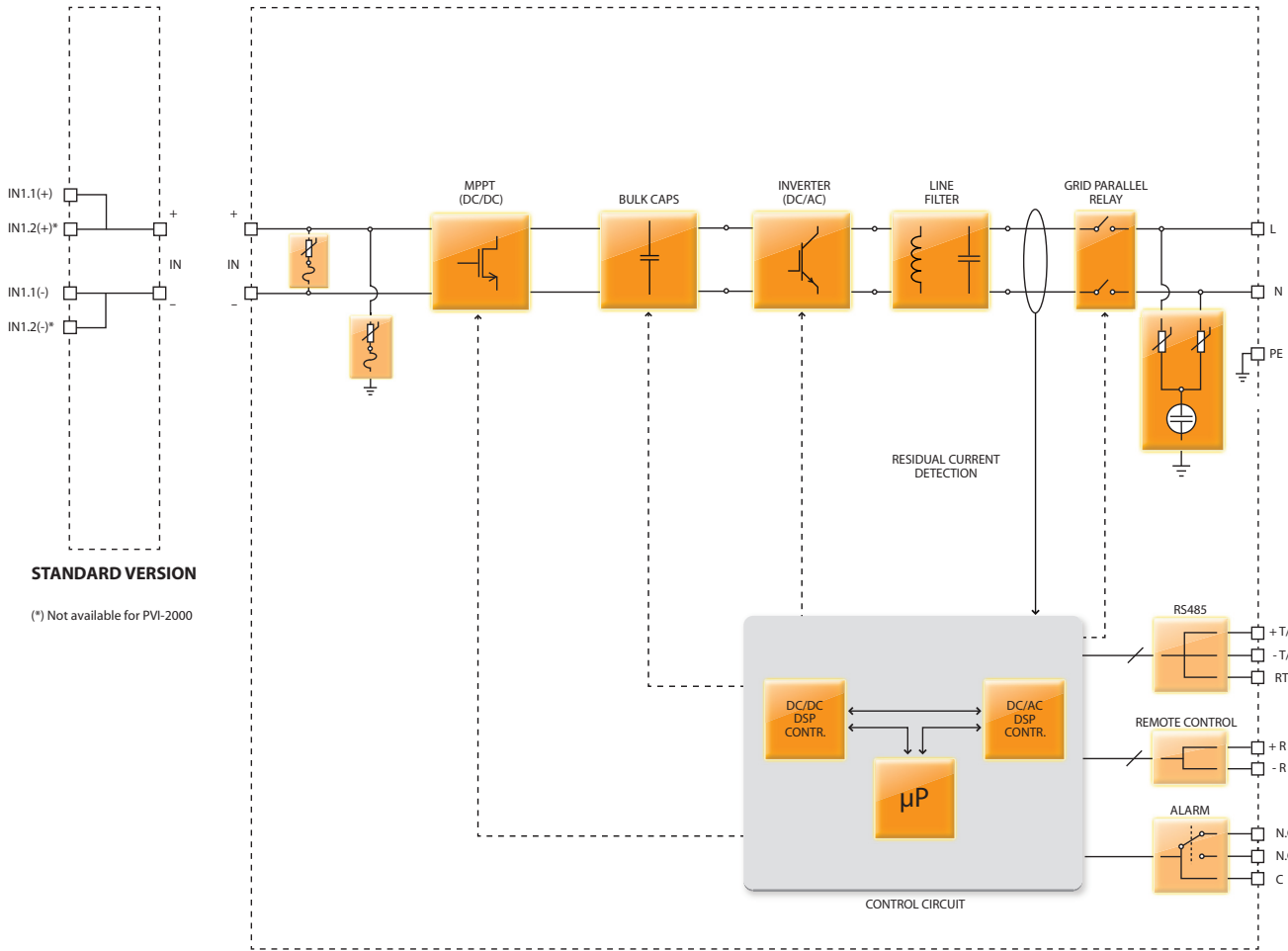
The inverter offers a range of benefits, including maximum energy harvesting, through both its high-speed Maximum Power Point Tracker (MPPT) and transformerless technology. The important parameter is the wide input voltage range making the inverter suitable to low power installations with reduced string size. The graphical display allows users to check real-time performance through its integrated data logger.



