

Solar inverters
Quick installation guide
UNO-2.0/2.5-I-OUT-S-US



EN

In addition to what is explained in this guide, the safety and installation information provided in the technical manual must be read and followed. The technical documentation and the interface and management software for the product are available at the website.

Power and productivity for a better world™ **ABB**

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS-KEEP IN SAFE PLACE!

The installer must read this document in its entirety before installing or commissioning this equipment!
The labels on the UNO inverter carry the markings, main technical data and identification of the equipment and manufacturer.
The technical data shown in this quick installation guide does not replace that shown on the labels attached to the equipment.

ABB
www.abb.com/solar
SOLAR UTILITY INTERACTIVE INVERTER
MODEL: UNO-2.5-I-OUT-S-US

DC RATING	
Nominal Input Operating Voltage	340 V _{DC}
Max. Input Voltage	520 V _{DC}
Range of Input Operating Voltage	90 - 520 V _{DC}
Range of Input Voltage @ Full Power	200 - 470 V _{DC}
Max. Input Current	12.8 A
Max. Input Short Circuit Current (PV Panels)	16 A

AC RATING	
Nominal Output Voltage	277 V _{L-L} / 240 V _{L-N} / 208 V _{L-L}
Operating Voltage Range	244-304 V _{L-L} / 211-264 V _{L-N} / 183-228 V _{L-L}
Nominal Output Frequency	60 Hz (factory preset)
Operating Frequency Range	59.3 (1) - 60.5 (1) Hz
Output Power Factor	>0.995
Max. Output Current (for each phase)	10.5 A / 12 A / 12 A (rms)
Max. Continuous Output Power	2500 W @ 45°C amb.
Max. Output Overcurrent Protection	15 A

Operating Ambient Temperature: -25 to +40 °C (13 to +104 °F) with Output Power Derating
Type of Enclosure: NEMA 4X
DC Ground Fault Detector/Interrupter is Provided
(1) Adjustable from 57.0 Hz to 59.7 Hz (2) Adjustable from 60.5 Hz to 63.0 Hz
For more details about product specifications refer to the Instruction Manual
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

UNO-X.X-I-OUT-X

P/N: PPPP SN: SSSS WK: WW/Y

- 1 Certification
- 2 Product origin
- 3 Model type and number
- 4 DC input ratings
- 5 AC output ratings
- 6 Inverter part number
- 7 Inverter serial number
- 8 Week/year of manufacture

Main symbols used in the guide and on the products

	UL 1741; CSA-C22.2 No. 107.1-01		General warning - Important safety information
	Hazardous voltage		Hot surfaces
	System earth conductor (main grounding protective earth, PE)		Phase
	Grounding (earth)		Direct and alternating currents, respectively

This inverter has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: a) Reorient or relocate the receiving antenna; b) Increase the separation between the equipment and receiver; c) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected; d) Consult the dealer or an experienced radio/TV technician for help.

2. Electrical warnings

- Wiring methods used should be in accordance with the National Electric Code, ANSI/NFPA 70 (NEC), Canadian Electric Code (CEC), and/or other local codes and regulations.
- The PV source conductors must be Listed PV wire per NEC 690.35.
- PV output conductors must consist of sheathed (jacketed) multi-conductor cables or installed in an approved raceway and must be isolated from the enclosure and system grounding, as required by NEC 690.35 and is the responsibility of the installer.
- An external DC switch must be used if not integrated in the inverter; all -S models have an integrated DC switch.
- AC output overcurrent protection is not provided; it is the responsibility of the end user to provide protection for the AC output circuit.
- All photovoltaic source and output circuit conductors shall have disconnects complying with the NEC, Section 690, Part III.
- To reduce the risk of fire, connect only to a circuit provided with 15A maximum branch circuit overcurrent protection in accordance with the NEC (ANSI/NFPA 70). See Maximum AC OCPD requirement in section 16 on next page.
- To prevent electrical hazards, all the connections must be carried out with the disconnect switch downstream of the inverter (grid side) open and locked out.

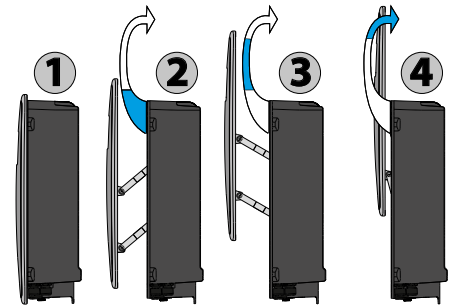
3. List of components

Components shipped with all models	QTY	Components shipped with all models	QTY
3 pin connector for configurable relay, 82000005907-G	2	Mounting Kit, XAK.V0E10 includes: 1 bracket for wall mounting 5 anchors and screws 2 locking screws for securing wiring box to bracket	1
8 pin connector for communication and control signals, 82000005908-G	2		
L-key, TORX TX20 81510000077	1		

6. Open the covers

The inverter cover is equipped with fixed hinges and is not intended to be removed from the chassis.

