MIT-5000-8T Series Microinverter Quick Installation Guide

** Applicable for MIT-4000/4500/5000-8T & MIT-4000/4500/5000-8TL Microinverters*

Danger

- *The installation must be carried out with all devices powered off.*
- *To avoid microinverter damage or potential fire hazards, ensure reliable and secure connection with the correct torque.*

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.*

Notice

MIT-5000-8T series microinverter can be operated on the three-phase 230/400 V grid.

Hoymiles Microinverter (model: MIT-4000/4500/5000-8T & MIT-4000/4500/5000-8TL) is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures. OPERATING FREQUENCY (the maximum output power): 863 to 870 MHz, ERP ⩽ 14 dbm

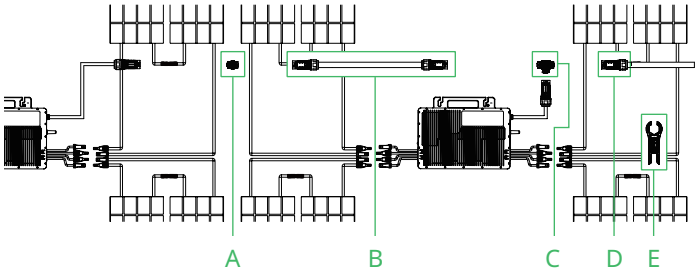
EU Declaration of Conformity

Hoymiles Microinverter (model: MIT-4000/4500/5000-8T & MIT-4000/4500/5000-8TL) is in compliance with the essential requirements and other relevant provisions of directives 2014/53/EU, 2009/125/EC, 2011/65/EU and (EU)2015/863.
The original EU Declaration of Conformity may be found at https://www.hoymiles.com/resources/download.

RoHS

Wiring Diagram

Item	Description
A	Flex-T5 Extension Connector
B	Flex-T5 Connection Cable
C	Flex-T5 Trunk Connector
D	Flex-T5 Cable Terminal Connector
E	Flex-T5 Disconnect Tool

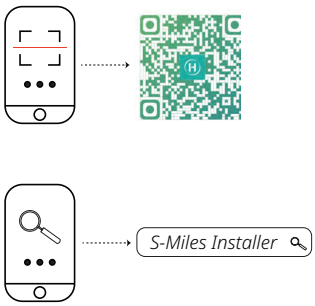


Preparation

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 (2.5/4/6 mm²)

2 Download the application



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 the actual limitations.*

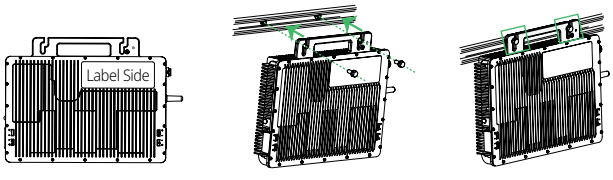
Maximum Microinverter Number per Line @230/400 V						
Model / Cable Size	MIT-4000-8T	MIT-4000-8TL	MIT-4500-8T	MIT-4500-8TL	MIT-5000-8T	MIT-5000-8TL
2.5 mm²	3		3		3	
4 mm²	5		4		4	
6 mm²	6		5		5	

Mechanical Installation

1 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).

Mounting Torque: 9 N•m



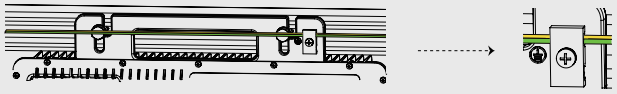
Warning

- *Always install the microinverter beneath the PV module to avoid direct exposure to rain, UV, and other harmful weather events.*
- *Maximize the separation between the microinverter and the roof for optimal communication quality.*
- *Allow at least 2 cm of space around the microinverter for ventilation and heat dissipation.*

Additional Grounding (If Necessary)

The AC cables already include ground wires for direct grounding. If external grounding is required on your installation site, you can order the grounding accessory by emailing sales@hoymiles.com.

Torque: 2 N·m



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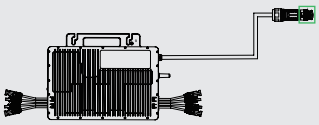
Region: Global AP040986 REV1.1

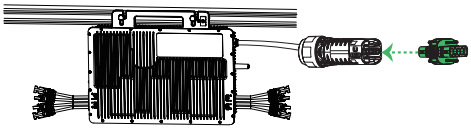
AC Side Electrical Installation

1 Connect the Flex-T5 Extension Connector

Connect the Flex-T5 Extension Connector to the microinverter. Listen for a click as the connectors engage.

