



Warning:

- Read this guide thoroughly before installation.
- Operation personnel must wear proper personal protective equipment (PPE).
- Ensure that AC and DC wires are not live before any connection work.
- Adhere to the applicable codes and regulations of the installation site.
- Hoymiles is not liable for damages resulting from improper installation and use.

Danger:

- This installation must be carried out with all devices off the grid.
- To avoid damaging the microinverter or potential fire hazards, ensure all terminals are securely tightened with the correct torque.

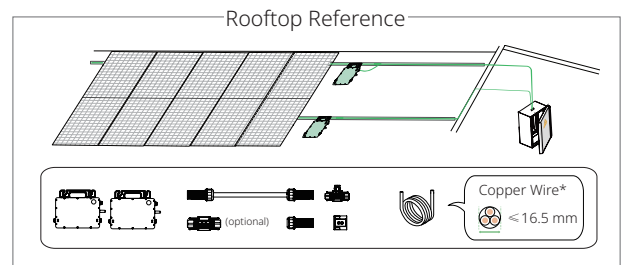
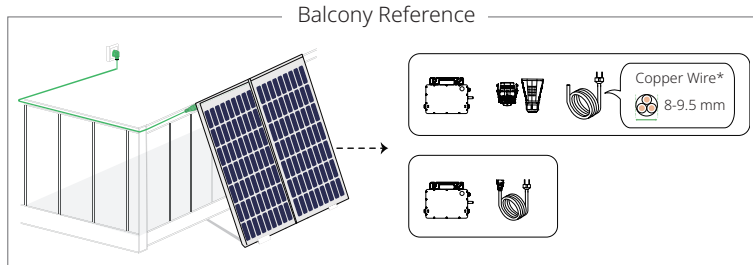
Notice:

- Operating voltage: 230 V Single-phase, 230/400 V Three-phase grid.

Application

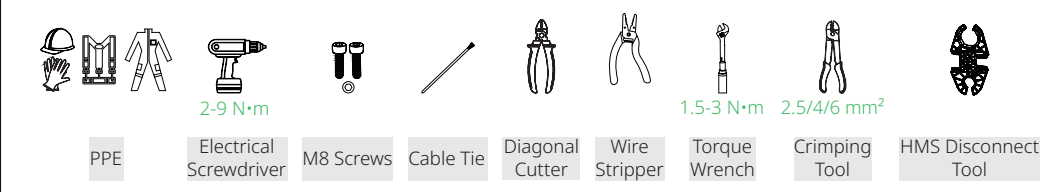
The HMS-1000-2T series microinverters can be used both in balcony single-microinverter systems and rooftop multi-microinverter systems, with three configuration options:

- Single microinverter, two PV modules, one HMS Field Connector, and an AC cable (installer-prepared).
- Single microinverter, two PV modules, and an HMS Plug and Play Cable.
- Multiple microinverters, multiple PV modules, and HMS Cable System.

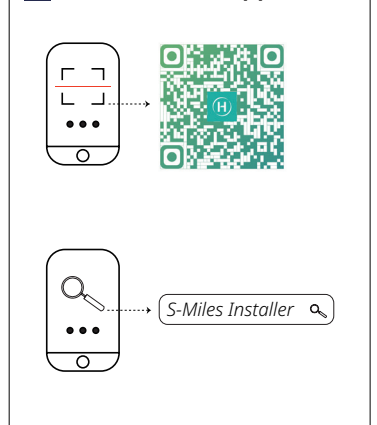


Preparation

1 Check the Tools



3 Download the Application



2 Plan the Microinverters

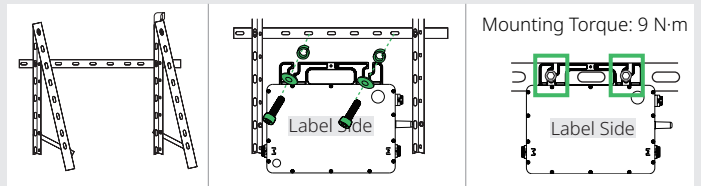
- For single-microinverter systems, the entire system consists of one microinverter and two PV modules.
- For multi-microinverter systems, define the number of microinverters per AC output line based on the ampacity of the AC cables. (*AC cable ampacity determines the limits, which may vary. Check local codes for the actual limitations.)

