# HMS-2000DW-4T Series Microinverter Quick Installation Guide

** Applicable for HMS-1600DW/1800DW/2000DW-4T Microinverters*

***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:***

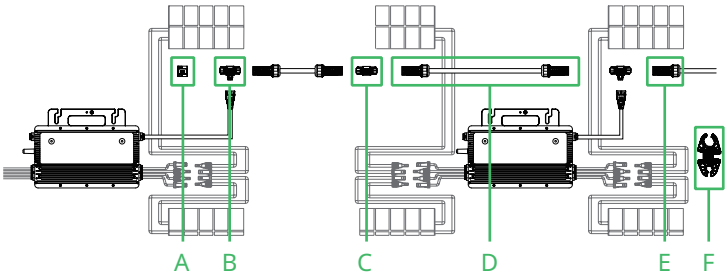
- *This installation must be carried out with all devices off the grid.*
- *To avoid microinverter damage or potential fire hazards, ensure all terminals are securely tightened with the correct torque.*

***Notice:***

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

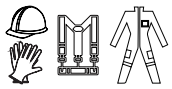
## Wiring Diagram

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




## Preparation

### 1 Check the Tools



PPE

2-9 N•m

Electrical Screwdriver

M8 Screws

Cable Tie

Diagonal Cutter

Wire Stripper

1.5-3 N•m

Torque Wrench

10 AWG, 2.5/4/6 mm²

Crimping Tool

### 2 Download the Application

Download the S-Miles Installer application. To download,

- Scan the QR code located on the right side.
- 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.

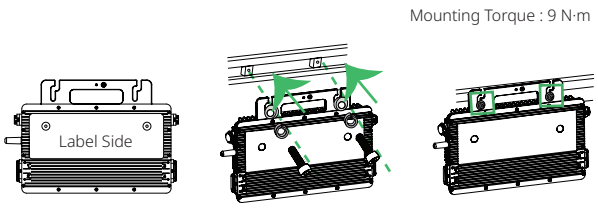
**AC cable ampacity determines the limits, which may vary. Check local codes for actual limitations.*

| 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

### Attach the Microinverters to the Racking

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

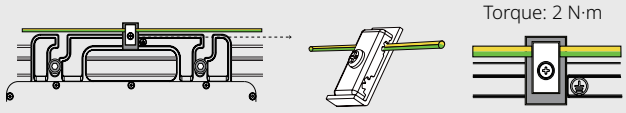



***Warning***

- *Always install the microinverter beneath the PV module to avoid direct exposure to rain, UV, and other harmful weather events.*
- *Maintain a minimum 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.



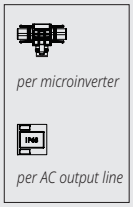


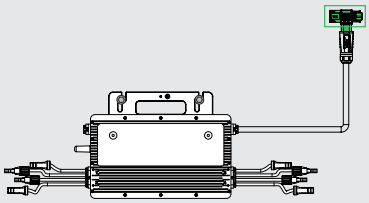

Region: Global AP040887 REV1.1 

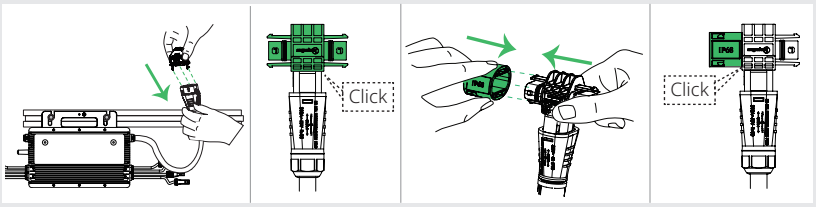
# AC Side Electrical Installation

## 1 Connect the AC Trunk Connector

a. Connect the HMS Trunk Connector to the microinverter.
b. 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.