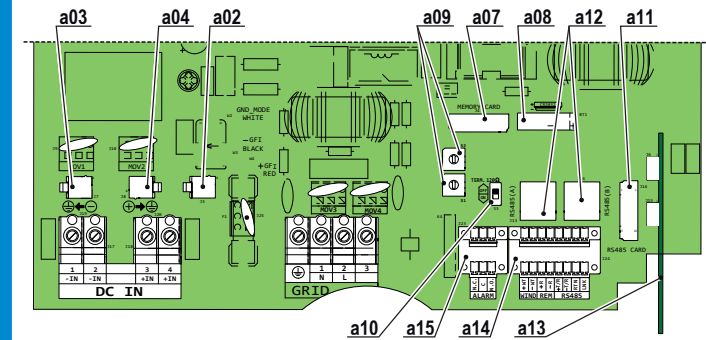
- Wiring box cover 06 must be removed before opening the inverter cover 04.
- Loosen the four captive screws to remove the wiring box cover 06.
- Loosen the four captive screws on the inverter front cover 04.
- Using light pressure, pull out and up on the cover so it rotates in an upward arc to its rest position.
- Remove the protective film located on the inverter front cover display 01.
- When connections are complete, close covers and tighten the captive screws with at least 2.0Nm (17.7in-lbs) torque to maintain waterproof sealing.



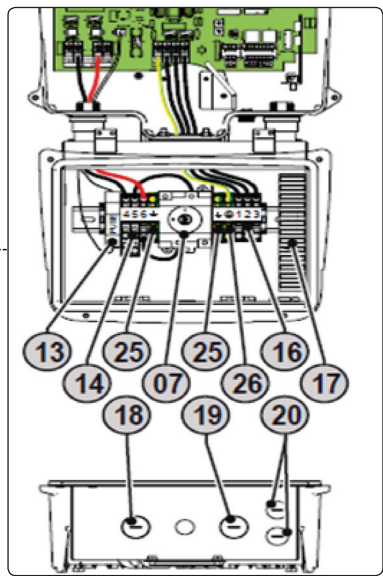
7. Wiring details

- The inverter uses pressure type terminal blocks for connection of all conductors.
- Acceptable wire size range is from 12 AWG to 6 AWG; refer to local codes for appropriate wire size; use only copper wire rated at least 90°C.
- To plug the input cables into the inverter it is necessary to replace the knockout plugs 18 and 19 with an EMT FITTING 3/4" (thread 14 NPSM).

All connection operations must be carried out with the DC disconnect switch 07 turned to the OFF position and locked out AND the external AC disconnect switch downstream of the inverter (grid side) open and locked out!

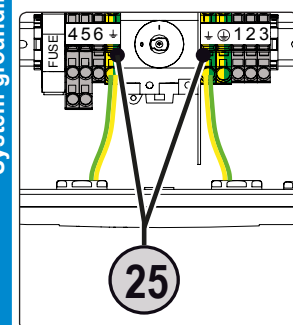


a02	Ground cable connector	a10	Termination switch S3
a03	Negative grounding input	a11	RS-485 card housing
a04	Positive grounding input	a12	RJ45 Connectors
a07	Memory card housing	a13	Radiomodule slot
a08	Battery housing	a14	RS-485 terminal
a09	Rotary switches	a15	Multi-function relay
07	DC disconnect switch	18	DC knockout plug
13	Ground fault fuse	19	AC knockout plug
14	DC input terminal blocks	20	Signals knockout plug
16	AC output terminal blocks	25	Earth (ground) terminal
17	Signal wiring duct	26	Protective earth terminal



8. System grounding

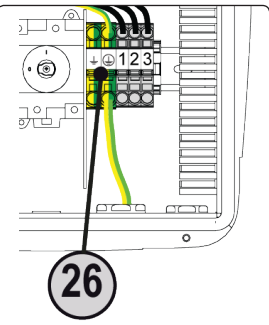
The inverter includes an earth (ground) terminal 25 for each wiring system (DC input and AC output circuit), and a protective earth (PE) terminal 26 for the external protective conductor, identified by the symbols on the terminals as shown below.



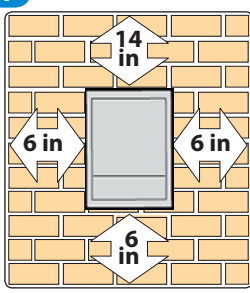
The earth (ground) connection terminal 25 is positioned inside the switchbox and connected as shown in the illustration at left.

The PE connection terminal 26 is positioned inside the switchbox and connected as shown in the illustration at right.

To prevent electrical hazards, all the connections must be carried out with the disconnect switch downstream of the inverter (grid side) open and locked out.

