

MICRO-0.25-I MICRO-0.3-I MICRO-0.3HV-I

GENERAL SPECIFICATIONS OUTDOOR MODELS

The new Aurora 250 & 300-watt micro-inverter product offers something new to Power-One customers with the ability to monitor individual PV modules and flexible installation options under high shading conditions.

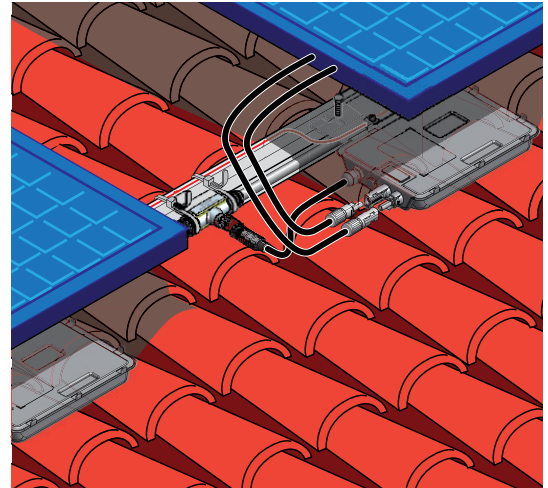
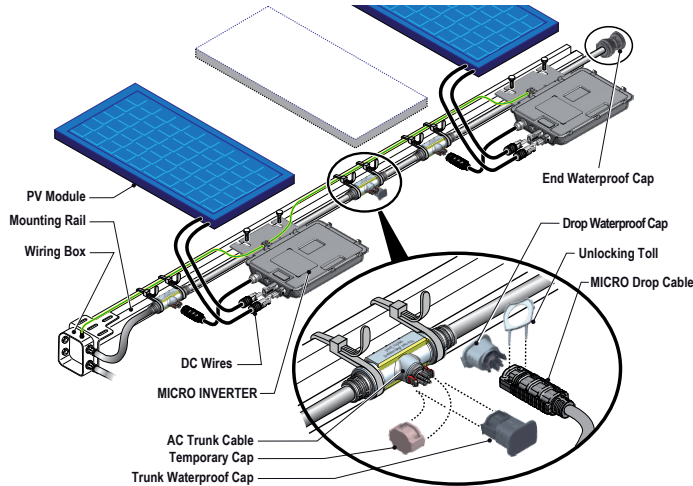
They also allow you to control individual panels in different ways and reduce the losses in efficiency in a variety of challenging conditions.



Features

- **Powerful:**
 - More energy production with fewest microinverters
 - 96% CEC Efficiency
 - More harvesting under low light conditions or partial module shading
- **Universal:**
 - Electrically compatible with all 60, 72 and 96 cell PV modules
 - NEMA 4X enclosure rating allows installation anywhere, including seaside environments
- **Flexible:**
 - Wireless communications with module level monitoring capability
 - Install different models (250W or 300W) on the same PV array
- **Reliable:**
 - Electrolyte free design for longer life
 - From a company with a 40 year experience in power electronics

SYSTEM INSTALLATION



AURORA MICRO® INVERTER SYSTEM INSTALLATION

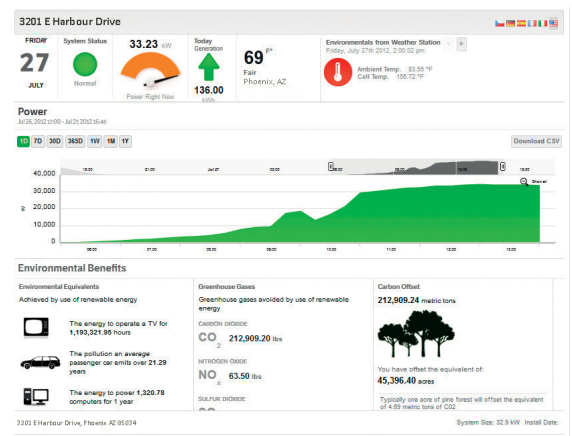
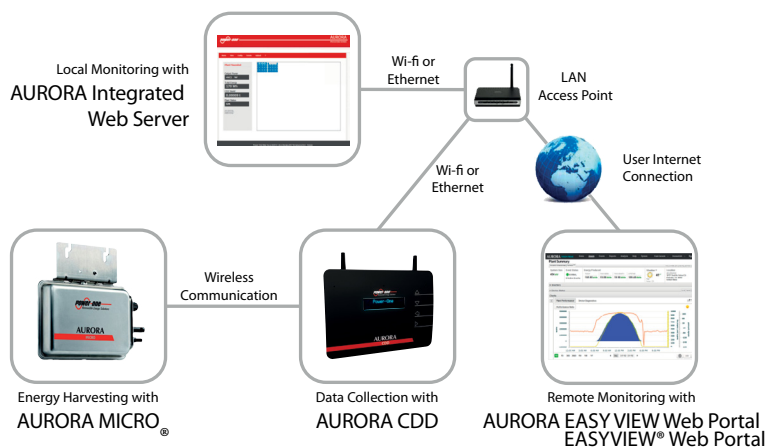
- The AURORA MICRO® Inverter offers ease of installation with an AC trunk and drop cable configuration
- The mounting bracket on the AURORA MICRO® inverter ensures simple and durable mounting on commercially available racking solutions
- AC Cabling compatible with 60, 72 and 96 cell modules in both portrait and landscape orientation
- Locking connectors and weatherproof accessories ensure long term reliable operation of the plant