Model	HMS-600-2T	HMS-700-2T	HMS-800-2T	HMS-900-2T	HMS-1000-2T
2.5 mm ²	9	7	6	6	5

Installation Steps (Single-Microinverter System)

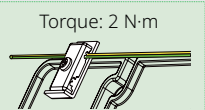
1 Position the Microinverter

- Follow the manufacturer's instructions to assemble the bracket.
- Attach the microinverter (label side up) to the bracket, ensuring the microinverter is properly aligned.
- Secure the microinverter to the bracket with M8 screws (Torque: 9 N·m). Do not over-torque.



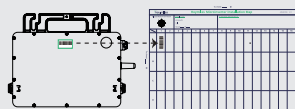
Warning:

- The AC cables already include earth wires for direct grounding. Use the grounding clamps as shown on the right if external grounding is required.
- Check the balcony railing for stability, weight capacity, and a smooth, level surface for bracket attachment.
- Always place the microinverter beneath the PV module to avoid direct exposure to rain, UV, and other harmful weather events.
- Allow at least 2 cm of space around the microinverter for ventilation and heat dissipation.



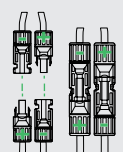
2 Complete the Installation Map

- Peel off the microinverter's removable SN label.
- Affix the label to the respective location on the installation map.



3 Connect the PV Modules

- Mount the PV modules above the microinverters.
- Connect the DC leads of PV modules to the corresponding DC inputs on the microinverters.



4 Attach the Bracket

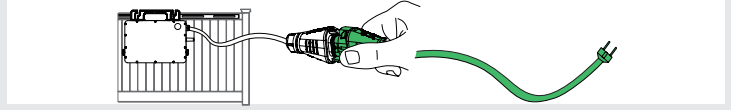
- Follow the manufacturer's instructions to securely attach the bracket to the balcony railing.
- Verify the bracket is aligned correctly, level, and stable.



5 AC Side Electrical Connection

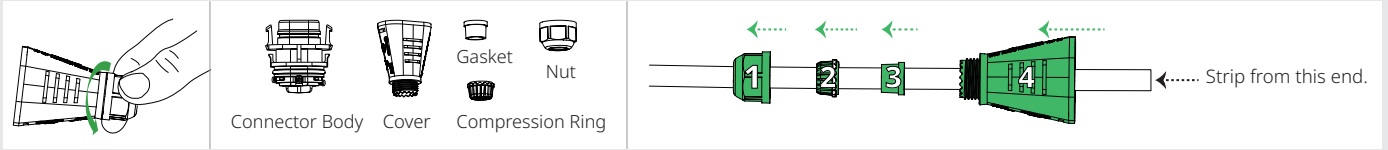
● Use HMS Plug and Play Cable

Connect the HMS Plug and Play Cable to the microinverter.
Listen for a click as they engage.

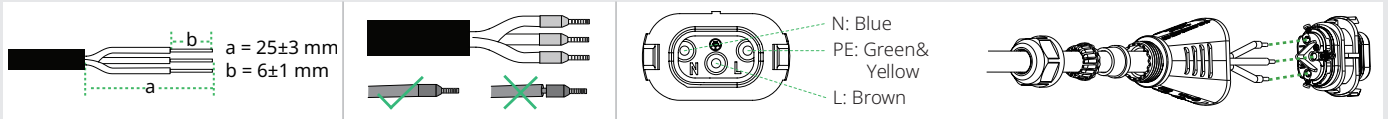


● Use HMS Field Connector

a. Separate the HMS Field Connector into five parts and slide them over an AC cable.

