

Solar inverters

ABB string inverters UNO-2.0/2.5-I-OUTD 2.0kW to 2.5kW



ABB's UNO 2.0 and 2.5 inverters have a lightweight design that enables inverter mounting flexibility for residential applications.

These isolated inverters are simple to wall mount and are extremely lightweight.

They feature the flexibility and innovation for which ABB is known for. These inverters are fully integrated with a DC disconnect and wiring box that saves installation time and cost.

These inverters provide a flexible system with high levels of performance and reliability that designers need.

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

The wide input voltage range makes the inverter suitable for low-power installations with a reduced string size.

Highlights:

- This inverter operates at 96 percent CEC weighted efficiency
- It has a single-phase and split-phase output
- It operates with extra quiet high-frequency transformer inverter architecture
- The NEMA 4X rated enclosure enables unrestricted use under any environmental condition

Additional highlights:

- The flexible data monitoring options enables users to view inverter performance from any location from virtually any device
- This inverter comes with a standard 10-year warranty, and available extensions to 15 and 20 years

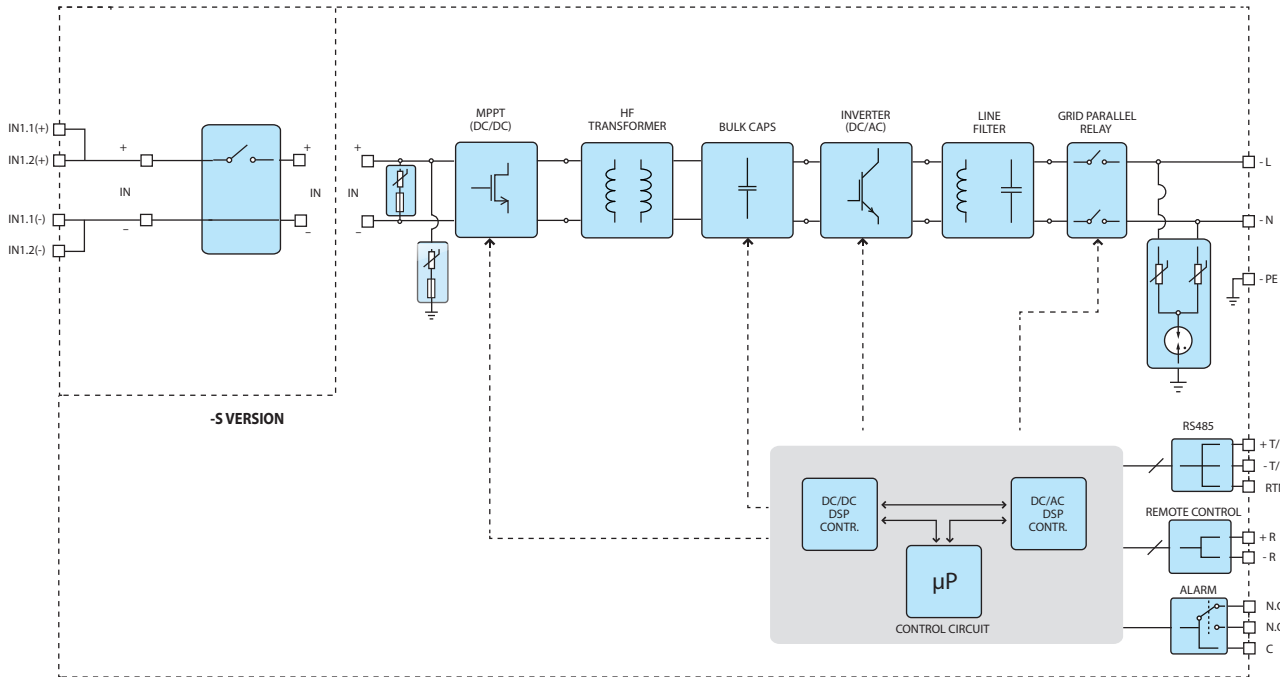


Technical data and types

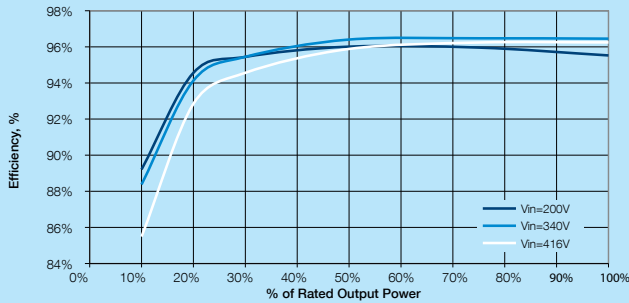
Type code	UNO-2.0-I-OUTD-S-US			UNO-2.5-I-OUTD-S-US		
Nominal output power	2000W			2500W		
Maximum output power	2200W ¹			2750W ¹		
Rated grid AC voltage	208V	240V	277V	208V	240V	277V
Input side (DC)						
Number of independent MPPT channels				1		
Maximum usable power for each channel	2300W			2900W		
Absolute maximum voltage (Vmax)				520V		
Start-up voltage (Vstart)				200V (adj. 120-350V)		
Full power MPPT voltage range	170-470V			200-470V		
Operating MPPT voltage range				0.7xVstart-520 (≥90V)		
Maximum usable current per channel	12.5A			12.8A		
Maximum short circuit current limit per channel				15A		
Number of wire landing terminals per channel				2 pairs		
Array wiring termination	Terminal block, pressure clamp, 20 AWG - 6 AWG					
Output side (AC)						
Grid connection type	1Ø/2W	Split-Ø/3W	1Ø/2W	1Ø/2W	Split-Ø/3W	1Ø/2W
Adjustable voltage range	183-228V	211-264V	244-304V	183-228V	211-264V	244-304V
Nominal grid frequency				60Hz		
Adjustable grid frequency range				57-63Hz		
Maximum current	10A			12A		
Power factor				>0.995		
Total harmonic distortion (@ rated output power)				<2%		
Grid wiring termination type	Terminal block, pressure clamp 20 AWG - 6 AWG					
