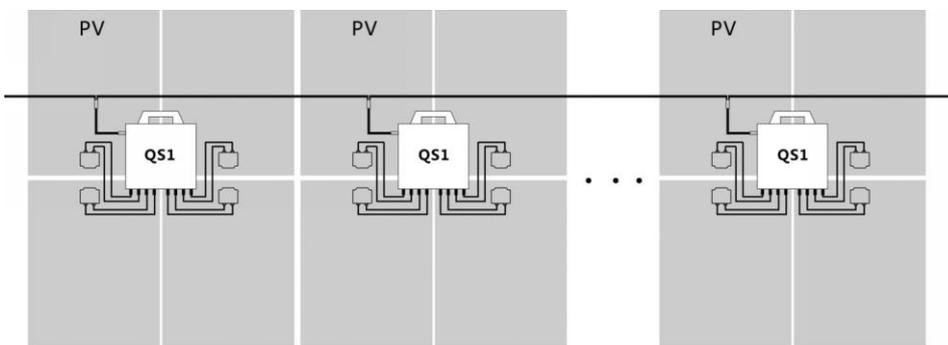


QS1 Microinverter Quick Installation Guide



Please scan the QR code to get mobile app and more support to help the installation.

The sketch of QS1 support system.



All the PV modules are placed into two lines. Then put a QS1 in the middle of the two lines and make sure it is easy to connect with four PV modules which are next to it, as well all the cables.

Step 1. Verify the grid voltage to match with microinverter rating

Step 2. The AC bus distribution

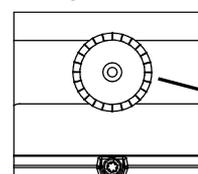
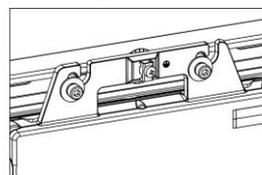
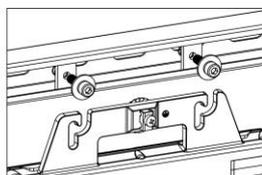
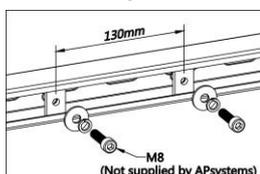
- The AC bus is arranged at the proper position of the microinverter.
- One end of the AC bus access junction box into power grid.
- Wire the conductors of the AC bus: L - BROWN; N - BLUE; PE - YELLOW GREEN.

NOTE: Wiring colour code can be different according local regulation, check all the wires of the installation before connecting to the AC bus to be sure they match. Wrong cabling can damage irreparably the microinverters, such an issue is not covered by the warranty.

Step 3. Attach the APsystems Microinverters to the racking

NOTE: Do not place the microinverters (including DC and AC connectors) where exposed to the sun, rain or snow, even gap between modules. Allow a minimum of 2 cm between the roof and the bottom of the microinverter to allow proper air flow. The racking of install microinverter must be reliably grounding.

- Mark the location of the microinverter on the rack, with respect to the PV module junction box or any other obstructions.
- Mount one microinverter at each of these locations using hardware recommended by your module racking vendor when install microinverter, grounding washer must be facing the racking.



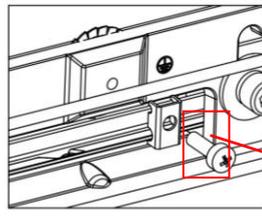
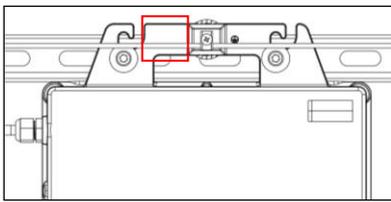
grounding washer

APsystems B.V

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Step 4. Ground the system

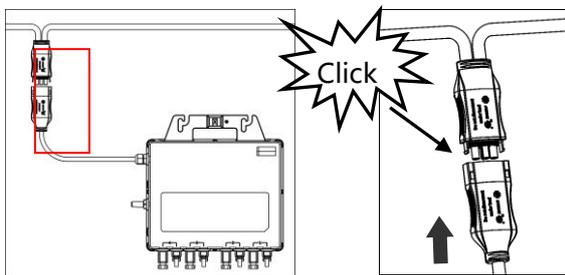
- A earth wire is already included inside the AC cable, thus the grounding can be done directly with it.
- For geographical areas that have special requirements, the external grounding can be done using the grounding brackets provided.