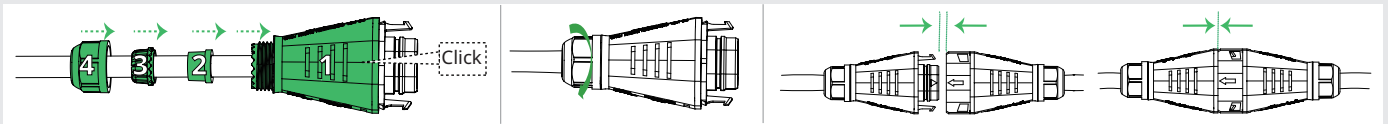


b. Strip the cable, crimp it, and insert the crimped cable into the connector body.



⚠ Notice: Wiring color codes may vary. (For example, in Australia, live wires are red, neutral wires are black, and PE wires are green and yellow.) Always adhere to national and site-specific regulations for wiring.

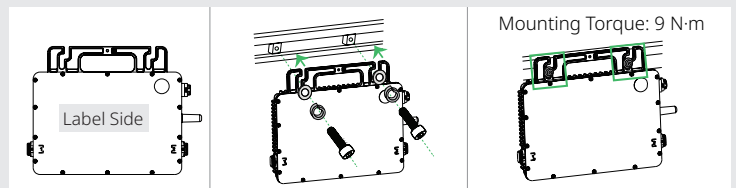
c. Slide the cover, gasket, compression ring, and nut over the cable, then firmly tighten the nut with a torque wrench (Torque: 2 ± 0.5 N·m). Connect the HMS Field Connector to the microinverter's output connector until it clicks into place.



Installation Steps (Multi-Microinverter System)

1 Attach the Microinverters to the Racking

- Plan and mark the position of each microinverter on the racking.
- Slide all sliding T-nuts along the racking until they are fully seated in the marked locations.
- Place the microinverter (label side up) onto the racking.
- Secure the microinverter to the racking (Torque: 9 N·m).



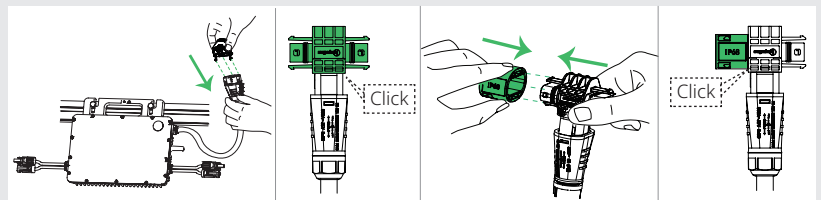
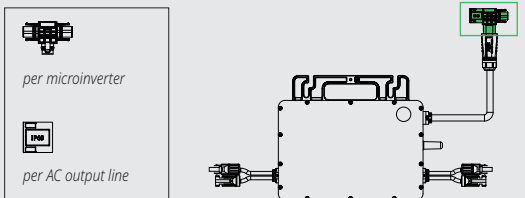
⚠ Warning:

- Always install the microinverter beneath the PV module to avoid direct exposure to rain UV, and other harmful weather events.
- Maintain a minimum 30 cm distance between the microinverter and the roof for optimal communication quality. If this isn't possible due to site constraints, maximize the separation between the microinverter and the roof.
- Allow at least 2 cm of space around the microinverter for ventilation and heat dissipation.
- The AC cables already include earth wires for direct grounding. Use the grounding clamps as shown on the right if external grounding is required.



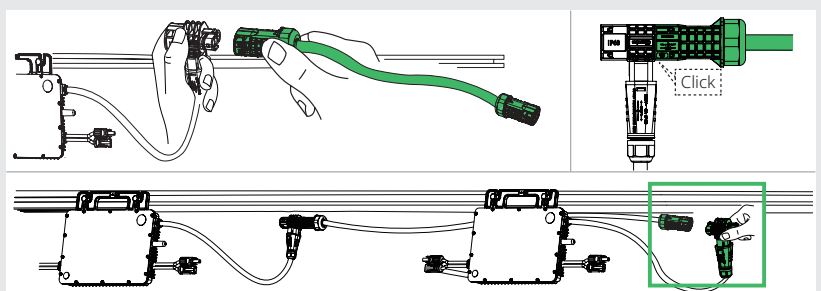
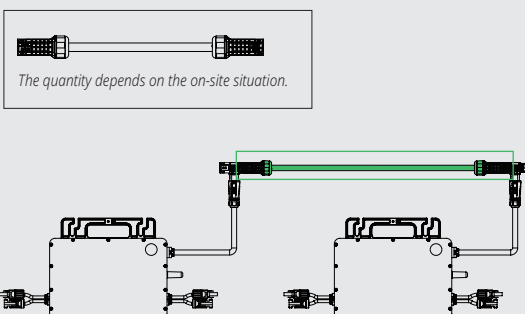
2 Connect the AC Trunk Connector

