ABB solar inverter
Quick Installation Guide
UNO-DM-1.2/2.0/3.0/3.4/4.0/6.5-TL-PLUS-Q
(from 1.2 to 5.0 kW)

1. Regulatory Label
   - In case of a service password request, it is necessary to have the serial number available (SN: YYYWWSSSSSS).
   - General warning - Important safety information.
   - Thermal protective device for the inverter's safety protection (thermal cut-out, fuse, or circuit breaker).
   - Ambient temperature interval.
   - Weatherproofing and protection of the inverter against water, dust, and pollution.
   - Protective and finishing elements, depending on the protective equipment used.

2. Wireless Identification Label
   - The label is placed on two separate parts by a dashed line; take the bottom part and apply it in the cover of the quick installation guide.

3. APPLY HERE THE WIRELESS IDENTIFICATION LABEL
   - Use the equipment identification label to enable a unique traceability of the equipment and installation solutions shown in the installation manual. A thermal protective device is used to protect the receiver against water, dust, and pollution.
   - The equipment must be used in accordance with the Quick Installation Guide. Otherwise, the protection guarantees the equipment is no longer effective.

4. Transportation and Relocation
   - Transportation or relocation of the inverter is particularly dangerous. It is necessary to ensure that the equipment is adequately protected from impacts, humidity, vibrations, etc.
   - External packaging components must be removed and disposed of according to the applicable regulations of the country where the device is located.
   - When opening the packaging, check that the integrity of the equipment and install it only if the components are intact.
   - If you notice defects or deterioration, stop the operations and call the carrier, as well as inform ABB Service immediately.
   - Keep the packaging in the event it is returnable; use the equipment packaging will be disposed of properly.
   - Always store the Quick Installation Guide, all the supplied accessories and the AC connector cover in a safe place.

5. Unpacking and inspection
   - The packing components must be removed and disposed of according to the applicable regulations of the country where the device is located.
   - The means used for lifting must be suitable to bear the weight of the equipment.
   - The equipment is designed to be installed in an upright position, as indicated on the equipment label. When installing on the front wall or structure, use the necessary screws.
   - Install the inverter by following this procedure:
     - Place the inverter on the wall and use a suitable cradle.
     - Connect the DC input, always checking the tightness of the connectors.
     - Install the wireless antenna by screwing it into the dedicated connector.
     - Fix the bracket to the wall or structure.

6. Assembly and installation
   - The main connections are made on the back plate (outside) of the inverter.
   - Install the inverter and then the accessory components, including the AC output, using the TORN T20 key and open the front cover. Remove the screws, pay special attention since additional screws are not supplied.
   - After making the connections, close the cover by tightening the AC output screws to the correct tightening torque (2.5 Nm).

7. WARNING: ELECTRICAL SHOCK HAZARD: Hazardous voltage may be present inside the equipment. Use proper safety equipment and follow the instructions for proper assembly and installation.

8. Configuration of Input Mode
   - Only for the 5K model. If the input strings are connected in channels with independent mode, you must take special care to ensure that the independent channel is not affected by the other inverters.

9. Input Connector and I/O and input configurations
   - Models with "S" suffix (e.g. UNO-DM-3.3-TL-PLUS-SB-Q).
   - The inverter models referred to in this installation guide are available in six power capacity systems: 1.2kW, 2.0kW, 3.0kW, 3.3kW, 4.0kW, 4.6kW and 5.0kW.

10. Choice of the place to install
    - Do not expose the inverter to rain, snow or direct sunlight. If necessary, use a protective device.
    - Always ensure that the airflow around the inverter is not blocked to prevent overheating.

11. Service
do not open the inverter in case of rain, snow or high humidity (65%). During the installation, do not place the inverter on the ground or on a non-conductive surface. When installing multiple inverters, position the inverters side by side while considering the ambient temperature conditions.

12. Choosing the operating mode
    - The inverters referred to in this document are WITHOUT AN ISOLATION TRANSFORMER (transformer-less). This type involves the possibility of a risk of electric shock, particularly when the equipment is installed in an area where the environment is at risk of impinging on the inverter.

13. Input connection (DC) and input configurations
    - Each inverter is equipped with two input channels (MPPT) in independent mode. This means that the jumpers (supplied) between the positive and negative terminals are not used, which means that the input terminals can be accessed independently from the positive and negative poles of the DC input circuit. Cables must not be installed, and the independent channels must be used as input channels for the inverter.

14. Models and accessories
    - The input channels allow for a completely customizable configuration depending on the needs of each installation.

15. Inverter models and supply components
    - In addition to what is explained in this guide, the safety information of the manufacturer's website or via ABB for the compliant counterpart.

16. Technical documentation and the installation instructions shown in the installation manual. The technical documentation and installation instructions shown in the installation manual. The technical documentation and installation instructions shown in the installation manual. The technical documentation and installation instructions shown in the installation manual. The technical documentation and installation instructions shown in the installation manual. The technical documentation and installation instructions shown in the installation manual.


1. Before proceeding with commissioning, make sure you have carried out all the following checks:
   - Check the correct connection and polarity of the DC inputs, and the correct connection of the AC output and ground cables.
   - Check the sealing border of the cable seals and isolated against connectors to prevent accidental disconnections and short circuits.
   - Set the frequency range, voltage range and power range for the PV generator. The error is shown on the EUVTS/" section of the internal webserver.

2. To maintain the IP protection rating of the inverter, it is mandatory to install the counterpart with the AC cable connected or the protective cap, on the AC output connector. In addition, the connector must not be subjected to tensile forces (examples: do not connect weights to the connector cap, on the AC output connector. In addition, the connector must not be subjected to tensile forces (examples: do not connect weights to the connector, on the AC output connector. In addition, the connector must not be subjected to tensile forces (examples: do not connect weights to the connector). The maximum length of the AC output connector must not exceed 1.5 m.

3. Prepare the connectors according to the following measurement:
   - Use copper stranded wire with HEPR rubber insulation and placed in open air (adj. 120...350 V).

4. Insert the individual wires (phase, neutral and ground) on the connector according to the instructions printed on each of the three terminals (tightening torque). (1) 5/16" (10 mm).

5. Close the connector and tighten the cable gland respecting the tightening torque (60 Nm) to ensure the IEC degree of protection.

6. To make the inverter more suitable for the grid connection of the inverter, it is necessary to connect it to the DC voltage of the photovoltaic panels and the inverter with DC input voltage from the DC voltage of the photovoltaic panels.

7. Make sure that the irradiation is stable and adequate for the inverter commissioning procedure to be completed.

8. After the LED is disconnected, the inverter will return to the initial state of LED power (indicated).

9. The on-network button will proceed to the next stage of the configuration wizard.

10. The IP address assigned may vary for reasons connected to the wireless home router setup (for example, a very brief DHCP lease time). If the address is unknown or not available for your inverter model.

11. The information contained in this QR code is the IP address of the web user interface of the inverter.

12. Recommended browsers: Chrome from v85, Firefox from v75, Safari from v10.2.

13. The LEDs allow you to view inverter status conditions to be analyzed in greater depth by consulting the manual.

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16. To establish the connection and operate with the inverter, it is necessary to connect it to the DC voltage of the photovoltaic panels.

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