One Per AC Output Line

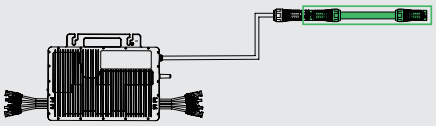


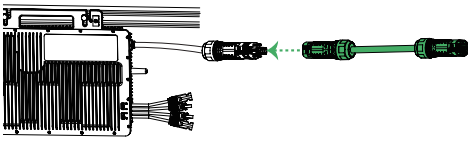


2 Connect the Flex-T5 Connection Cable

Connect the Flex-T5 Connection Cable to the other side of the Flex-T5 Extension Connector. Listen for a click as the connectors engage.

Quantity Depending on On-site Situation

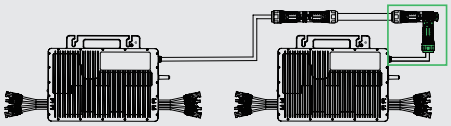


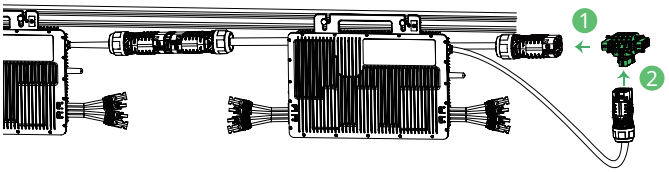


3 Connect adjacent microinverters

Use the Flex-T5 Trunk Connector to connect the adjacent microinverter and listen for a click as they engage. Then, repeat this step to connect all microinverters on the AC Trunk one by one.

Number of Microinverters per Line Minus One

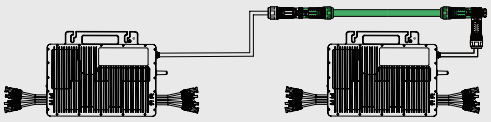


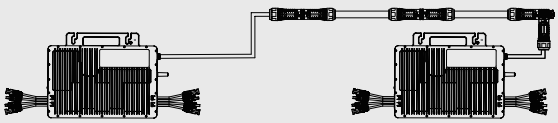


Obstacle Scenario

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

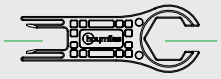
- **Using a longer Flex-T5 Connection Cable:** Hoymiles Flex-T5 Connection Cable is 4.6 m. If you require a different length, contact Hoymiles sales.
- **Using a Flex-T5 Extension Connector:** It connects two Flex-T5 Connection Cables into a longer one.





** To disconnect the connections, you must use a Flex-T5 Disconnect Tool.*

Disconnects connectors



Tightens/loosens nuts

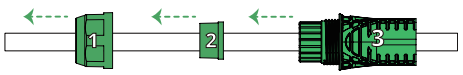
4 Make the AC End Cable

a. Prepare an AC cable. (See the table on the right.)
b. Separate the Flex-T5 Cable Terminal Connector into five parts.
c. Slide the nut, gasket, and cover over the AC cable in the correct order.

> ⚠ *Warning*
> *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 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
Cable Diameter	⩽ 22 mm
Voltage Rating	600 V

Nut × 1 | Gasket × 1 | Cover × 1 | Terminal Pin × 5 | Connector Body × 1



Strip from this end.

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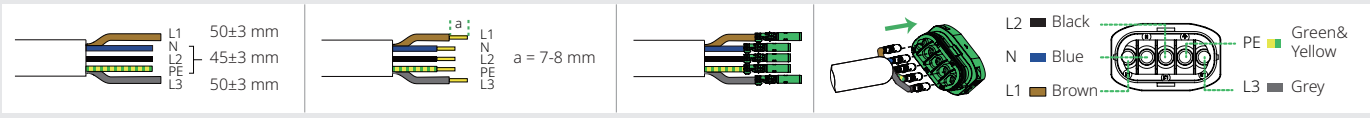
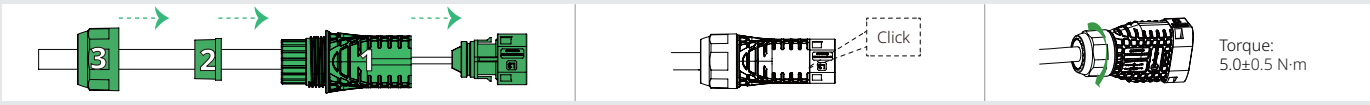
d. Cut the outer jacket by 50±3 mm, and cut 5 mm off the N, L2, and PE wires.
e. Strip all insulation to expose 7 mm to 8 mm conductors, and insert them into the terminal pins.
f. Crimp the cable and insert it into the connector body.