Input protection devices						
Reverse polarity protection				Yes		
Over-voltage protection type				Varistor, 2		
PV array ground fault detection	Meets UL1741 / NEC 690.5 requirements					
PV array isolation control	GFDI (for use with either positive or negative grounded arrays)					
Output protection devices						
Anti-islanding protection	Meets UL 1741 / IEEE1547 requirements					
Over-voltage protection type				Varistor, 2 (L ₁ - L ₂ / L ₁ - G)		
Maximum AC OCPD rating				15A		
Efficiency						
Maximum efficiency				96.6%		
CEC efficiency	95.5%	95.5%	95.5%	95.5%	96%	96%
Operating performance						
Nighttime consumption				<0.6W		
Stand-by consumption				<8W		
Communication						
User-interface				5.5" x 1.25" graphic display		
Remote monitoring (1xRS485 incl.)				VSN700 Data Logger (opt.)		
Environmental						
Ambient air operating temperature range	-13°F to 140°F (-25°C to +60°C) with derating above 122°F (50°C)					
Ambient air storage temperature range	-40°F to 176°F (-40°C to +80°C)					
Relative humidity	0-100% condensing					
Acoustic noise emission level	<50 db (A) @ 1m					
Maximum operating altitude without derating	6560ft (2000m)					

1. At nominal AC voltage and with sufficient DC power available

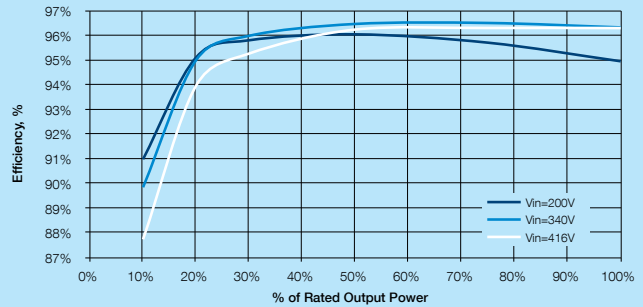
Block diagram of UNO 2.0/2.5-I-OUTD



UNO-2.0-I-OUTD-S-US



UNO-2.5-I-OUTD-S-US



Technical data and types

Type code	UNO-2.0-I-OUTD-S-US	UNO-2.5-I-OUTD-S-US
Mechanical specifications		
Enclosure rating	NEMA 4X	
Cooling	Natural convection	
Dimensions (H x W x D)	30.3 x 14.4 x 6.3in (769 x 367 x 161mm)	
Weight	<42.5lb (19.3kg)	
Mounting system	Wall bracket	
Conduit connections	Bottom: (2) 3/4" KO, (3) 1/2" KO / Left and right side: (1) 3/4" KO / Back: (4) 3/4" KO	
DC switch rating (per contact) (A/V)	16A / 600Vdc	
Safety		
Isolation	High-frequency transformer	
Safety and EMC standard	UL 1741, IEEE1547, IEEE1547.1, CSA-C22.2 N. 107.1-01, FCC Part 15 Class B	
Safety approval	cCSAus	
Warranty		
Standard warranty	10 years	
Extended warranty	15 & 20 years	
Available models		
With DC switch and wiring box	UNO-2.0-I-OUTD-S-US	UNO-2.5-I-OUTD-S-US
All data is subject to change without notice		

Support and service

ABB supports its customers with a dedicated, global service organization in more than 60 countries, with strong regional and national technical partner networks providing a complete range of life cycle services.

For more information please contact your local ABB representative or visit:

www.abb.com/solarinverters

www.abb.com

© Copyright 2015 ABB. All rights reserved. Specifications subject to change without notice.