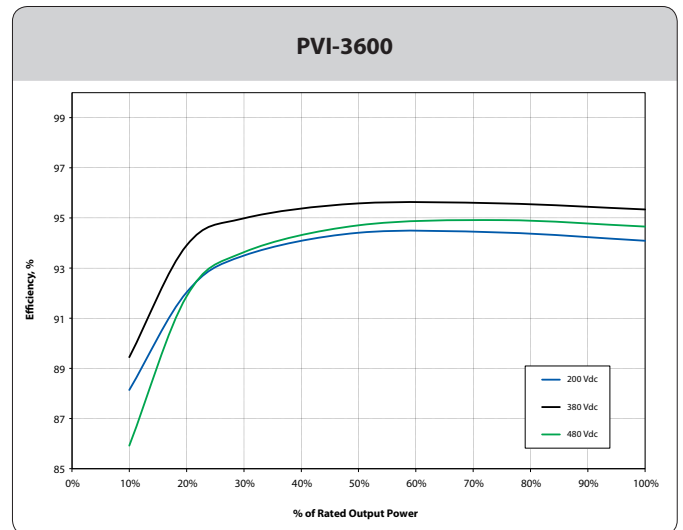
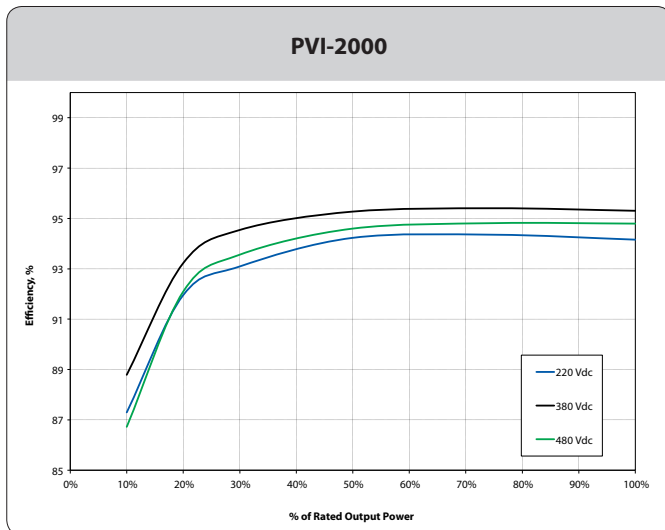
Features

- Wide input range
- High speed and precise MPPT algorithm for real time power tracking and improved energy harvesting
- Flat efficiency curves ensure high efficiency at all output levels ensuring consistent and stable performance across the entire input voltage and output power range
- RS-485 communication interface (for connection to laptop or datalogger)
- Compatible with PVI-RADIOMODULE for wireless communication with Aurora PVI-DESKTOP