AURORA VISION MONITORING

- Easy monitoring solution for homeowners with AURORA EASYVIEW®
- Complete reporting, analytics and diagnostic view for installers with complete control of installation process and access security
- Tightly integrated micro-inverter and monitoring solution

System Overview

MONITORING SOLUTION



AURORA MICRO® INVERTER



- 250W: MICRO-0.25-I
- 300W: MICRO-0.3-I
- 300W: MICRO-0.3HV-I

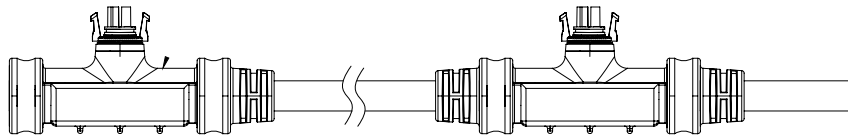
AURORA CDD



- Wireless Data Monitoring
- Remote Monitoring through AURORA VISION

CABLING AND ACCESSORIES

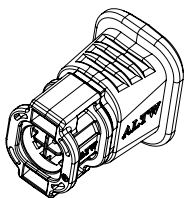
AC TRUNK CABLE



- Portrait Orientation (60, 72, 96 cell modules): AC-TRUNK SPOOL-41inches-50plugs (41" connector pitch, spool of 50 plugs)
- Landscape Orientation (60, 96 cell modules): AC-TRUNK SPOOL-67inches-32plugs (67" connector pitch, spool of 32 plugs)
- Landscape Orientation (72 cell modules): AC-TRUNK SPOOL-81inches-27plugs (81" connector pitch, spool of 27 plugs)

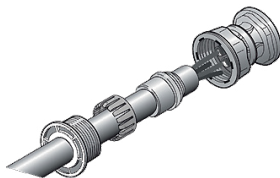
System Components

AC TRUNK CABLE PLUG CAP



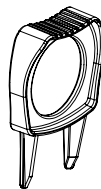
- Plug cap to cover and seal unused plugs on AC trunk cable: AC-TRUNK PLUG CAP

AC TRUNK CABLE END CAP



- End cap to cover and seal ends of AC trunk cable: AC-TRUNK END CAP

AC TRUNK CABLE UNLOCK TOOL



- To disconnect AURORA MICRO inverter or Junction cap from trunk cable: AC-TRUNK UNLOCK TOOL