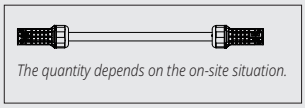


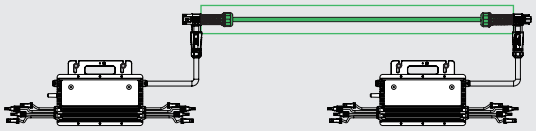



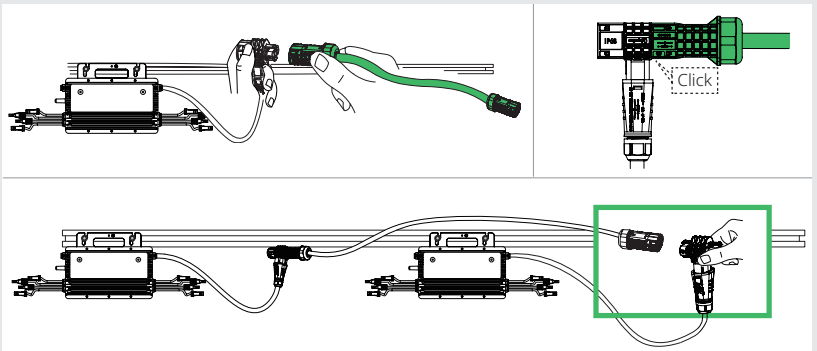



## 2 Connect Adjacent Microinverters

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



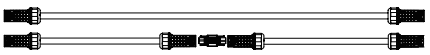



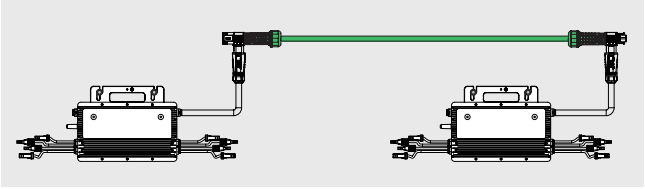


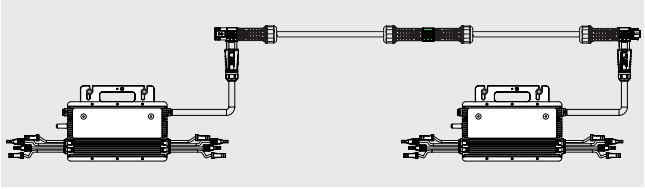

## Obstacle Scenario

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

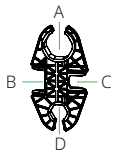
- **Using a longer HMS Connection Cable:** Hoymiles offers cable lengths including 1.1 m, 2.0 m, 2.3 m, 3.0 m, and 4.6 m. If you require a different length, contact Hoymiles sales.
- **Using an HMS Extension Connector** to connect two HMS Connection Cables into a longer one.



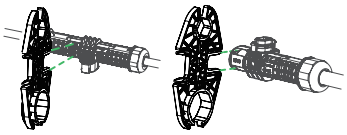




** To disconnect the HMS Extension Connector from the AC Trunk, you must use an HMS Disconnect Tool.*




| 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 |



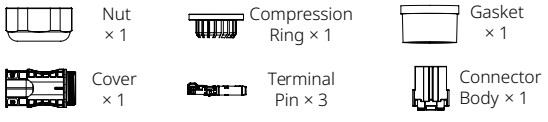
## 3 Make the AC End Cable

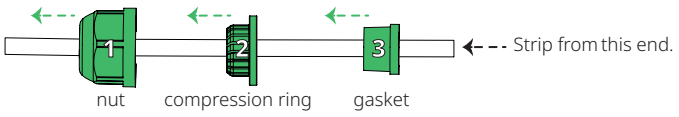
a. Prepare an AC cable. (See the table on the right.)

b. Separate the HMS Cable Terminal Connector into six parts.

c. Slide the nut, compression ring, and gasket over the AC cable in the correct order.

| Wire Type | Outdoor Use, Copper Wire, Three Core |
|---|---|
| Cable Diameter | ≤ 16.5 mm |
| Voltage Rating | 600 V |



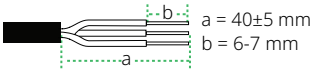




***Notice***

*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.*

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.

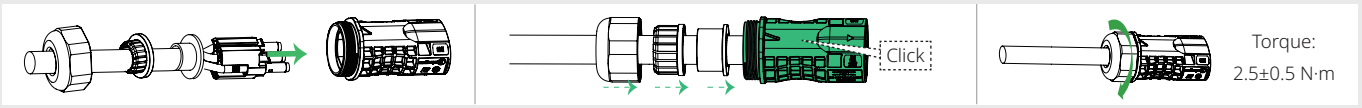



d. Insert the conductor into the terminal pin, crimp the connection, and push the crimped cable through the connector body. Please note that the cable color codes may vary, ensure compliance with the local wiring code.


