



Open Energy for All

# Technical Note

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Wireless Connection Issues about DTU and Microinverter

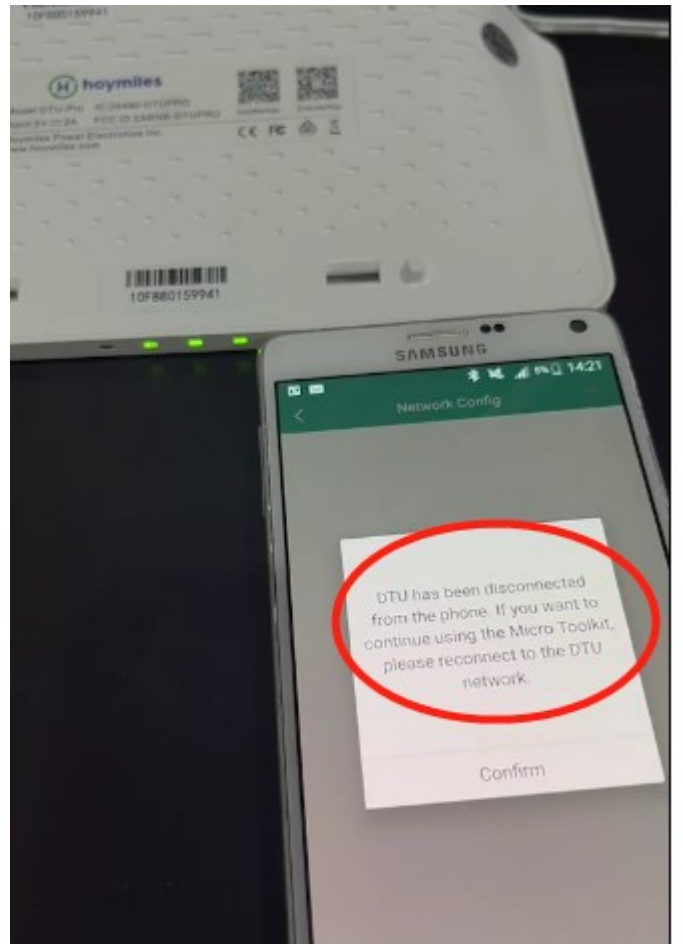
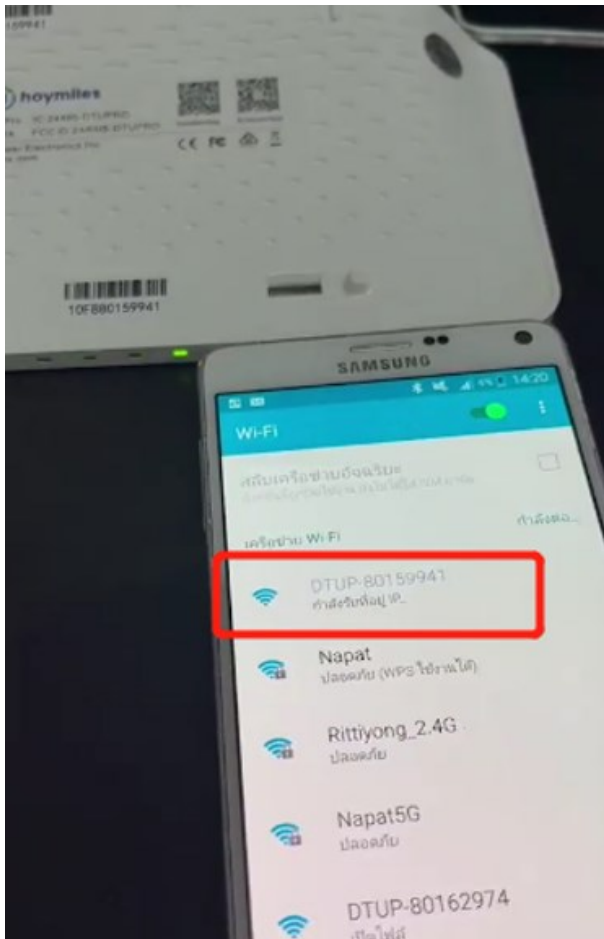
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[hoymiles.com](http://hoymiles.com)

## Wireless Connection Issue about DTU

### Phenomena 1:

DTU SSID (DTUP\_xxxxxxx) has been connected but show disconnected after clicking "Network Config".



### Troubleshooting:

◆ Please make sure the internet configuration procedures are followed properly:

- 1) Use smart phone/pad to connect the ssid that the DTU emits;
- 2) Open installer or end user APP, open the network configuration page;
- 3) Input the name and password of the home router Wifi correctly and send it to DTU;
- 4) Restart the DTU and turn off the Wlan List to avoid connecting to DTU ssid.

● If the procedure is followed correctly, please try following points and try to connect DTU's wifi again:

- 1) Make sure the APP has updated to the latest version;
- 2) Or use other Android or IOS phone;
- 3) Make sure open Local network Switch of S-Miles installer APP if choose IOS;

- 4) Turn off the mobile 4G/5G data on the mobile phone/pad;
  - 5) Delete some Wifi names if there are too many detected in the Wifi list;
  - 6) Hold and press on the reset button of the DTU for 10s before releasing it to reset DTU;
  - 7) Some smart phones have some smart options to automatically switch Wifi. Please close such options;
  - 8) Upgrade the DTU firmware to the latest version locally (only applicable for DTU-Pro by USB disk);
  - 9) Adjust the distance between the DTU, home router and smart phone/pad to keep them as close as possible.
- Please take a complete test video to apply for the replacement if DTU always cannot be conneted after trying all the above points.

