

Warning:

- Read this guide thoroughly before installation.
- Operation personnel must wear proper personal protective equipment (PPE).
- Do not work with live wires. 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:

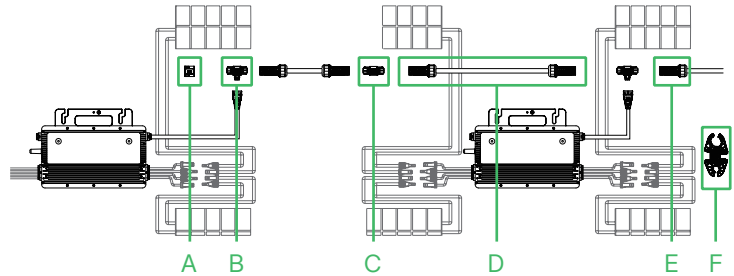
- This installation must be carried out with all devices off the grid.
- To avoid microinverter damage or potential fire hazards, ensure all terminals are securely tightened with the correct torque.

Notice:

Operating voltage: 230 V Single-phase, 230/400 V Three-phase, and 120/208 V Three-phase grids.

Wiring Diagram

Item	Description
A	Flex-S3 Sealing Cap
B	Flex-S3 Trunk Connector
C	Flex-S3 Extension Connector
D	Flex-S3 Connection Cable
E	Flex-S3 Cable Terminal Connector
F	Flex-S3 Disconnect Tool



Preparation

1 Check the tools

PPE	Electrical Screwdriver (2-9 N•m)	M8 Screws	Cable Tie	Diagonal Cutter	Wire Stripper	Torque Wrench (1.5-3 N•m)	Crimping Tool (10 AWG, 2.5/4/6 mm²)
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2 Download the application

Download the S-Miles Installer application. To download,

- Scan the QR code.
- Search for "S-Miles Installer" on App Store or Google Play.



3 Plan the microinverters

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 actual limitations.

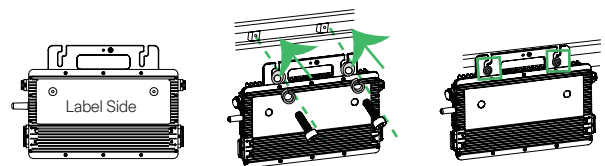
	Maximum Microinverter Number per Line (@230 V)		
Model	HMS-1600DW-4T	HMS-1800DW-4T	HMS-2000DW-4T
10 AWG	4	4	3
2.5 mm²	3	3	2
4 mm²	4	4	3
6 mm²	5	5	4

Mechanical Installation

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).

Mounting Torque: 9 N•m

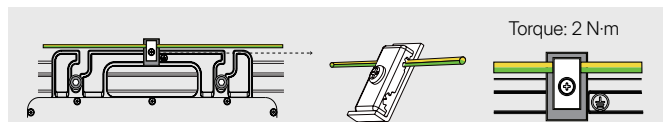


Warning

- Always install the microinverter beneath the PV module to avoid direct exposure to rain, UV, and other harmful weather events.
- Maintain a minimum of 30 cm distance between the microinverter and the roof for optimal communication quality. If this isn't possible due to obstacles, maximize the separation between the microinverter and the roof.
- Allow a minimum of 2 cm around the microinverter for ventilation and heat dissipation.

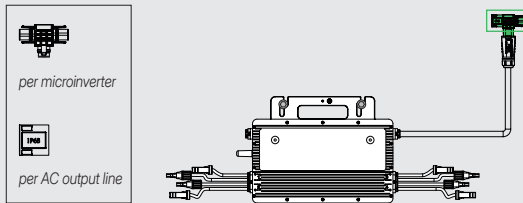
Additional Grounding (if necessary)

The AC cables already include earth wires for direct grounding. Use the grounding clamps shown on the right if external grounding is required.