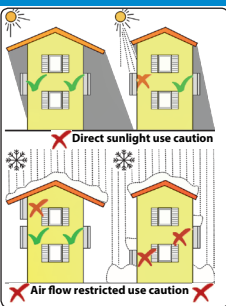


4. Installation location

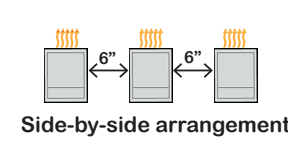


Choose the installation location and position to comply with the following:

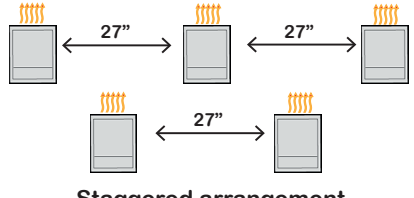
- Install on a wall or strong structure capable of bearing the weight.
- Install vertically with a maximum incline of +/- 5°.
- Maintain minimum clearance measurements shown.
- Choose a location that allows unobstructed airflow around the inverter.
- When possible, install at eye level so the display and status LEDs can be easily seen.
- Ensure sufficient working area in front of the inverter to allow removal of the wiring box cover and easy access for servicing the inverter.
- See technical data, section 16, to check the environmental parameters to be observed (degree of protection, temperature, humidity, altitude, etc.).
- Select a well-ventilated location sheltered from direct sun radiation or any other heat source (other inverters).



- Exposure to direct sunlight will increase operational temperature of the inverter and may cause output power limiting.
- It is recommended to use a sun shade to minimize direct sunlight when ambient air temperature around the unit exceeds 104°F/40°C.
- Position multiple inverters side-by-side, maintaining minimum clearances.
- Multiple inverters can also be placed in a staggered arrangement.



Minimum clearances illustrated for staggered arrangement includes width of inverter plus additional allowances for inverters arranged above or below. This minimizes heat dissipation from lower inverters affecting operation of other inverters.

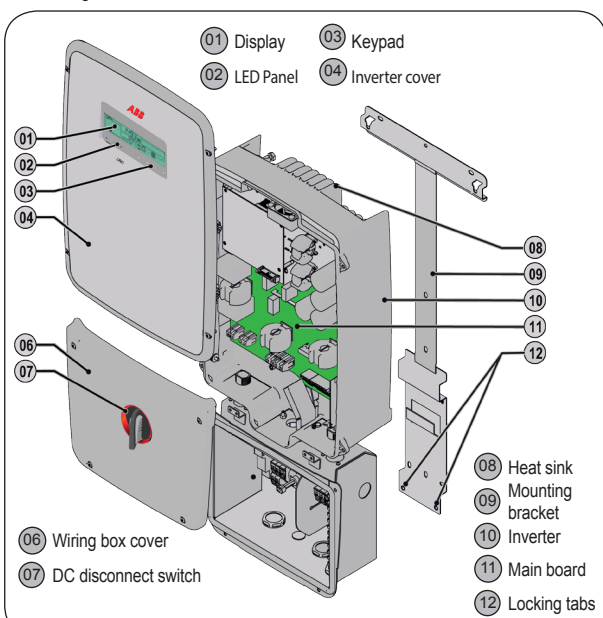
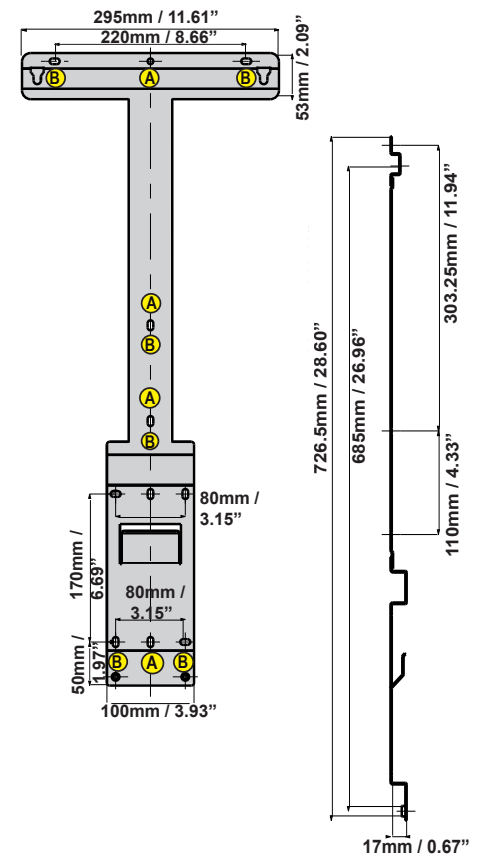


