power-one®
Renewable Energy Solutions

AURORA®

PVI-2000-OUTD

AURORA® UNO

GENERAL SPECIFICATIONS
OUTDOOR MODELS

The transformerless operation of this compact outdoor residential inverter provides an efficiency of 95.5%. The high-speed Maximum Power Point Tracker (MPPT) produces real-time power tracking and improved energy harvesting.

The wide input voltage range makes this inverter suitable to low power installations with reduced string size. This rugged outdoor inverter has been designed as a completely sealed unit to stand withstand the harshest environmental conditions.

This small single string inverter features a front heat sink to keep the unit cleaner and more efficient over time.

Features

- Wide input range
- High speed and precise MPPT algorithm for real time power tracking and improved energy harvesting
- Outdoor enclosure for unrestricted use under any environmental conditions
- RS-485 communication interface (for connection to laptop or datalogger)

PARAMETER	PVI-2000-OUTD
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}...V_{dcmax})	0.7 x V_{start}...580 V
Rated DC Input Power (P_{dcr})	2100 W
Number of Independent MPPT	1
Maximum DC Input Power for each MPPT ($P_{MPPTmax}$)	2100 W Linear Derating From MAX to Null [530V≤V_{MPPT}≤580V]
MPPT Input DC Voltage Range ($V_{MPPTmin,f}$ ... $V_{MPPTmax,f}$) at P_{acr}	210...530 V
DC Power Limitation for each MPPT with Independent Configuration of MPPT at P_{acr}, max unbalance example	Not applicable
Maximum DC Input Current (I_{dcmax}) / for each MPPT ($I_{MPPTmax}$)	10.0 A / 10.0 A
Maximum Input Short Circuit Current for each MPPT	12.0 A
Number of DC Inputs Pairs for each MPPT	1
DC Connection Type	Tool Free PV Connector WM / MC4
Input Protection	
Reverse Polarity protection	Yes, from limited current source
Input Over Voltage Protection for each MPPT - Varistor	2
Photovoltaic Array Isolation Control	According to local standard
Output Side	
AC Grid Connection Type	Single phase
Rated AC Power (P_{acr})	2000 W
Maximum AC Output Power (P_{acmax})	2000 W
Rated AC Grid Voltage ($V_{ac,r}$)	230 V
AC Voltage Range	180...264 V (1)
Maximum AC Output Current ($I_{ac,max}$)	10.0 A
Rated Output Frequency (f_r)	50 Hz
Output Frequency Range (f_{min}...f_{max})	47...53 Hz (2)
Nominal Power Factor (Cosphi$_{ac,r}$)	> 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
Output Overvoltage Protection - Varistor	2 (L - N / L - PE)
Operating Performance	
Maximum Efficiency (η_{max})	95.5%
Weighted Efficiency (EURO/CEC)	94.4% / -
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	-
User Interface	16 characters x 2 lines LCD display
Environmental	
Ambient Temperature Range	-25...+60°C /-13...140°F with derating above 40°C/104°F
Relative Humidity	0...100 % condensing
Noise Emission	< 40 db(A) @ 1 m
Maximum Operating Altitude without Derating	2000 m / 6560 ft
Physical	
Environmental Protection Rating	IP 65
Cooling	Natural
Dimension (H x W x D)	420mm x 326mm x 141mm / 16.5" x 12.8" x 5.6"
Weight	< 14.5 kg / 32.0 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-OUTD

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