

UNO-2.0-I UNO-2.5-I

GENERAL SPECIFICATIONS OUTDOOR MODELS

The UNO-2.0-I and UNO-2.5-I are the latest single phase string inverters in the Aurora range. A new-look inverter but packed with Power-One's proven high performing technology. The new look inverter has new features including a special built-in heat sink compartment and front panel display system.

The smallest of Power-One's outdoor range, these new products are the right size for the average rooftop installation. This rugged outdoor inverter has been designed as a completely sealed unit to withstand the harshest environmental conditions.

The high speed MPPT offers real-time power tracking and improved energy harvesting.

Despite the isolated operation, the UNO-2.0-I and UNO-2.5-I feature an efficiency of 96.3%. The wide input voltage range makes the inverter suitable to low power installations with reduced string size.

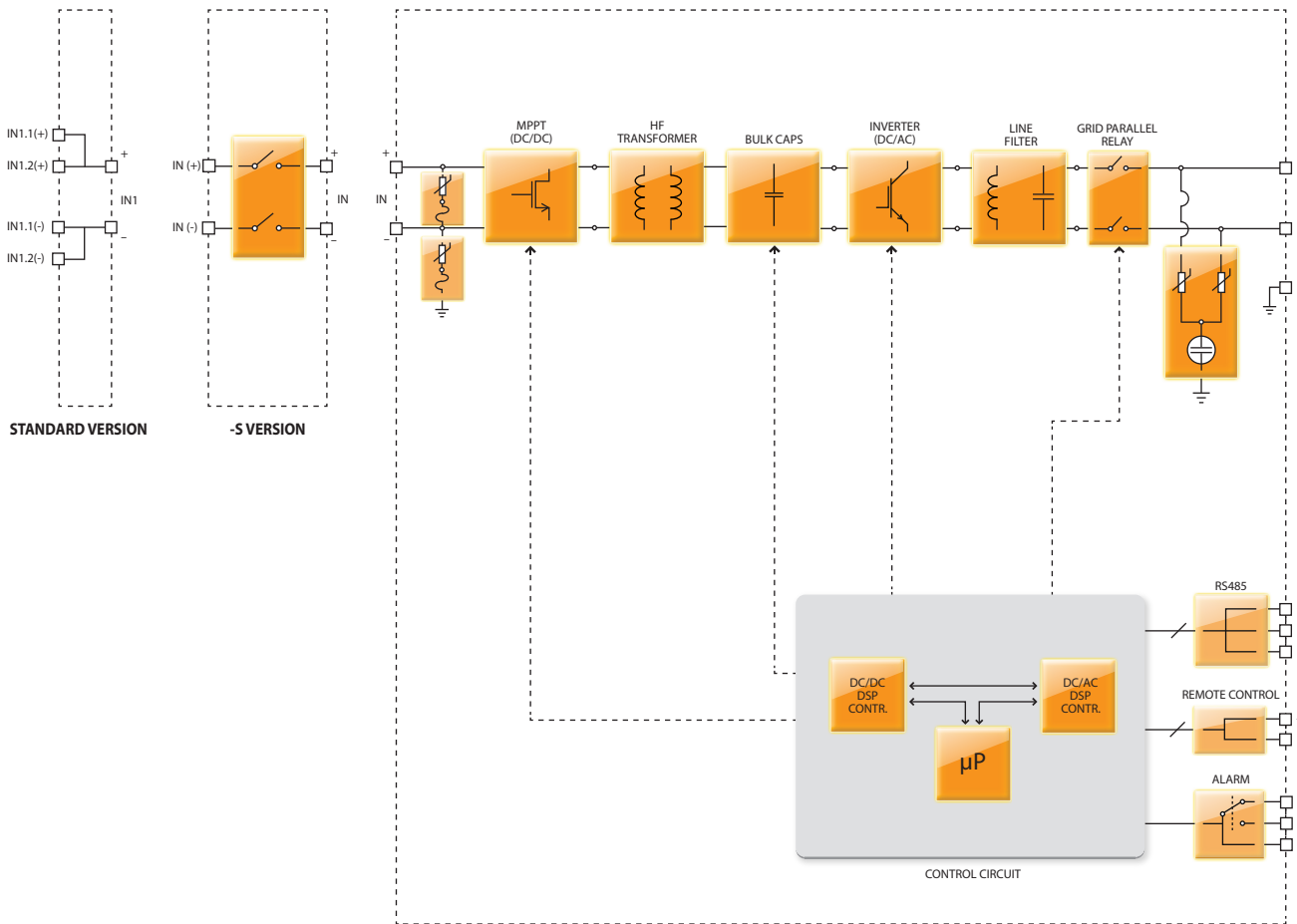


AURORA UNO

Features

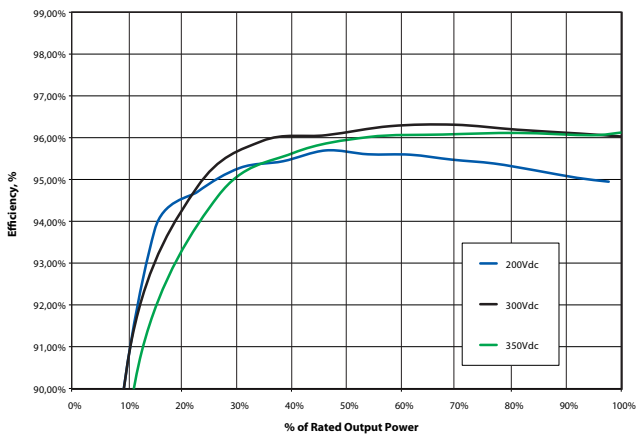
- Each inverter is set on specific grid codes which can be selected in the field
- Single phase output
- Wide input range
- High speed and precise MPPT algorithm for real time power tracking and improved energy harvesting
- Flat efficiency curves ensure high efficiency at all output levels ensuring consistent and stable performance across the entire input voltage and output power range
- Outdoor enclosure for unrestricted use under any environmental conditions
- RS-485 communication interface (for connection to laptop or datalogger)
- Compatible with PVI-RADIOMODULE for wireless communication with Aurora PVI-DESKTOP

BLOCK DIAGRAM OF UNO-2.0-I AND UNO-2.5-I

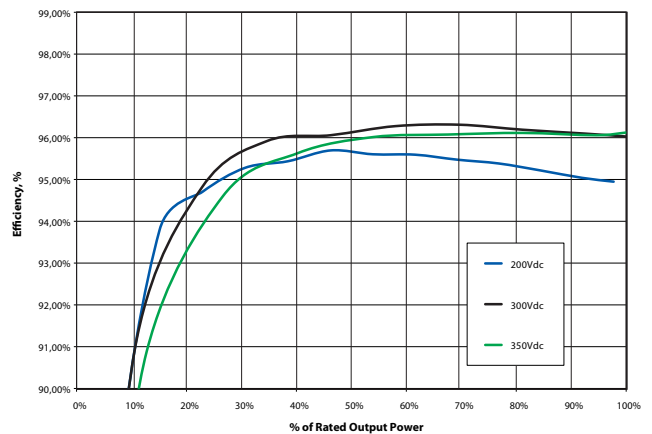


Block Diagram and Efficiency Curves

UNO-2.0-I-OUTD



UNO-2.5-I-OUTD



PARAMETER		UNO-2.0-I-OUTD	UNO-2.5-I-OUTD
Input Side			
Start-up Input Voltage (V_{start})		200 V (adj. 120...350 V)	
Operating Input Range ($V_{dcmin} \dots V_{dcmax}$)		0.7 x V_{start} ... 520 V	
MPPT Input Range ($V_{MPPT min, f} \dots V_{MPPT max, f}$) at Full Power		165...470 V	205...470 V