**Notice**

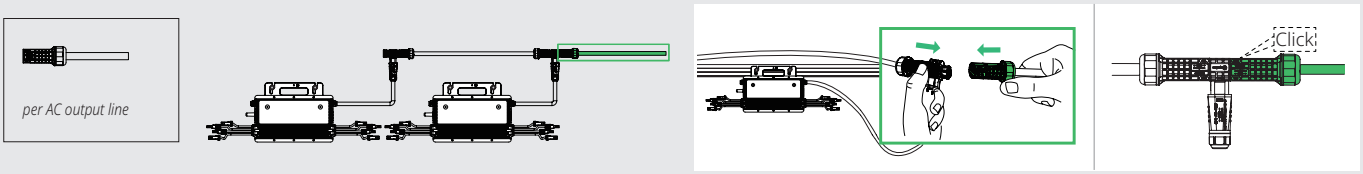
*Wiring color codes may vary. (For example, in North America, live wires are red, neutral wires are grey, and PE wires are green and yellow.) Always adhere to national and site-specific regulations for wiring.*

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.



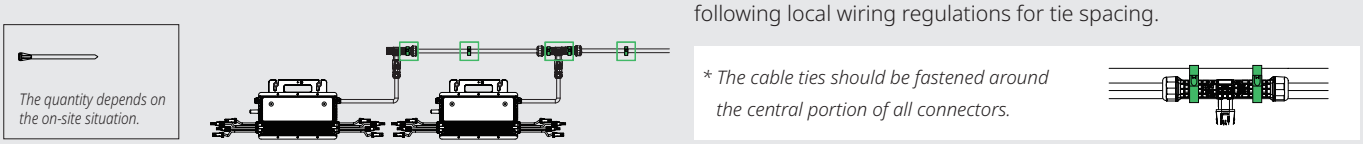

## 4 Connect the AC End Cable

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




## 5 Manage the AC Trunk

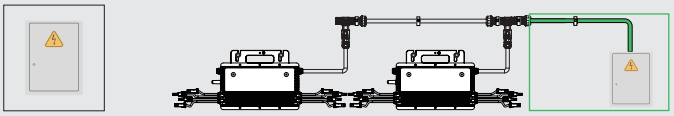
Secure all cables and connectors to the racking with metal cable ties, following local wiring regulations for tie spacing.




** 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**

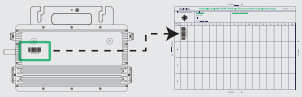
*Please adhere to local wiring codes for wiring safety.*

| L | N | PE |
|---|---|---|
| Brown | Blue | Green&Yellow |

# DC Side Electrical Installation

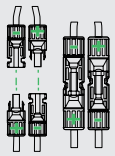
## 1 Complete the Installation Map

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



## 2 Connect the PV Modules

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



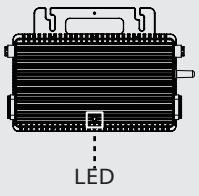
# Start-up

## 1 Energize the system

a. Turn **ON** the AC disconnect or circuit breaker for each output line.
b. 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 |






Region: Global AP040887 REV1.1 

# Monitoring Settings

**Notice**

*The HMS-2000DW series microinverter supports two methods for data monitoring:*

- ***Direct Connection:** Log into the app without an account, and connect to the microinverter's wireless signal to access various local data and set up your own power plant.*
- ***Remote Connection:** Log into your account, input the device's SN, then you can view device data and commence with power plant setup.*

**Notice**

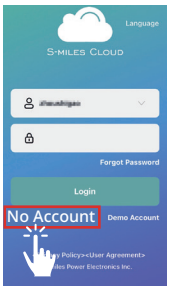
- *The screenshots provided here are for reference only. The actual screens may vary.*
- *The router's Wi-Fi name can only contain **letters** and **Arabic numerals** and the router should support 2.4 GHz band.*
- *The microinverter's network name includes "DTUBI" followed by the last 8 digits of the SN. The default password is printed on a non-removable label affixed to the device's label side.*

## Method One - Direct Connection

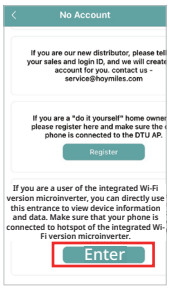
### 1 Connect to S-Miles Cloud

a. Open the S-Miles Installer app, and tap the **No Account** > **Enter** buttons.