Staggered arrangement

5. Wall or pole mounting

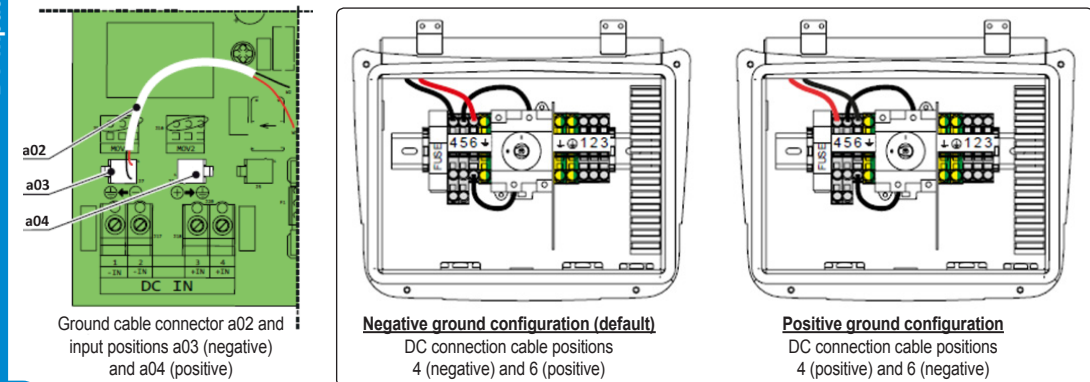
The location of the mounting holes is based on the mounting surface:

- Group A holes are used for pole mount.
- Group B holes are used for wall mount.
- Position and level the bracket.
- Mark the holes appropriate to the type of mounting surface.
- Drill the holes required using a 10mm/0.39" bit; the holes must be about 70mm/2.75" deep.
- Fix the bracket to the poll/wall with the wall anchors, 10mm/0.39" in diameter, supplied.
- Hook the inverter to the bracket by inserting head of the inverter rear screws and the anchor point on the wiring box, in the slots of the bracket.
- Anchor the inverter to the bracket by tightening the locking screw to the locking tabs 12 located on the bracket bottom.



Grounding of inputs is negative configuration by default.

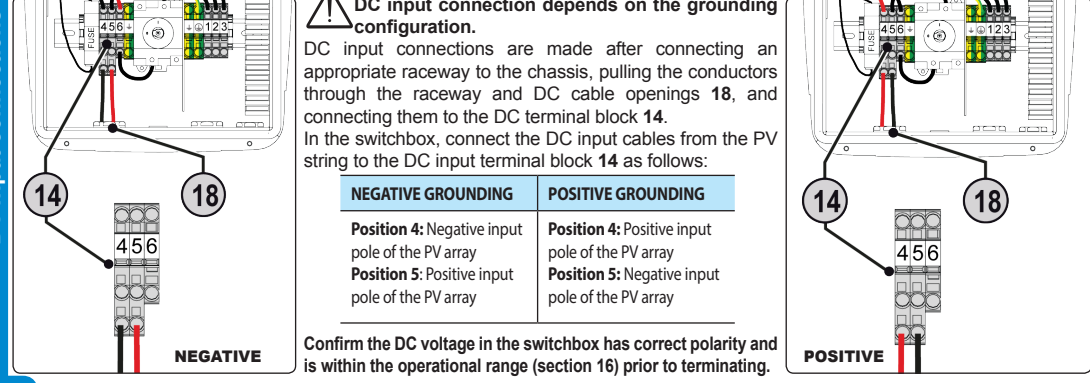
- Grounding cable **a02** is located in the inverter on the main board.
- It is connected in position **a03** for negative grounding of the inputs as illustrated below.
- To change the grounding to positive, move the connector installed in position **a03** (negative) to position **a04** (positive).
- In addition to moving the connector, it is also necessary to reverse the internal DC connection cable positions **4** and **6**, found on the DC terminal block within the switchbox as shown below right.



Ground cable connector a02 and input positions a03 (negative) and a04 (positive)

Negative ground configuration (default)
DC connection cable positions 4 (negative) and 6 (positive)

Positive ground configuration
DC connection cable positions 4 (positive) and 6 (negative)