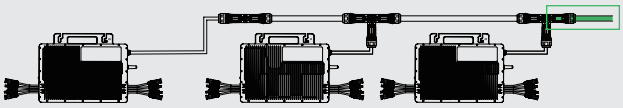
Notice: Wiring color codes may vary. Always adhere to national and site-specific regulations for wiring.

g. Slide the cover, gasket, and nut over the cable assembly. Then tighten the nut to 5.0±0.5 N·m.

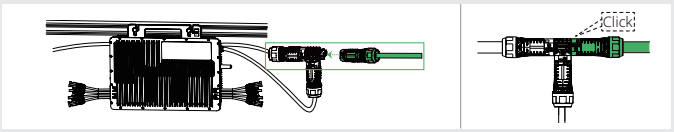


5 Connect the AC End Cable

One Per AC output line

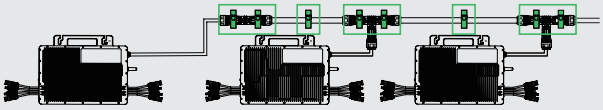


Connect the AC End Cable to the last Flex-T5 Trunk Connector in the AC Trunk. Listen for a click as they engage.



6 Manage the AC Trunk

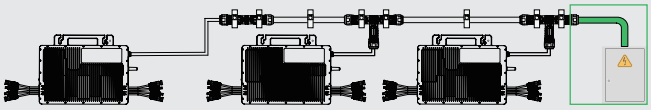
Quantity Depending on On-site Situation



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

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

7 Connect to the distribution box



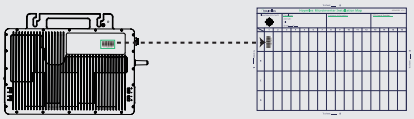
Adhere to local wiring codes to connect the other end of the AC End Cable to the distribution box.

L1	L2	L3	N	PE
Brown	Black	Grey	Blue	Green&Yellow

DC Side Electrical Installation

1 Complete the installation map

a. Peel off the removable serial number (SN) label of each microinverter.
b. Affix the labels to the respective locations on the installation map.

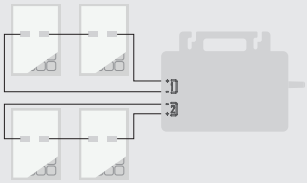


2 Connect the PV modules

a. (Optional) Connect every two PV modules in series as a string.
b. Connect the microinverters to the PV modules. Ensure that each microinverter DC input connects to a minimum of one PV module.
c. Mount the PV modules above the microinverters.

Warning

- *Check the polarity of DC connectors before connection. Connect the microinverter's positive (with a "+" sign) and negative (with a "-" sign) DC terminals respectively to the PV module's positive and negative terminals. If they are reversely connected, the microinverter will not operate.*
- *Connect one PV module or PV string to one microinverter DC input. Hoymiles is not liable for damages resulting from the conduction between any two inputs that is caused by incorrect or improper connection.*



** The product proportions have been adjusted to enhance the illustration of the structure.*

Start-up

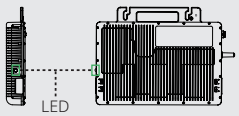
1 Energize the system

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

Check the LED indicator on the side of the microinverter.