- Connect the HMS Trunk Connector to the microinverter.
- Cover the unused port on the HMS Trunk Connector (located at the beginning of the AC Trunk) with an HMS Sealing Cap. Listen for a click as the sealing cap engages.



3 Connect Adjacent Microinverters

Use the HMS Connection Cables to connect all microinverters on the AC Trunk one by one. Listen for a click as they engage.

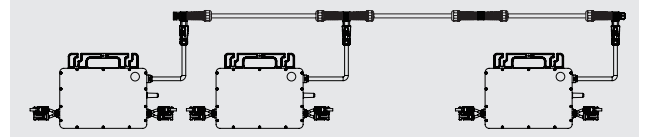
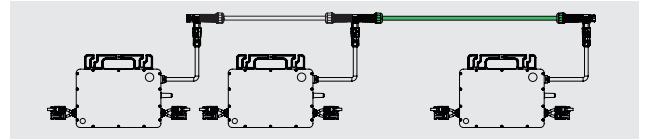


Obstacle Scenario

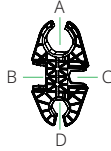
If you need to space microinverters farther apart due to an obstacle, Hoymiles offers two solutions:



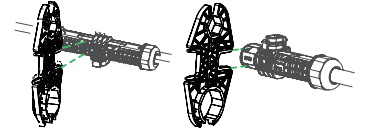
- **Using a longer HMS Connection Cable:** Hoymiles offers cable lengths including 1.1 m, 2.0 m, 2.3 m, 3.0 m, and 4.6 m. If you require a different length, contact Hoymiles sales team.
- **Using an HMS Extension Connector** to connect two HMS Connection Cables into a longer one.



* To disconnect the HMS Extension Connector from the AC Trunk, you must use an HMS Disconnect Tool.

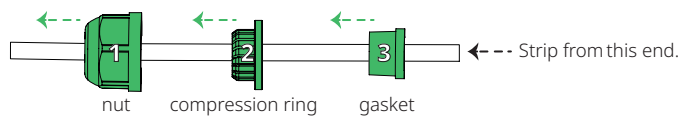
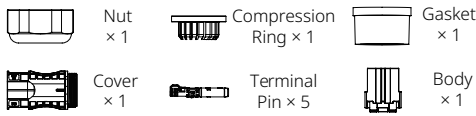


No.	Functions
A	Tighten/Loosen nuts in the AC Trunk
B	Remove microinverters from the AC Trunk
C	Disassemble connectors on the AC Trunk
D	Tighten/Loosen the HMS Field Connector's nuts



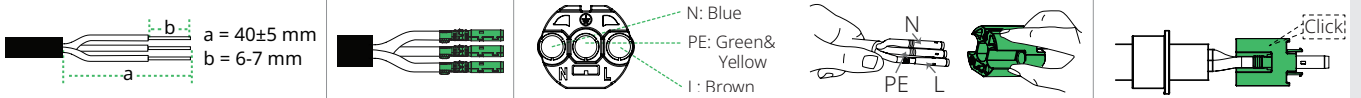
4 Make the AC End Cable

a. Separate the HMS Cable Terminal Connector into six parts, then slide the nut, compression ring, and gasket over the AC cable in the correct order.