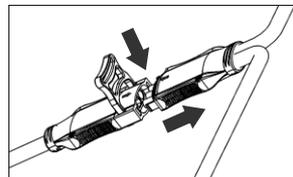
grounding brackets

Step 5. Connect the APsystems Microinverter to the AC bus cable

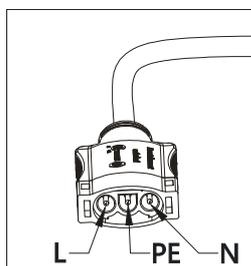
Push the microinverter AC connector to the trunk cable connector. You should hear a "Click".



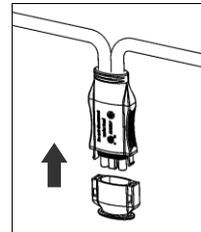
Best Practice: Use the Bus Cable Unlock Tool of the AC Bus to split the connectors.



NOTE: AC connector interface as follows.

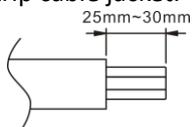


NOTE: Cover any unused connectors with the Bus Cable Y-CONN Cap to protect the connectors.

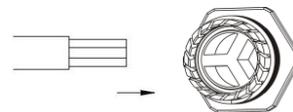


Step 6. Install a Bus Cable End Cap at the end of AC bus cable.

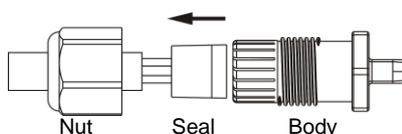
- Strip cable jacket.



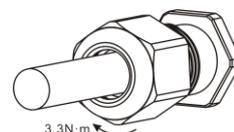
- Insert the wires into the cable clamps.



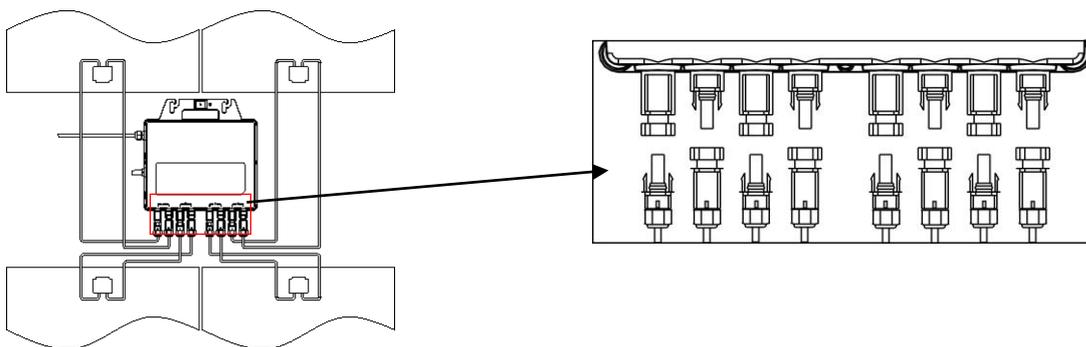
- Insert the cable end into the seal.



- Rotate the nut with 3.3N·m until the latching mechanism meets the base.



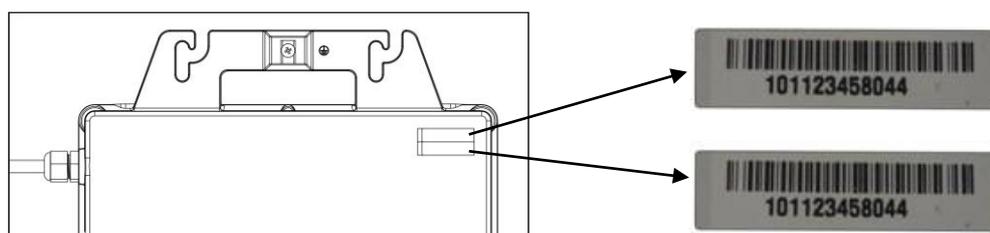
Step 7. Place the PV modules and connect each QS1 to the PV modules



Step 8. Finalizing the APsystems installation

- Each APsystems Microinverter has removable serial number labels.
- Peel labels off, affix one to the respective location on the APsystems installation map and fill in 1,2 3 and 4 in the label below according to the layout on the roof.
- The other serial number label posted on the solar module frame is easy to find.
- Log on to the EMA with your installer access details, then you can create a user account in EMA and register the installation (including the ECU). There, you can also upload a photo of the installation map.

NOTE: you can request an EMA installer account at <https://emea.apsystems.com/resources/register/>



NOTE: Sequence of steps 1 to 8 can be changed depending on the installation.

NOTE: Using APsystems' mobile app ECUAPP can make the installation and registration much simpler when there is an ECU included in the installation.

Step 9. Start the operation

- Turn on the AC circuit breaker on each microinverter AC branch circuit.
- Turn on the main utility-grid AC circuit breaker. Your system will start producing power after a two-minute waiting time.

*Product information is subject to change without notice.
(Please download manuals at emea.APsystems.com).*