AC TRUNK CABLE JOINER



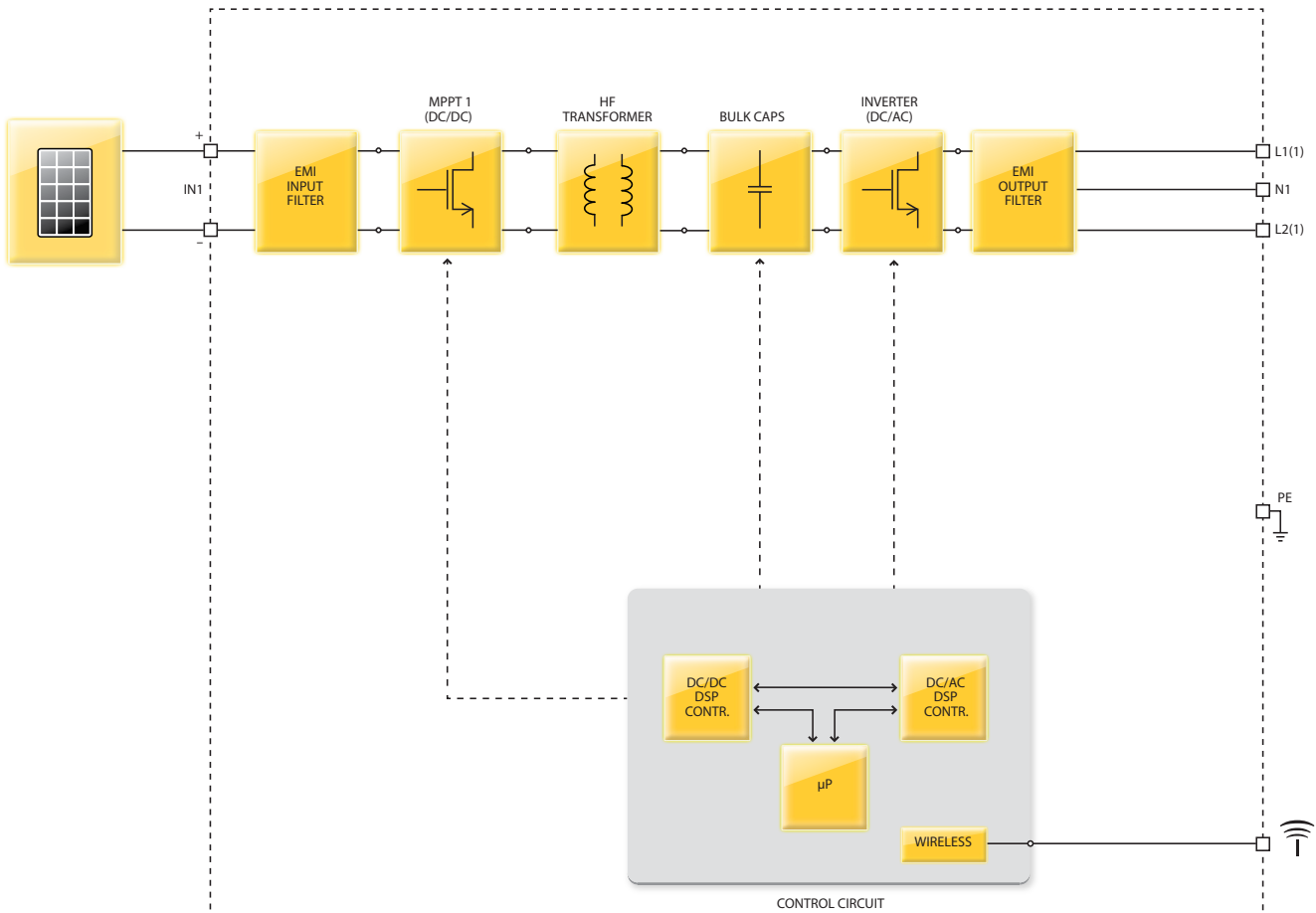
- To connect two trunk cables together: AC-TRUNK CABLE JOINER

CDD ANTENNA EXTENSION CABLE 50FT (Optional)



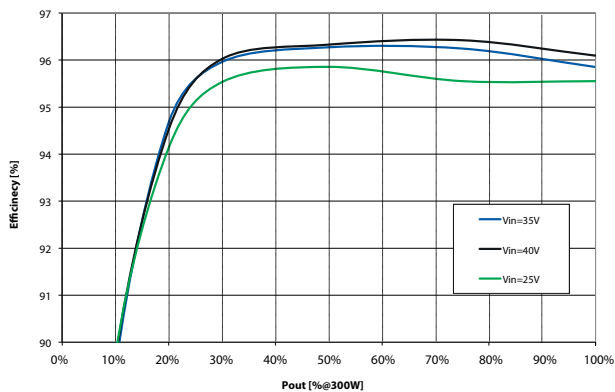
- To extend the wireless communication range of the CDD and MICRO inverters: MOBILE MARK CABLE-ASSY-C25-26-15L