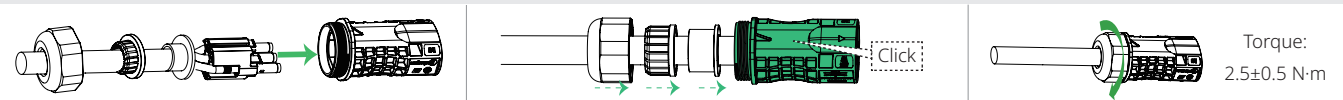
Notice: Two terminal pin sizes are available: one for 2.5 mm² cables and the other for 4 mm² or 6 mm² cables. Choose the correct terminal pin size matching the cable size to ensure a reliable and secure connection. Using the wrong size may result in potential issues or connection failures.

b. Strip the cable, crimp it, and insert the crimped cable into the connector body.

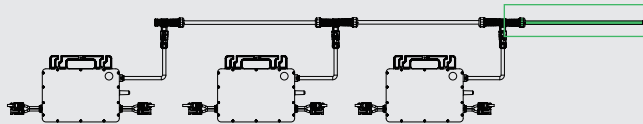
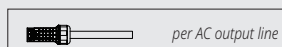


Notice: Wiring color codes may vary. (For example, in Australia, live wires are red, neutral wires are black, and PE wires are green and yellow.) Always adhere to national and site-specific regulations for wiring.

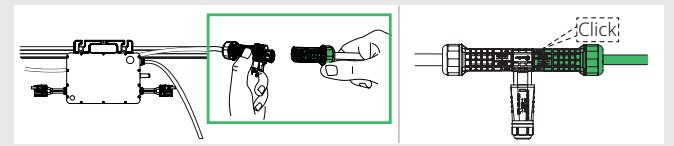
c. Insert the connector body into the cover, then slide the gasket, compression ring, and nut over the cable assembly. Tighten the nut to 2.5 ± 0.5 N·m.



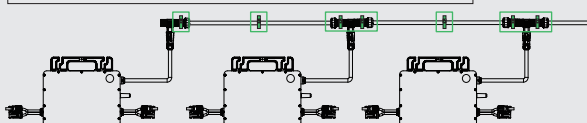
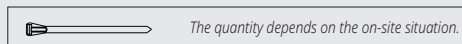
5 Connect the AC End Cable



Connect the AC End Cable to the last HMS Trunk Connector in the AC Trunk. Listen for a click as they engage.

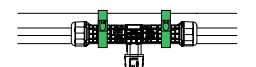


6 Manage the AC Trunk

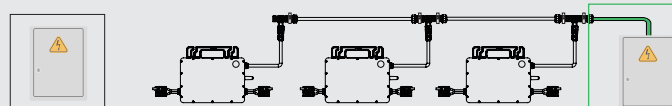


Secure all cables and connectors to the racking with metal cable ties, following local wiring regulations for tie spacing.

* The cable ties should be fastened around the central portion of all connectors.



7 Connect to the distribution box



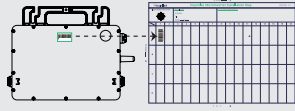
Connect the other end of the AC End Cable to the distribution box.

Warning: Please adhere to local wiring codes for wiring safety.

L	N	PE
Brown	Blue	Green&Yellow

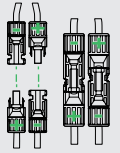
8 Complete the Installation Map

- Peel off the microinverter's removable SN label.
- Affix the label to the respective location on the installation map.



9 Connect the PV Modules

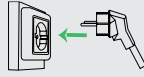
- Mount the PV modules above the microinverters.
- Connect the DC leads of PV modules to the corresponding DC inputs on the microinverters.



Start-up

1 Energize the system

For the **single-microinverter system**, connect the other end of the HMS Plug and Play Cable / AC End Cable to the socket. Wait five minutes for the system to start producing power.

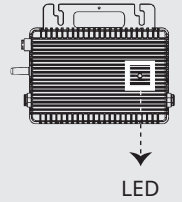


For the **multi-microinverter system**,

- Turn **ON** the AC disconnect or circuit breaker for each output line.
- Turn **ON** the main utility-grid AC circuit breaker. Wait five minutes for the system to start producing power.