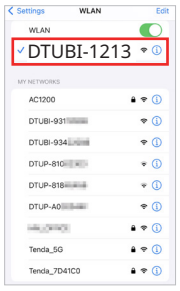
b. On the **WLAN** screen, select the microinverter's Wi-Fi and enter its AP password.




a-1




a-2



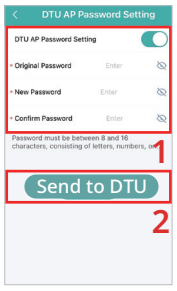

b

### 2 Reset the AP Password

a. Return to the app, and tap the **Confirm** button.

b. On the next **DTU AP Password Setting** screen, reset the AP password and tap the **Send to DTU** button.


a

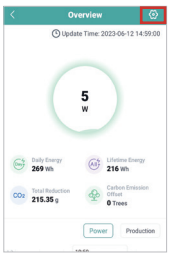



b

### 3 View Other Information

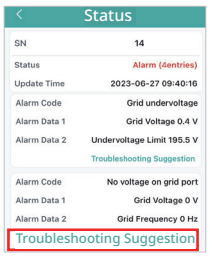
a. Go to the **Overview** screen and tap the **Settings** icon.

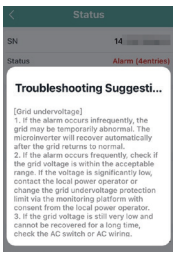
b. On the **Device Settings** screen, tap the **Alarm**, **DTU AP Password Setting**, or **Power Adjustment** button to monitor and manage the microinverter.



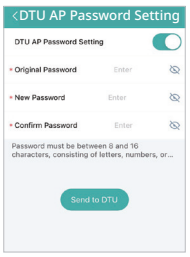

a


b

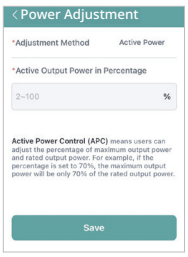



A - View the alarm




B - Reset AP password




C - Adjust active output power

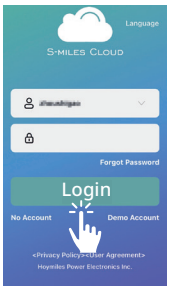
## Method Two - Remote Connection

### 1 Connect to S-Miles Cloud

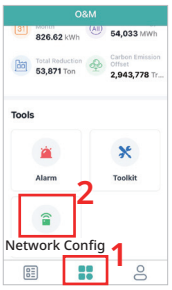
a. Open and log in to the S-Miles Installer app using your credentials. Then tap the **O&M** > **Network Config** icons.

b. On the next **WLAN** screen, select the microinverter's Wi-Fi.

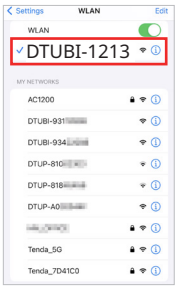
c. Return to the **O&M** screen, click the **Network Config** icon again, and follow the prompts to configure the network connection.



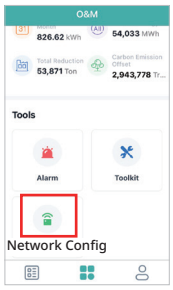

a-1



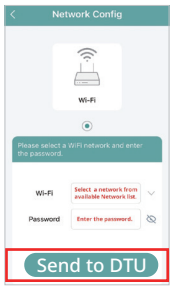

a-2



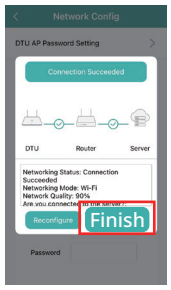

b




c-1




c-2

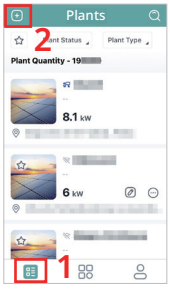



c-3

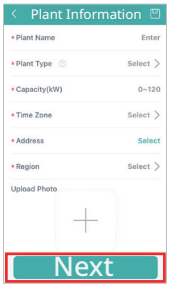
### 2 Add an Online Power Plant

a. Navigate to the **Plants** screen and tap the **Add Plant** icon.

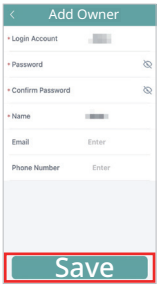
b. Follow the prompts to enter the required information. Then tap the **Save** button to finalize the power plant creation.



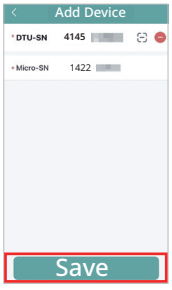

a



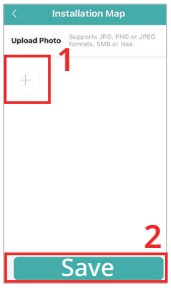

b-1



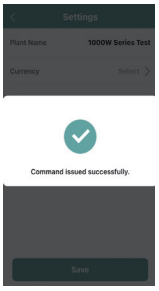

b-2




b-3




b-4




b-5

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

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