BLOCK DIAGRAM OF MICROINVERTER

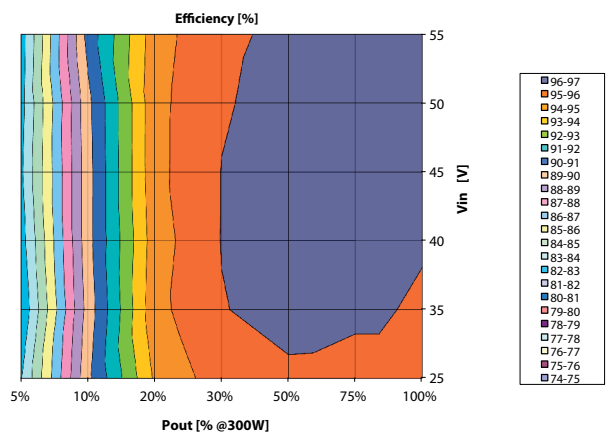


Block Diagram and Efficiency Curves

MICRO-0.3-I



MICRO-0.3-I



TECHNICAL DATA	VALUES	MICRO-0.25-I-OUTD-US-208/240		MICRO-0.3-I-OUTD-US-208/240		MICRO-0.3HV-I-OUTD-US-208/240	
Nominal Output Power	W	250		300 ¹		300 ¹	
Rated Grid AC Voltage	V	208	240	208	240	208	240
Maximum Output Power	W	260		310		310	
Input Side (DC)							
Maximum Usable DC Input Power	Wp	265 ²		320 ²		320 ²	
Maximum PV Panel Rating (STC)	W	300		360		360	
Absolute Maximum Voltage (Vmax)	V	65		65		79	
Start- Up Voltage (Vstart)	V	25		25		25	
Full Power MPPT Voltage Range	V	25-60		30-60		30-75	
Operating Voltage Range	V	12-60 ³		12-60 ³		19-75 ³	
Maximum Usable Current (Idcmax)	A	10.5		10.5		10.5	
Maximum Short Circuit Current Limit	A	12.5 ³		12.5 ³		12.5 ³	
DC Connection Type		Amphenol H4 PV connector					
Output Side (AC)							
Grid Connection Type		1Ø/2W	Split-Ø/3W	1Ø/2W	Split-Ø/3W	1Ø/2W	Split-Ø/3W
Adjustable Voltage Range (Vmin-Vmax)	V	183-228	211-264	183-228	211-264	183-228	211-264
Grid Frequency	Hz	60		60		60	
Adjustable Grid Frequency Range	Hz	57-60.5		57-60.5		57-60.5	
Maximum Output Current	A	1.20	1.04	1.44	1.25	1.44	1.25
Power Factor		> 0.95		> 0.95		>0.95	
Maximum Number of Inverters per String		13	15	11	12	11	12
Grid Wiring Termination Type		18AWG Drop Cable from Inverter to 10AWG AC Trunk Cable					
Protection Devices							
Input							
Reverse Polarity Protection		Yes; Polarized PV Connectors (Amphenol H4)					
Output							
Anti-Islanding Protection		Meets UL 1741/IEEE1547 requirements					
Over-Voltage Protection Type		Varistor		Varistor		Varistor	
Maximum AC OCPD Rating	A	20		20		20	
Efficiency							
Maximum Efficiency	%	96.5		96.5		96.5	
CEC Efficiency	%	96		96		96	
Operating Performance							
Stand-by Consumption	mW	< 50		< 50		<50	
Communication							
Monitoring System		Wireless and Web-Based Monitoring through AURORA CDD (CDD required for compliance to UL1741)					
Environmental							
Ambient Air Operating Temperature Range	°F (°C)	-40 to 167 (-40 to 75) with derating above 149 (65)					
Ambient Air Storage Temperature Range	°F (°C)	-40 to 167 (-40 to +80)					
Relative Humidity	% RH	0-100 condensing					
Acoustic Noise Emission Level	db (A) @1m	< 30					
Maximum Operating Altitude without Derating	ft(m)	6560 (2000)					
Mechanical Specifications							
Enclosure rating		NEMA 4X		NEMA 4X		NEMA 4X	
Cooling		Natural Convection		Natural Convection		Natural Convection	
Dimensions (H x W x D)	in (mm)	10.5 x 9.7 x 1.37 (266 x 246 x 35)					
Weight	lb/(kg)	< 3.5 (1.65)		< 3.5 (1.65)		< 3.5 (1.65)	
Mounting System		Rack mounting with M8, 1/4" or 5/16" bolt					
Safety							
Isolation Level		HF Transformer					
Safety and EMC Standard		UL1741, CSA C22.2 N. 107.1-01, EN61000-6-2, EN61000-6-3, FCC Part 15					
Safety Approval		CSA _{us}					
Warranty							
Standard Warranty	years	10		10		10	
Available Models							
Standard		MICRO-0.25-I-OUTD-US-208/240		MICRO-0.3-I-OUTD-US-208/240		MICRO-0.3HV-I-OUTD-US-208/240	

¹ With derating below 200V for 208VAC operation

² This is the maximum input power that the inverter will utilize.

³ Only use PV modules that satisfy these parameters under all operating conditions.



www.power-one.com

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