Absolute Maximum Input Voltage ($V_{max, abs}$)		520 V	
Number of Independent MPPT		1	
Maximum Input Current (I_{dcmax})		12,8 A	
Number of DC Inputs Pairs		2	
DC Connection Type		MC4	
Input Protection			
Reverse Polarity Protection		Yes	
Input Short Circuit Current		16.0 A	19.5 A
Input Over Voltage Protection - Varistor		2	
Photovoltaic Array Isolation Control		According to local standard	
DC Switch (-S Version)		16 A / 600 V	
Output Side			
AC Grid Connection		Single phase	
Rated Power (P_{acr})		2000 W	2500 W
Rated Grid Voltage ($V_{ac, r}$)		230 Vac	
AC Voltage Range ($V_{acmin} \dots V_{acmax}$)		180...264 Vac ¹	
Maximum Output Current ($I_{ac, max}$)		10.0 A	12.0 A
Rated Frequency (f_r)		50 Hz	
Frequency Range ($f_{min} \dots f_{max}$)		47...53 Hz ²	
Nominal Power Factor ($\cos\phi_{i, ac, r}$)		> 0.995 (adj. $\pm$ 0.95)	
Total Harmonic Distortion		< 3%	
AC Connection Type		Screw terminal block	
Output Protection			
Anti-islanding Protection		According to local standard	
Maximum AC Overcurrent Protection		15.0 A	15.0 A
Output Overvoltage Protection - Varistor		2 (L - N / L - PE)	
Operating Performance			
Maximum Efficiency (η_{max})		96.3%	
Weighted Efficiency (EURO/CEC)		96.0% / -	
Feed In Power Threshold		24.0 W	
Stand-by Consumption		< 8.0 W	
Communication			
Wired Local Monitoring	1 x RS485 (inc.)	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		-25...+60°C (-13...+ 140°F) with derating above 45°C (113°F)	
Relative Humidity		0...100 % condensing	
Noise Emission		< 50 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)		518mm x 367mm x 160mm / 20.4" x 14.4" x 6.3"	
Weight		< 17 kg / 37.4 lb	
Mounting System		Wall bracket	
Safety			
Isolation Level		HF transformer	
Marking		CE	
Safety and EMC Standard		EN 50178, AS/NZS3100, AS/NZS 60950, EN61000-6-1, EN61000-6-3, EN61000-3-11, EN61000-3-12	
Grid Standard		Enel Guideline, VDE 0126-1-1, G83/1-1, EN 50438, RD1663, AS 4777	
Available Products Variants			
With DC Switch		UNI-2.0-I-OUTD	UNI-2.5-I-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

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