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



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Monitoring Settings

Notice

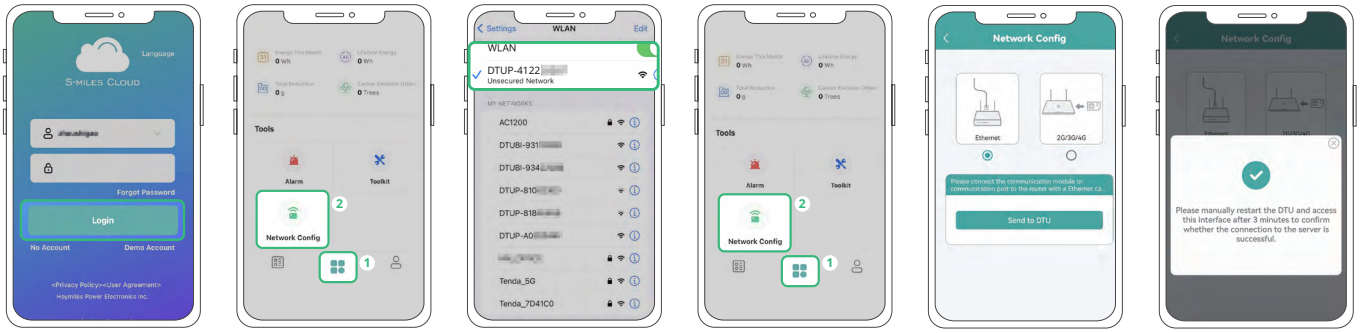
- *The screenshots are for reference only.*
- *The DTU's network name includes "DTU/DTUP/DTUL" followed by the **last eight digits** of the product SN, and is password-free by default.*
- *The router's Wi-Fi name can only contain **English letters** and **Arabic numerals** and the router should support 2.4 GHz band.*
- *Consult the Microinverter User Manual, DTU Manual, and S-Miles Cloud Guide for comprehensive instructions on configuring your monitoring system.*

1 Establish an internet connection

a. Open and log in to the S-Miles Installer application using your credentials.

b. Tap **O&M** > **Network Config** .

c. Follow the prompts to configure the network connection.

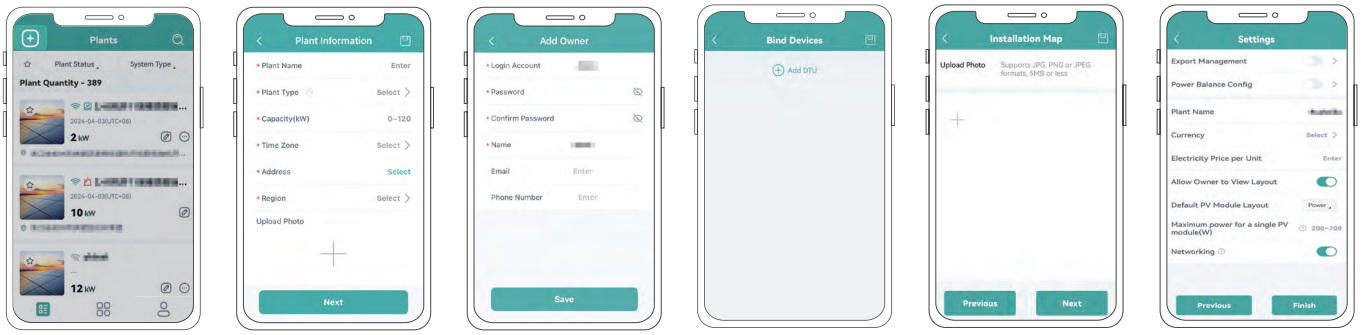


a b c-1 c-2 c-3 c-4

2 Create a power plant

a. Tap **Plants** > **Add Plant** .

b. Follow the prompts to fill in the required information.



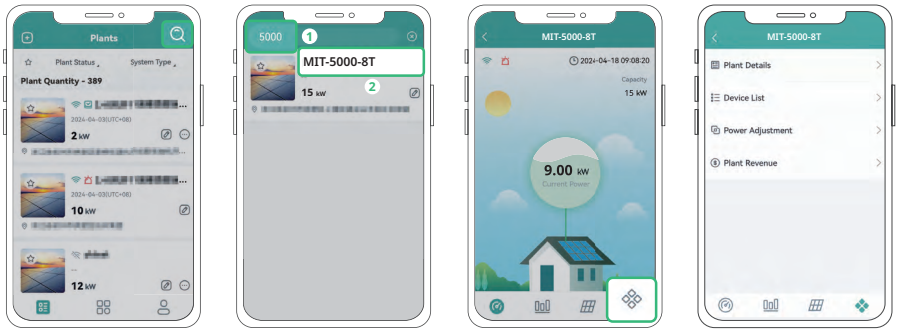
a b-1 b-2 b-3 b-4 b-5

3 Set your power plant

a. Tap **Search** .

b. Enter the desired plant name for your search and tap it to move to the plant homepage.

c. On the plant homepage, tap **Setting** .



a b c Plant Settings

Item	Description
Plant Details	It provides access to geographical location, system capacity, and owner information about your power plant.
Device List	It provides an SN list of devices installed in your power plant.
Power Adjustment	It provides access to adjust the Active Power, Power Factor, and Reactive Power.
Plant Revenue	It provides revenue data over the electricity price, real-time power production data, and historical power production data.

Change without notice. Scan the QR code to access more information.

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