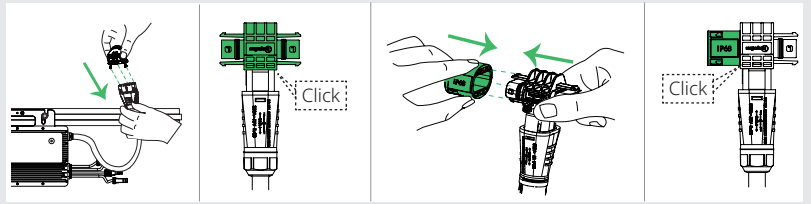


AC Side Electrical Installation

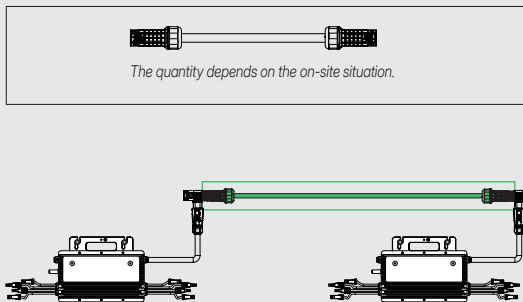
1 Connect the AC Trunk Connector



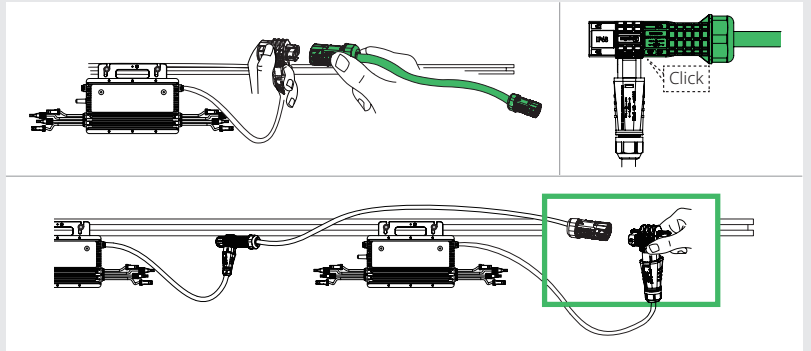
- Connect the Flex-S3 Trunk Connector to the microinverter.
- Cover the unused port on the Flex-S3 Trunk Connector (located at the beginning of the AC Trunk) with a Flex-S3 Sealing Cap. Listen for a click as the sealing cap engages.



2 Connect adjacent microinverters



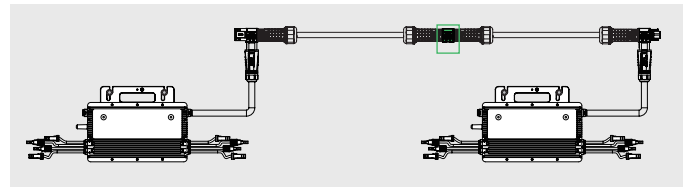
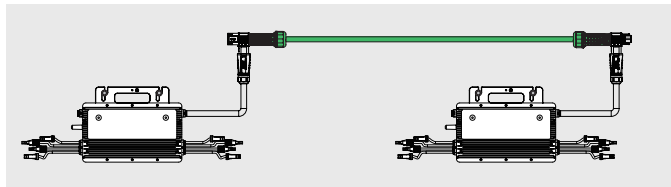
Use the Flex-S3 Connection Cables to connect all microinverters on the AC Trunk one by one. Listen for a click as they engage.



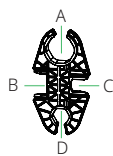
Obstacle Scenario

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

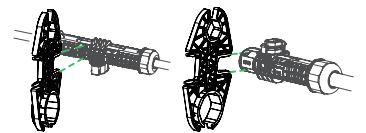
- Using a longer Flex-S3 Connection Cable:** Hoymiles offers cable lengths including 1.1 m, 2.0 m, 2.3 m, 3.0 m, and 4.6 m. If you require a different length, contact Hoymiles sales.
- Using a Flex-S3 Extension Connector** to connect two Flex-S3 Connection Cables into a longer one.



* To disconnect the connectors, you must use a Flex-S3 Disconnect Tool.



No.	Functions
A	Tightens/Loosens nuts
B	Removes microinverters from the AC Trunk
C	Disassembles connectors on the AC Trunk
D	Tightens/Loosens nuts



3 Make the AC End Cable

- Prepare an AC cable. (See the table on the right.)
- Separate the Flex-S3 Cable Terminal Connector into six parts.
- 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 10 AWG, 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.