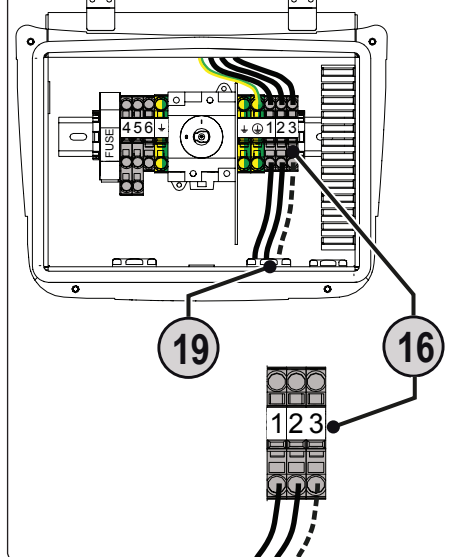
NEGATIVE

POSITIVE

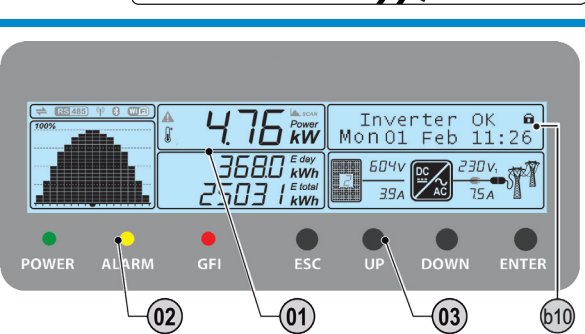
DC switch 07 disconnects PV array current from the inverter when switch is in the OFF position. It DOES NOT disconnect AC from the grid. To disconnect the inverter from the AC grid, an external, customer supplied AC switch must be used.

- Connect the AC wires on the inverter AC terminal block (positions 1, 2, 3) based on the utility voltage configuration table below.
- Illustration at right shows the AC connection using AC cable openings 19 and AC terminal block 16.
- Dotted line indicates where additional wire can be connected if used.

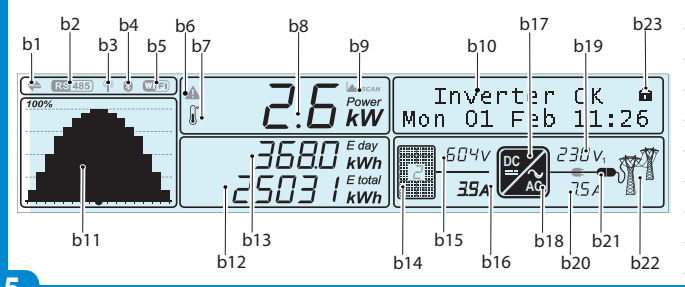
GRID STANDARD	L1			L2			L3		
	1	2	3	1	2	3	1	2	3
208V~ 3PH - Δ	L1	L2	-	L1	L2	N	N	L1	-
240V~ SPLIT-PHASE	L1	L2	-	L1	L2	N	N	L1	-
277V~ 3PH - Y	L1	L2	-	L1	L2	N	N	L1	-



- POWER LED** GREEN - On if the inverter is working correctly. Flashes when checking the grid or if there is insufficient sunlight.
- ALARM LED** YELLOW - The inverter has detected an anomaly. Anomaly is shown on the display area **b10**.
- GFI LED** RED - Ground fault on the DC side of the PV array. Error is shown on the display area **b10**.
- ESC** Used to access the main menu, go back to the previous menu, or go back to the previous digit to be edited.
- UP** Used to scroll up the menu options or shift the numerical scale.
- DOWN** Used to scroll down the menu options or shift the numerical scale.
- ENTER** Used to confirm a selection, access the submenu for the selected option (indicated by arrow > symbol), or move to the next digit to be edited.



Operating parameters of the equipment are displayed on the LCD **01**; LEDs **02** indicate operating state of inverter. Keypad **03** is used to review data on the cyclical display **b10**, and access data logged internally. LEDs **02** (warning lights) and KEYPAD **03** can be used to carry out complex actions that are described more fully in the manual. Description of symbols and display fields on the LCD **01** are found at right and illustrated below:



b1	RS-485 data transmission	b13	Daily energy produced
b2	RS-485 line present	b14	PV voltage > Vstart
b3	Radio line present	b15	DC voltage
b4	Bluetooth line present (*)	b16	DC current
b5	WiFi line present (*)	b17	DC/DC circuit part
b6	Warning	b18	DC/AC circuit part
b7	Temperature derating	b19	AC voltage
b8	Instantaneous power	b20	AC current
b9	MPP scan running	b21	Connection to the grid
b10	Graphic display	b22	Grid status
b11	Power graph	b23	Cyclic view on/off
b12	Total energy		(*) NOT available

In order to configure the ADDRESS settings (section 13) prior to grid connection, the inverter display only needs DC power to use the menus. **DO NOT connect the AC power (grid side) at this time!** With only the array connected, set the inverter's DC disconnect switch to ON. GREEN POWER LED will flash and YELLOW ALARM LED will be steady. The message "Missing Grid" will display in area **b10**.