BLOCK DIAGRAM OF PVI-2000 AND PVI-3600



Block Diagram and Efficiency Curves



PARAMETER	PVI-2000	PVI-3600
Input Side		
Absolute Maximum DC Input Voltage ($V_{max,abs}$)	600 V	
Start-up DC Input Voltage (V_{start})	200 V (adj. 120...350 V)	
Operating DC Input Voltage Range ($V_{dcmin} \dots V_{dcmax}$)	$0.7 \times V_{start} \dots 580$ V	
Rated DC Input Power (P_{dcr})	2100 W	3800 W
Number of Independent MPPT	1	2
Maximum DC Input Power for each MPPT ($P_{MPPTmax}$)	2100 W Linear Derating From MAX to Null [$530V \leq V_{MPPT} \leq 580V$]	2000 W
MPPT Input DC Voltage Range ($V_{MPPTmin,f} \dots V_{MPPTmax,f}$) at P_{acr}	210...530 V	200...530 V
DC Input Voltage Range with Parallel Configuration of MPPT at P_{acr}	Not applicable	200...530 V
DC Power Limitation with Parallel Configuration of MPPT	Not applicable	Linear Derating From MAX to Null [$530V \leq V_{MPPT} \leq 580V$]
DC Power Limitation for each MPPT with Independent Configuration of MPPT at P_{acr} , max unbalance example	Not applicable	2000 W [$200V \leq V_{MPPT} \leq 530V$] the other channel: $P_{dcr} - 2000W$ [$180V \leq V_{MPPT} \leq 530V$]
Maximum DC Input Current (I_{dcmax}) / for each MPPT ($I_{MPPTmax}$)	10.0 A / 10.0 A	20.0 A / 10.0 A
Maximum Input Short Circuit Current for each MPPT	12.0 A	
Number of DC Inputs Pairs for each MPPT	1	2
DC Connection Type	Tool Free PV Connector WM / MC 3 / MC 4 ⁽¹⁾	
Input Protection		
Reverse Polarity protection	Yes, from limited current source	
Input Over Voltage Protection for each MPPT - Varistor	2	2 for each MPPT
Photovoltaic Array Isolation Control	According to local standard	
Output Side		
AC Grid Connection Type	Single phase	
Rated AC Power (P_{acr})	2000 W	3600 W
Maximum AC Output Power (P_{acmax})	2000 W	3600 W
Rated AC Grid Voltage (V_{acr})	230 V	
AC Voltage Range	180...264 V ⁽²⁾	
Maximum AC Output Current ($I_{ac,max}$)	10.0 A	16.0 A
Rated Output Frequency (f_r)	50 Hz	
Output Frequency Range ($f_{min} \dots f_{max}$)	47...53 Hz ⁽³⁾	
Nominal Power Factor ($\cos\phi_{i,acr}$)	> 0.995	
Total Current Harmonic Distortion	< 2.5 %	
AC Connection Type	Circular connector	
Output Protection		
Anti-Islanding Protection	According to local standard	
Maximum AC Overcurrent Protection	16.0 A	20.0 A
Output Overvoltage Protection - Varistor	2 (L - N / L - PE)	
Operating Performance		
Maximum Efficiency (η_{max})	95.5%	96.0%
Weighted Efficiency (EURO/CEC)	94.4% / -	95.0% / -
Feed In Power Threshold	10.0 W	
Stand-by Consumption	< 8.0 W	
Communication		
Wired Local Monitoring	PVI-USB-RS485_232 (opt.), PVI-DESKTOP (opt.)	
Remote Monitoring	PVI-AEC-EVO (opt.), AURORA-UNIVERSAL (opt.)	
Wireless Local Monitoring	PVI-DESKTOP (opt.) with PVI-RADIOMODULE (opt.)	
User Interface	Graphic display	
Environmental		
Ambient Temperature Range	-20...+55°C / -4...131°F with derating above 40°C/104°F	
Relative Humidity	0...95 %	
Noise Emission	< 30 db(A) @ 1 m	
Maximum Operating Altitude without Derating	2000 m / 6560 ft	
Physical		
Environmental Protection Rating	IP 21	
Cooling	Air Forced	
Dimension (H x W x D)	440mm x 465mm x 57mm / 17.3" x 18.3" x 2.2"	
Weight	< 7.5 kg / 16.5 lb	< 8.5 kg / 18.7 lb
Mounting System	Wall bracket	
Safety		
Isolation Level	Transformerless	
Marking	CE	
Safety and EMC Standard	EN 50178, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3, AS/NZS 3100	
Grid Standard	DK 5940, VDE 0126-1-1, G83/1, AS 4777	
Available Products Variants		
Standard	PVI-2000	PVI-3600

1. Different DC connection type for specific country model

2. The AC voltage range may vary depending on specific country grid standard

3. The Frequency range may vary depending on specific country grid standard



www.power-one.com

Power-One Renewable Energy Worldwide Sales Offices

Country	Name/Region	Telephone	Email
Australia	Asia Pacific	+61 2 9735 3111	sales.australia@power-one.com
China	Asia Pacific	+86 755 2988 5888 ext.5588	sales.china@power-one.com
Singapore	Asia Pacific	+65 6896 3363	sales.singapore@power-one.com
France	Europe	00 800 00287672 Choix n°4	sales.france@power-one.com
Germany	Europe	+49 7641 955 2020	sales.germany@power-one.com
Italy	Europe	+39 055 9195 396	sales.italy@power-one.com
Spain	Europe	+34 629253564	sales.spain@power-one.com
United Kingdom	Europe	+44 1903 823 323	sales.UK@power-one.com
Dubai	Middle East	+971 50 100 4142	sales.dubai@power-one.com
Canada	North America	+1 877 261-1374	sales.canada@power-one.com
USA East	North America	+1 877 261-1374	sales.usaeast@power-one.com
USA Central	North America	+1 877 261-1374	sales.usacentral@power-one.com
USA West	North America	+1 877 261-1374	sales.usawest@power-one.com