Wire Type	Outdoor Use, Copper Wire, Three Core
Cable Diameter	≤ 16.5 mm



Nut
× 1



Compression
Ring × 1



Gasket
× 1



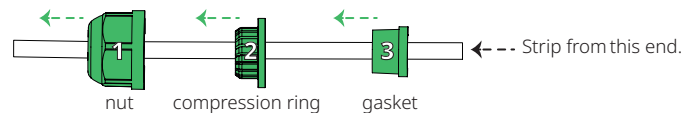
Cover
× 1



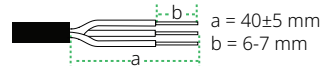
Terminal
Pin × 3



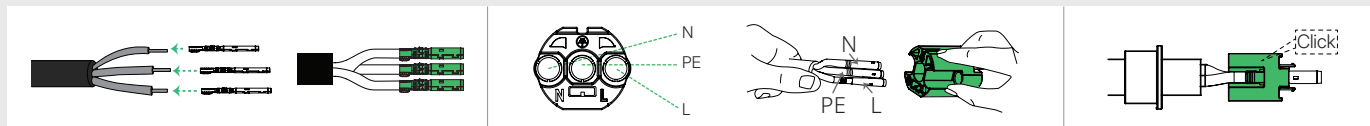
Connector
Body × 1



c. Cut the outer jacket by 40 ± 5 mm using a diagonal cutter. Then, strip the insulation with a wire stripper, exposing 6-7.5 mm conductor.

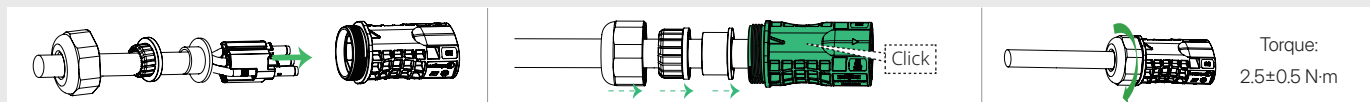


d. Insert the conductors into the terminal pins, crimp the connection, and push the crimped cable through the connector body.



Notice
Always adhere to national and site-specific regulations for wiring.

e. 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.

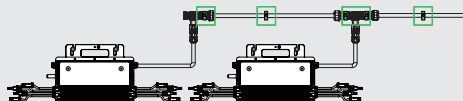
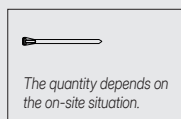


4 Connect the AC End Cable

Connect the AC End Cable to the last Flex-S3 Trunk Connector in the AC Trunk. Listen for a click as they engage.

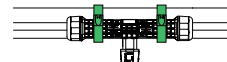


5 Manage the AC Trunk

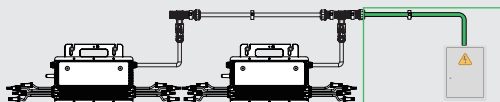


Secure all cables and connectors to the racking with metal cable ties, following local wiring regulations for tie spacing.

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



6 Connect to the distribution box



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

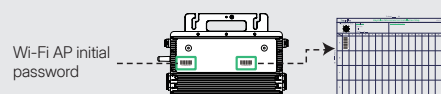


Warning
Adhere to local wiring codes for wiring safety.

DC Side Electrical Installation

1 Complete the installation map

- Record the Wi-Fi AP initial password of each microinverter for later configuration.
- Peel off the removable SN label of each microinverter.
- Affix the label to the respective location on the installation map.



2 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.