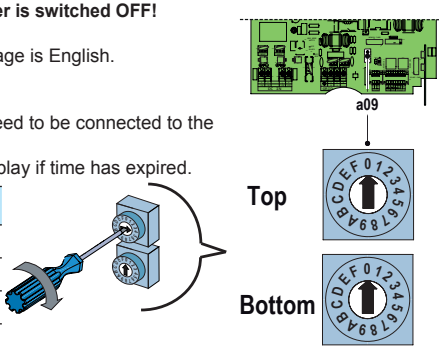
- Press ESC to open the menus. Use the DOWN key to scroll to SETTINGS, and press ENTER. The SETTINGS menu requires an access password. Upon selecting SETTINGS the password screen will open; the default password is 0000.
- Pressing ENTER four times loads four zeroes on the display and opens the submenu.
- Area **b10** has two visible text lines and the UP and DOWN keys are used to scroll through the menu items.
- Arrow > on the left side of the display highlights the current selection.
- Press UP or DOWN keys to move the arrow to the desired selection and press ENTER to open the associated submenu.
- To return to the preceding menu, press the ESC key.
- Address: the RS-485 address may need to be changed or assigned.
- Default address is set at 2 for a single inverter.
- Scroll to Address and press ENTER to open the submenu.
- Address values are assigned manually using any value in the range 2 to 63.
- Press UP and DOWN keys to scroll through numbers and press ENTER to select, ESC to cancel.
- Turn DC disconnect switch **07** to OFF in order to save the changes.

- The procedure for start up is as follows:**
- Turn DC disconnect switch **07** to ON position.
 - If there are two separate external disconnect switches (one for DC and the other for AC), first close the AC disconnect switch and then the DC disconnect switch. There is no order of priority for opening the disconnect switches.
 - When the inverter has power, the first check performed relates to input voltage:
 - If DC input voltage is lower than Vstart voltage (voltage required to begin the inverter's grid connection) icon **b14** remains off and the "Waiting sun" message is displayed in area **b10**.
 - If DC input voltage is higher than Vstart voltage icon **b14** is displayed and inverter goes to next stage. Voltage levels and input current are displayed in the **b15** and **b16** fields.
 - The inverter performs a control of grid parameters. Icon **b22** represents grid distribution and can display the following states:
 - not present indicates AC voltage is absent, flashing indicates AC voltage is present but outside the parameters of the country of installation, steady ON - indicates AC voltage is present and within the parameters of the country of installation; this status starts grid connection sequence.
 - If the input voltage and the grid voltage are within the inverter operating intervals, connection to the grid will begin.
 - Icon **b21** represents an electrical plug that is connected when the inverter is connected to the grid and a disconnected when not connected.

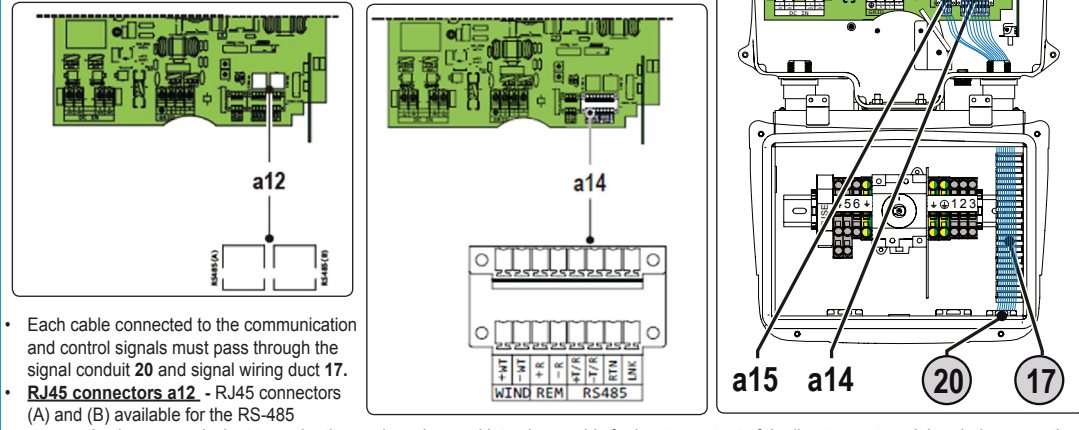
When the connection sequence is complete, the inverter indicates its correct operation by making a sound and by the green LED coming on steady on the LED panel. If the inverter signals any errors/warnings the messages and their codes will be indicated on the display. Refer to full technical manual on the website for Error and Warning Codes.

- Set the grid/country standard using the two rotary switches found on the main board in the inverter prior to connecting the inverter to the distribution grid. **Before turning the rotary switches confirm the inverter is switched OFF!**
- Refer to selections below for the appropriate choice of grid parameters.
- Default setting 0 / 0 means no grid standard is selected and display language is English. ("Set Country" message will appear on the inverter display).
- Turn dials of two rotary switches **a09** to program the selected grid settings.
- Settings become fixed after 24 hours of operation (the inverter does not need to be connected to the grid, but only needs DC power to count operation time).
- Time remaining can be seen in the menu, and a notice appears on the display if time has expired.
- Contact technical support with part number and serial number of the inverter to change standard after settings have been fixed for 24 hours.

