

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.

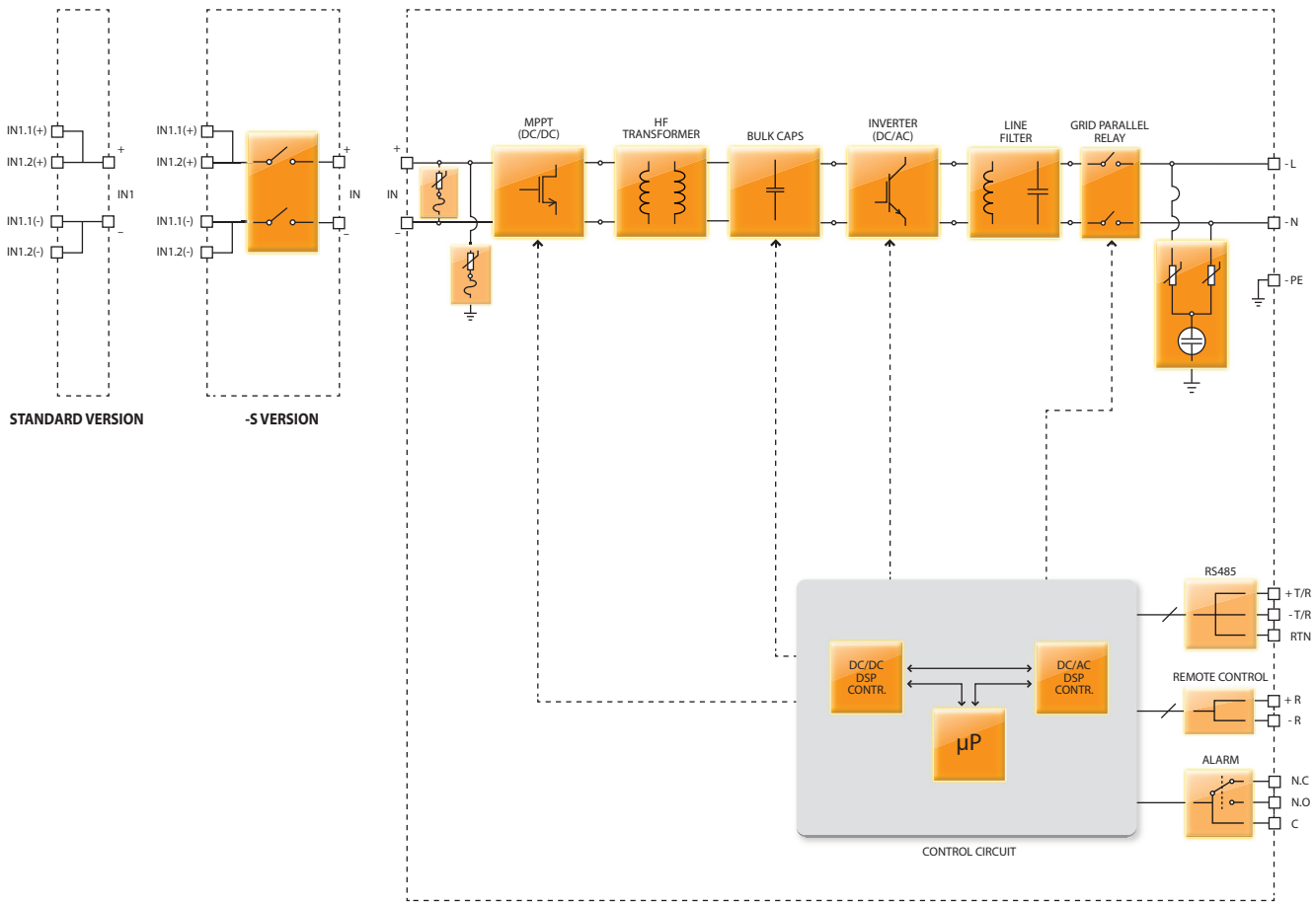


AURORA UNO

Features

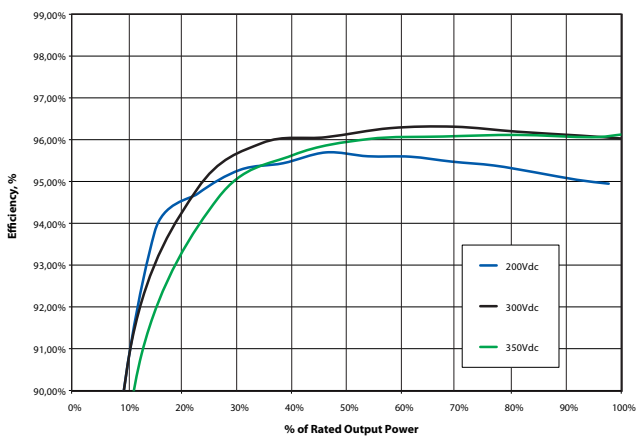
- Each inverter is set on specific grid codes which can be selected in the field
- Single phase output
- Wide input range
- High speed and precise MPPT algorithm for real time power tracking and improved energy harvesting
- Flat efficiency curves ensure high efficiency at all output levels ensuring consistent 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