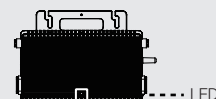
Start-up

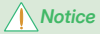
1 Energize the system

- 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

Status	Flashing green (0.3s gap, 5 times)	Flashing green (1s gap)	Flashing red (1s gap)
Indication	Start-up success	Normal power production	AC grid fault



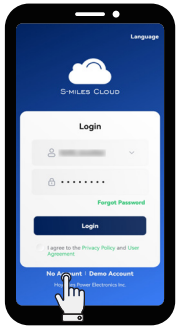


Notice

- The HMS-2000DW series microinverters support two methods for data monitoring:
 - Direct Connection:** No need for login. Connect to the microinverter's wireless signal to access various local data.
 - Remote Connection:** Log in to your account, connect to the microinverter's wireless signal, and commence with power plant setup.
- The screenshots are for reference only.
- The microinverter's network name includes "DTUBI" followed by the last 8 digits of the SN. The default password is printed on a **non-removable** label affixed to the device's label side.
- The router's Wi-Fi name can only contain **letters** and **Arabic numerals** and the router should support 2.4 GHz band.
- Consult the microinverter user manual and S-Miles Cloud Guide for comprehensive instructions on configuring your monitoring system.

Method One - Direct Connection

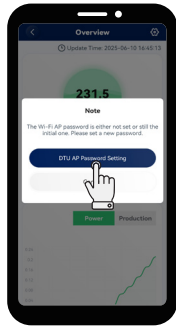
- Open S-Miles Installer, and tap **No Account** > **Enter** > **Go to set**.
- Select the microinverter's Wi-Fi and enter its AP password.
- Return to the app, and tap **DTU AP Password Setting**.
- Reset the AP password and tap **Send to DTU**.
- Tap
- Tap **Alarm**, **DTU AP Password Setting**, or **Power Control** to monitor and manage the microinverter.



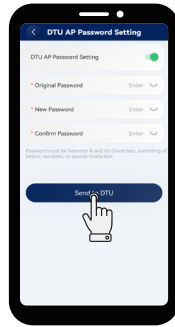
a-1



a-2



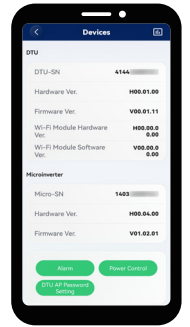
c



d



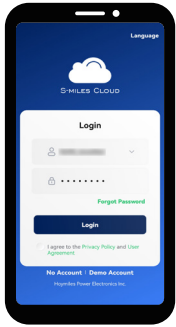
e



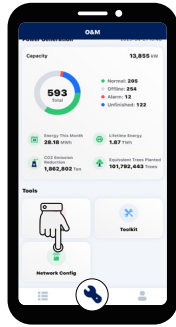
f

Method Two - Remote Connection

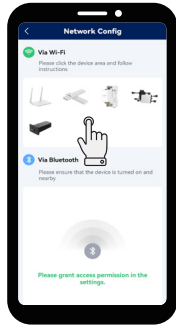
- Open and log in to the S-Miles Installer application using your credentials.
- Tap > **Network Config**.
- Click on the white area below **Via Wi-Fi**.
- Follow the prompts to configure the network connection.



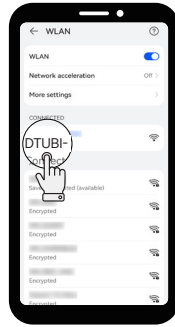
a



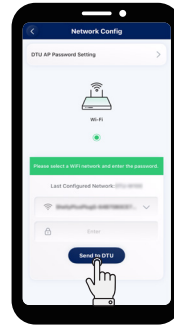
b



c



d-1



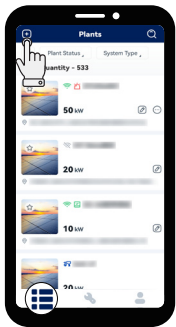
d-2



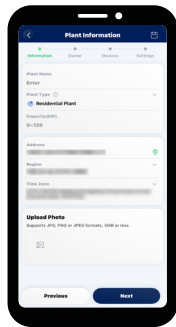
d-3

- Tap > .

- Follow the prompts to fill in the required information.



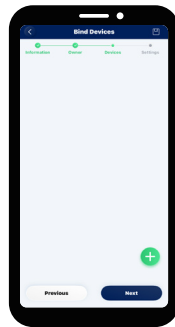
e



f-1



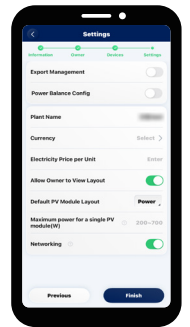
f-2



f-3



f-4



f-5