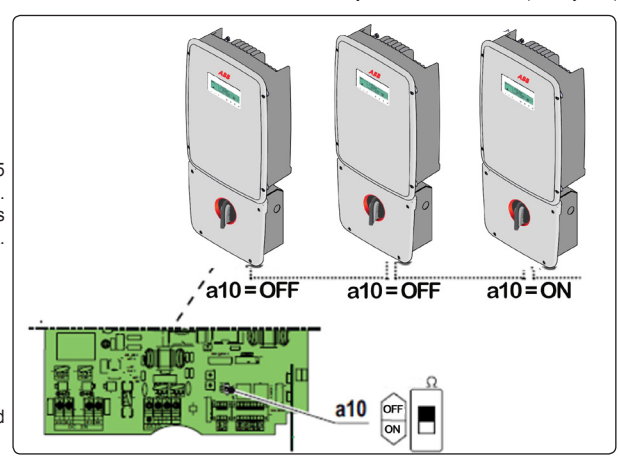
Grid settings	Top switch	Bottom switch	Display Language
UL 1741 @208V Single Phase	0	2	English
UL 1741 @240V Split Phase	0	3	English
UL 1741 @277V Single Phase	0	4	English



In order to connect the communication wiring to the inverter it is necessary to replace the signal plug screw **20** with a 1/2" box connector (thread 14 NPSM) that matches the wiring method chosen (e.g., conduit, flexible conduit, etc.).



- Each cable connected to the communication and control signals must pass through the signal conduit **20** and signal wiring duct **17**.
- RJ45 connectors a12** - RJ45 connectors (A) and (B) available for the RS-485 communication are equivalent to each other and can be used interchangeably for input or output of the line to create a daisy chain connection of the inverters.
- RS-485 connections a14** - If terminal blocks are used, signals RTN, +T/R and -T/R have to be cabled. Use a cable designed for use with RS-485 communications such as Belden 3106A, which is a data cable wire with one twisted pair, one ground conductor, and a shield with drain wire (equivalent). Locate mating connectors (provided in hardware bag) for the terminal block. Connect the three RS-485 leads (-RTN, +T/R, -T/R) to the mating connector corresponding points. Attach the mating connector to line up with correct signals on either upper or lower row of the terminal block.
- Daisy chain connection** - Recommended length of total communication cable line for all inverters in the system is 1,000 meters (1094 yards) or less. Depending on type of computer used, cable line adaptor can be RS-485_RS232 or RS-485_USB.
- Termination switch A10** - On last inverter in a daisy chain, or on a single inverter, activate termination resistance of communication line by moving switch down into ON position. All other inverters in daisy chain will have the switch up in OFF position.
- Addressing each inverter** - Default setting for RS-485 address is 2 and termination switch in OFF position. When multiple inverters are connected in a daisy chain, it is necessary to assign a different RS-485 address to each unit.
- The address can be changed before or after commissioning using the display menu, see section 15.



The ±WT (WIND) terminals are not isolated and can have hazardous voltages present. These terminals must not be utilized for any purpose (for use with wind models only).