2 Check the LED Status

LED	Indicate
Five green flashes (0.3s gap)	Start-up Success
Fast green flashing (1s gap)	Producing Power
Red flashing (1s gap)	AC Grid Fault



Monitoring Settings

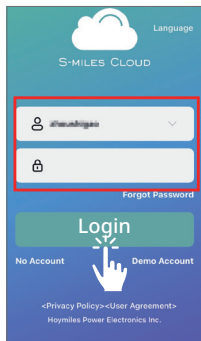


Warning:

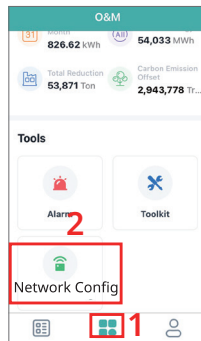
- The screenshots provided here are for reference only. The actual screens may vary.
- The DTU's network name includes "DTU/DTUP/DTUL" followed by the product serial number and is password-free by default.
- The router's Wi-Fi name can only contain **letters** and **Arabic numerals** and the router should support 2.4 Ghz brand.

1 Connect the DTU to S-Miles Cloud

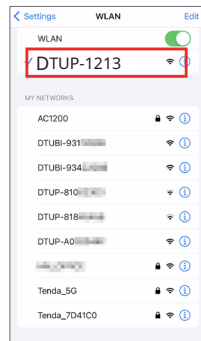
- Open and log in to the S-Miles Installer app using your credentials. This will take you to the **Home** screen.
- On the **Home** screen, tap the **O&M > Network Config** icon. This will take you to the **WLAN** screen.
- On the **WLAN** screen, select the DTU's hotspot.
- Back to the **O&M** screen, click the **Network Config** icon again, and follow the prompts to configure the network connection.



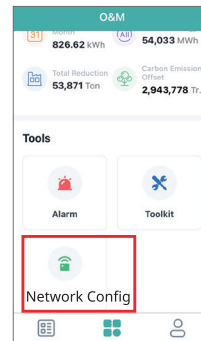
a



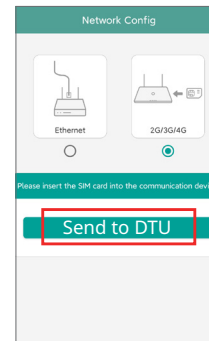
b



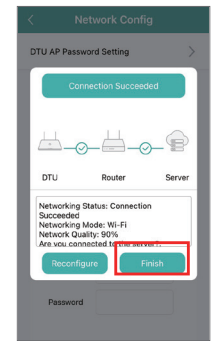
c



d-1



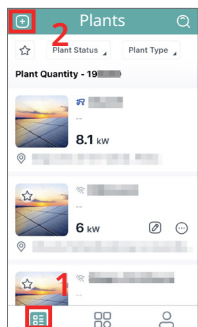
d-2



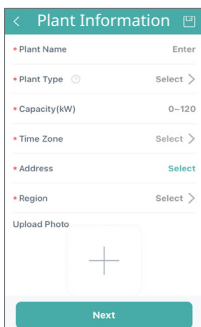
d-3

2 Add an Online Power Plant

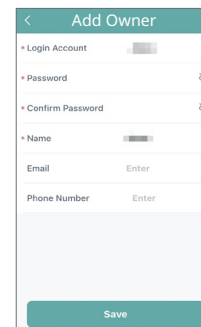
- Navigate to the **Plants** screen and tap the **Add Plant** icon.
- Follow the prompts to fill in the required information.
- Tap the **Save** button to finalize the power plant creation.



a



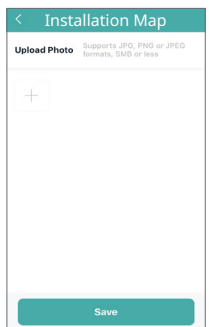
b-1



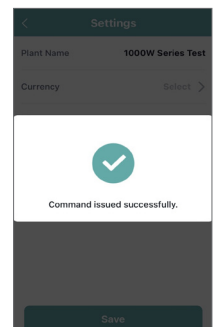
b-2



b-3



b-4



c



Note:

Consult the Microinverter User Manual, DTU Manual, and S-Miles Cloud Guide for comprehensive instructions on configuring your monitoring system.