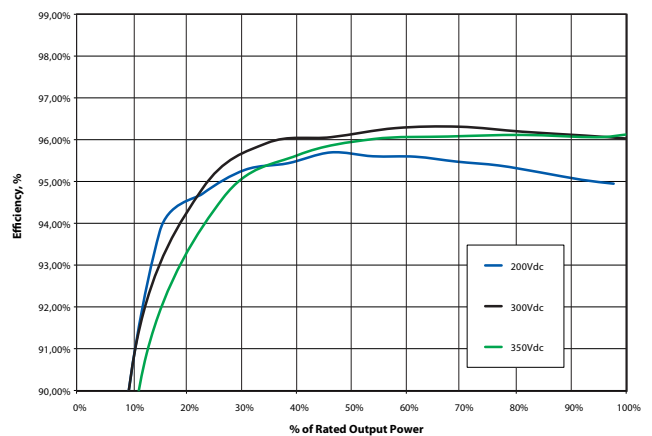


Block Diagram and Efficiency Curves

UNO-2.0-I-OUTD



UNO-2.5-I-OUTD



| PARAMETER | UNO-2.0-I-OUTD | UNO-2.5-I-OUTD |
|---|--|---|
| Input Side | | |
| Absolute Maximum DC Input Voltage ($V_{max,abs}$) | 520 V | |
| Start-up DC Input Voltage (V_{start}) | 200 V (adj. 120...350 V) | |
| Operating DC Input Voltage Range ($V_{dcmin} \dots V_{dcmax}$) | $0.7 \times V_{start} \dots 520 V$ | |
| Rated DC Input Power (P_{dcr}) | 2100 W | 2600 W |
| Number of Independent MPPT | 1 | |
| Maximum DC Input Power for each MPPT ($P_{MPPTmax}$) | "2300 W Linear Derating From MAX to Null [470V ≤ VMPPT ≤ 520V]" | "2900 W Linear Derating From MAX to Null [470V ≤ VMPPT ≤ 520V]" |
| MPPT Input DC Voltage Range ($V_{MPPTmin,f} \dots V_{MPPTmax,f}$) at P_{acr} | 200...470 V | 205...470 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 | 12.8 A / 12.8 A |
| Maximum Input Short Circuit Current for each MPPT | 15.0 A | |
| Number of DC Inputs Pairs for each MPPT | 2 | |
| 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 | |
| DC Switch Rating for each MPPT (-S Version) | 16 A / 600 V | |
| Output Side | | |
| AC Grid Connection Type | Single phase | |
| Rated AC Power (P_{acr}) | 2000 W | 2500 W |
| Maximum AC Output Power (P_{acmax}) | 2200 W | 2750 W |
| Rated AC Grid Voltage (V_{acr}) | 230 V | |
| AC Voltage Range | 180...264 V ⁽¹⁾ | |
| Maximum AC Output Current ($I_{ac,max}$) | 10.0 A | 12.0 A |
| Rated Output Frequency (f) | 50 Hz | |
| Output Frequency Range ($f_{min} \dots f_{max}$) | 47...53 Hz ⁽²⁾ | |
| Nominal Power Factor ($\cos\phi_{i,acr}$) | > 0.995 (adj. ± 0.95) | |
| Total Current Harmonic Distortion | < 2% | |
| AC Connection Type | Screw terminal block | |
| Output Protection | | |
| Anti-Islanding Protection | According to local standard | |
| Maximum AC Overcurrent Protection | 15.0 A | |
| Output Overvoltage Protection - Varistor | 2 (L - N / L - PE) | |
| Operating Performance | | |
| Maximum Efficiency (η_{max}) | 96.3% | |
| Weighted Efficiency (EURO/CEC) | 95.0% / - | |
| Feed In Power Threshold | 24.0 W | |
| Stand-by Consumption | < 8.0 W ⁽³⁾ | |
| 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 | -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, EN 50438, RD1663, AS 4777 | |
| Available Products Variants | | |
| With DC Switch | UNO-2.0-I-OUTD-S | UNO-2.5-I-OUTD-S |

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

3. Night time consumption < 0.6W



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