TECHNICAL DATA	VALUES	UNO-2.0-I-OUTD-US		UNO-2.5-I-OUTD-US		
		2000	2200*	208	240	277
Nominal Output Power	W	2000	2200*	208	240	277
Maximum Output Power	W	2200*	2400	208	240	277
Rated Grid AC Voltage	V	208	240	208	240	277
Input Side (DC)						
Number of Independent MPPT Channels		1	1	1	1	1
Maximum Usable Power for Each Channel	W	2300	2900	2300	2900	2900
Absolute Maximum Voltage	V	520	520	520	520	520
Start-Up Voltage (Vstart)	V	200 (adj. 120-350)	200 (adj. 120-350)	200 (adj. 120-350)	200 (adj. 120-350)	200 (adj. 120-350)
Full Power MPPT Voltage Range	V	170-470	170-470	170-470	170-470	170-470
Operating MPPT Voltage Range	V	0.7xVstart-520	0.7xVstart-520	0.7xVstart-520	0.7xVstart-520	0.7xVstart-520
Maximum Usable Current	A	12.5	12.8	12.5	12.8	12.8
Maximum Short Circuit Current Limit	A	15	15	15	15	15
# of Wire Landing Terminals Per Channel		2 Pairs	2 Pairs	2 Pairs	2 Pairs	2 Pairs
Array Wiring Termination		Terminal block, Pressure Clamp, 12AWG-6AWG	Terminal block, Pressure Clamp, 12AWG-6AWG	Terminal block, Pressure Clamp, 12AWG-6AWG	Terminal block, Pressure Clamp, 12AWG-6AWG	Terminal block, Pressure Clamp, 12AWG-6AWG
Output Side (AC)						
Grid Connection Type		1Ø/2W	Split-Ø/3W	1Ø/2W	1Ø/2W	1Ø/2W
Adjustable Voltage Range (Vmin-Vmax)	V	183-228	211-264	183-228	211-264	211-264
Grid Frequency	Hz	60	60	60	60	60
Adjustable Grid Frequency Range	Hz	57-63	57-63	57-63	57-63	57-63
Maximum Current	A	10	12	10	12	12
Power Factor		> 0.990	> 0.990	> 0.990	> 0.990	> 0.990
Total Harmonic Distortion At Rated Power	%	< 2	< 2	< 2	< 2	< 2
Grid Wiring Termination Type		Terminal Block, Pressure Clamp, 12AWG-6AWG	Terminal Block, Pressure Clamp, 12AWG-6AWG	Terminal Block, Pressure Clamp, 12AWG-6AWG	Terminal Block, Pressure Clamp, 12AWG-6AWG	Terminal Block, Pressure Clamp, 12AWG-6AWG
Protection Devices						
Reverse Polarity Protection		Yes	Yes	Yes	Yes	Yes
Over-Voltage Protection Type		Varistor, 2	Varistor, 2	Varistor, 2	Varistor, 2	Varistor, 2
PV Array Ground Fault Detection		Meets UL1741/NEC 690.5 requirements	Meets UL1741/NEC 690.5 requirements	Meets UL1741/NEC 690.5 requirements	Meets UL1741/NEC 690.5 requirements	Meets UL1741/NEC 690.5 requirements
PV Array Isolation Control		GFDI (for use with either Positive or Negative Grounded Arrays)	GFDI (for use with either Positive or Negative Grounded Arrays)	GFDI (for use with either Positive or Negative Grounded Arrays)	GFDI (for use with either Positive or Negative Grounded Arrays)	GFDI (for use with either Positive or Negative Grounded Arrays)
Output						
Anti-Islanding Protection		Meets UL 1741/IEE1547 requirements	Meets UL 1741/IEE1547 requirements	Meets UL 1741/IEE1547 requirements	Meets UL 1741/IEE1547 requirements	Meets UL 1741/IEE1547 requirements
Over-Voltage Protection Type		Varistor, 2 (L1 - L2 / L1 - G)	Varistor, 2 (L1 - L2 / L1 - G)	Varistor, 2 (L1 - L2 / L1 - G)	Varistor, 2 (L1 - L2 / L1 - G)	Varistor, 2 (L1 - L2 / L1 - G)
Maximum AC OCPD Rating	A	15	15	15	15	15
Efficiency						
Maximum Efficiency	%	95.5	96.6	95.5	95.5	96.6
CEC Efficiency	%	95.5	95.5	95.5	95.5	96
Operating Performance						
Stand-by Consumption	W _{res}	< 8	< 8	< 8	< 8	< 8
Night Time Consumption	W _{res}	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Communication						
User-Interface		5.5" x 1.25" Graphic Display				
Remote Monitoring		AURORA-UNIVERSAL (opt.)				
Wired Local Monitoring		PVI-USB-RS-485_232 (opt.), PVI-DESKTOP (opt.)				
Wireless Local Monitoring		PVI-DESKTOP (opt.) with PVI-RADIOMODULE (opt.)				
Environmental						
Ambient Air Operating Temperature Range	°F (°C)	-13 to +140 (-25 to +60) with automatic derating		-13 to +140 (-25 to +60) with automatic derating		
Ambient Air Storage Temperature Range	°F (°C)	above 122 (50)		above 113 (45)		
Relative Humidity	%	-40 to +176 (-40 to +80)		-40 to +176 (-40 to +80)		
Acoustic Noise Emission Level	db (A) 1m	< 50		< 50		
Maximum Altitude for Full Power Operation	ft(m)	6560 (2000)		6560 (2000)		
Mechanical Specifications						
Enclosure rating		NEMA 4X				
Cooling		Natural Convection				
Dimensions (H x W x D)	in (mm)	30.3 x 14.4 x 6.3 (769 x 367 x 161) with switch				
Weight	lb (kg)	42.5 (19.3) with switch				
Mounting System		Wall bracket				
Conduit Connections***		Bottom: (2) 3/4" EKO, (3) 1/2" EKO / Left and Right Side: (1) 3/4" EKO / Back: (4) 3/4" EKO				
DC Switch Rating		16 A / 600 VDC				
Safety						
Isolation Level		High-Frequency Transformer				
Safety and EMC Standard		UL1741(2010), IEE1547, IEE1547.1, CSA C22.2 N. 107.1-01, FCC Part 15 Class B, UL1998 UL1699B				
Safety Approval		cCSA _{us}				
Warranty						
Standard Warranty	years	10		10		
Extended Warranty	years	15 & 20		15 & 20		
Available Models						
Standard		UNO-2.0-I-OUTD-US		UNO-2.5-I-OUTD-US		
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
** Capability enabled at nominal AC voltage and with sufficient DC power available
*** When equipped with optional DC Switch and Wiring Box

Contact us
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UNO-2.0-2.5-I-OUTD-S-US Quick Installation Guide
BCM.00226_0_AA
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