PVI-10.0-I-OUTD

AURORA®
Photovoltaic Inverter

General Specifications
Outdoor models
PVI-10.0-I-OUTD-208-US
PVI-10.0-I-OUTD-480-US

PRELIMINARY
can be subject to changes

Electrolyte - Free
The string inverter without electrolytic capacitors

AURORA® BENEFITS

- Dual indipendent input sections to offer the maximum configuration flexibility of the installation
- High-frequency isolation for high efficiency, up to 96.5% and CEC 96% (-480Vac version)
- True 3ph bridge topology for DC/AC output converter
- Wide MPPT input voltage range: 220-450Vdc full power
- Flat efficiency curve: to ensure consistent and stable performance across the whole input voltage and output power range
- Efficiency peaks at the middle of the input voltage and output power range to ensure betters performance under real operating conditions
- Very fast and accurate dual MPPT algorithm (response time: 1sec; accuracy: 99,8%)
- Very low sensitivity to grid disturbances to avoid undesired disconnection from the grid
- Wide operating temperature range -25°/+60°C. Maximun output power guaranteed for ambient temperatures up to 50°C, free convection cooling (no ventilation)
- Optional AC and DC wiring box available
- LCD Display on the front to monitor the main parameters
- Anti-islanding Protection
- Integrated RS-485
- Reverse polarity protection minimizes chance of damage due to mis-wiring

STANDARDS AND CODES

Aurora inverters comply with standards set for grid-tied operation, safety and electromagnetic compatibility UL1741

CHARACTERISTICS	PVI-10.0-I-OUTD-208-US	PVI-10.0-I-OUTD-480-US
INPUT PARAMETERS		
Nominal DC Power [kW]	10,5	
Max. Recommended DC Power [kW]	11,4	
Operating Input Voltage Range [V]	0,7xVstart - 540	
Full Power MPPT input voltage range (symmetrical load) [V]	220-450	
Absolute Max. Input Voltage [V]	560Vac	
Activation voltage "Vstart" [V]	adjustable starting from 150Vdc (non full power)	
No of independent MPPT trackers	2	
Max. Input Power, each MPPT [kW]	6,5	
No. of DC Inputs	1 each MPPT	
Max. DC Current, each MPPT [A]	25A (30A shortcircuit)	
DC Connection	Screw terminal block	
INPUT PROTECTION		
DC side varistors	4 (2 for each MPPT), thermally protected	
PV array Insulation Control	according to UL 1741	
DC Switch (-S/-FS suffix versions only)	Integrated (Rating: 600Vdc/30Adc)	
OUTPUT PARAMETERS		
Nominal AC Power [up to 50°C, kW]	10,0	
Max. AC Power [kW]	10,8	
AC Grid Connection	3 phase 208Vac	3 phase 480Vac
Nominal AC Voltage [V]	208Vac	480Vac
Maximum AC Voltage Range [V]	183-229	423-528
Nominal AC Frequency [Hz]	60	
Max. AC Line Current [A]	30Aac (32A short-circuit)	12A (15A shortcircuit)
AC Connection	Screw terminal block	
Line Power Factor	1	
AC Current Distortion [THD%]	<2% at rated power with sine wave voltage	
OUTPUT PROTECTION		
AC side varistors	3, star connected to common point, plus gas arrester to ground	
Ground fault protection (AC + DC leakage current)	according to UL1741	
CONVERSION EFFICIENCY		
Max. Efficiency	96,0%	96,3%
CEC Efficiency	95,5%	96,0%
ENVIRONMENTAL PARAMETERS		
Cooling	Natural cooling	
Ambient Temp. Range [°C]	-25°C / +60°C (output derating above 50°C)	
Opertaing Altitude [m]	2000	
Acoustical Noise [dBA]	<50 @1mt	
Environmental IP Rating	NEMA 4x	
Relative Humidity	0-100% condensing	
MECHANICAL		
Dimensions [H x W x D]	650 x 650 x 200	
Weight [kg]	45 (99 lbs)	
OTHER		
Stand-By Consumption [W]	10	
Feed In Power Threshold [W]	30W	
Night Time consumption [W]	<2	
Isolation	Yes, High-frequency	
Display	YES (Alphanumeric 2 lines)	
Communication	RS485 (Screw terminal block - Conductor cross section: 0,08-1,5mmq/AWG28-16)	
AVAILABLE PRODUCT VARIANTS		
Standard - no options	PVI-10.0-I-OUTD-208-US	PVI-10.0-I-OUTD-480-US

MODEL SUMMARY

MODEL NUMBER	POWER
PVI-10.0-I-OUTD-208-US	10KW 208Vac
PVI-10.0-I-OUTD-480-US	10KW 480Vac