### Phenomena 2:

DTU can be connect to phone hotspot and cannot be connected to Home router Wifi.

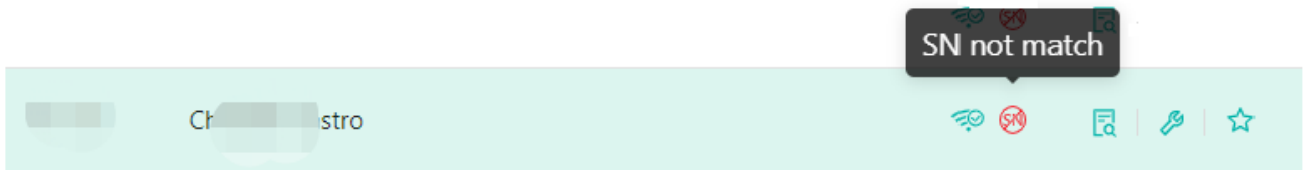
### Troubleshooting:

- ◆ If the problem may be related to the home router and cannot be solved by replacing DTU, please try following points to test it:
- 1) Check the type of router signal, note that only the 5G router is not supported by the DTU, only 2.4G Hz router is supported;
  - 2) Turn off the firewall of router;
  - 3) Check the router Wifi encryption type, the DTU only compatible with WPA 1/2 Wifi instead of WPA3 encryption;
  - 4) The IP of the router cannot start with 10.10;
  - 5) The Wifi name and password does not support special characters, such as spaces,#,!

## Wireless Connection Issue about Microinverter

### Phenomena 1:

DTU report SN not match alarm and all Microinverters show offline.



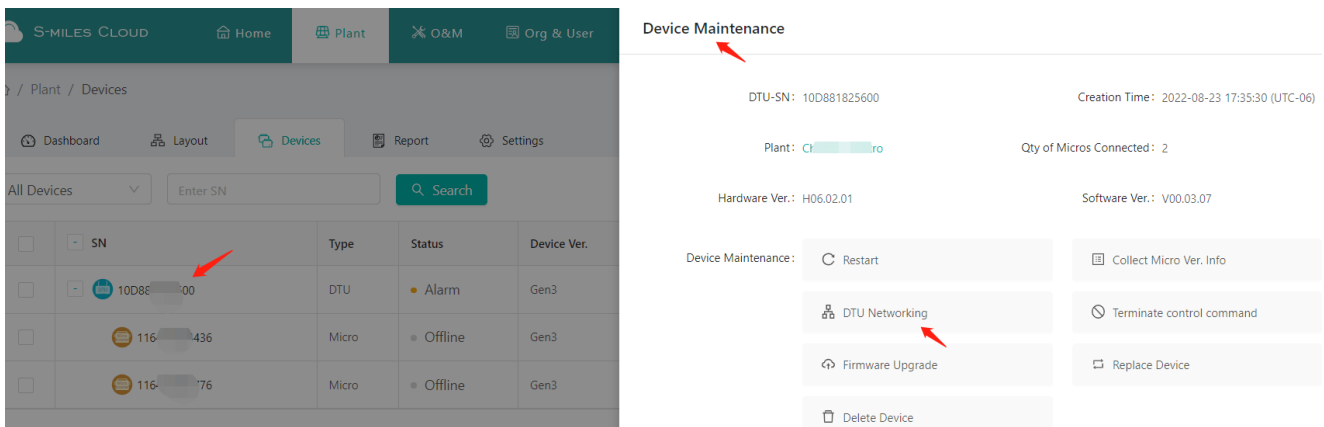
### Reasons:

The problems are generally caused by the following reasons:

1. Create the power station firstly and then configure DTU WiFi;
2. The SN is not consistent with the field device SN;
3. Replace,add and delete the device SN again.

### Troubleshooting:

Please go to "Plant List" and find the plant that you want to. Click "Device List", choose the DTU SN, then click "Device Maintenance" and "DTU Networking" button.



Note: Waiting for about 15 minutes, the microinverter will display online. If several microinverters are still displayed offline, please analyze the issue according to phenomenon 2.

## Phenomena 2:

DTU show online and one or more microinverters show offline.

### Reasons:

1. The Microinverter SN of the plant is inconsistent with the microinverter label.
2. The microinverter is not connected to any PV modules properly.
3. The communication is poor between the DTU and the microinverter.
4. The led light don't light on and microinverter is broken (Please reply for replacement process).

### Troubleshooting:

- Check with the client is it possible that the SN of this micro has been typed with mistakes, ask for a SN picture to check for customers also if needed (only applicable if the microinverter has never been online in the plant after adding devices);
- Check whether the microinverters have been properly powered up with PV modules connected, ask for the LED status of this microinverter to determine whether it is producing.
  - 1) If the microinverter connect to PV modules and flash green light, please try to upgrade the DTU firmware and issue restarting and networking command to see if it helps, in the meanwhile please always ensure the firmware of DTU has been upgraded to the latest version;
  - 2) If the led light don't light on, please refer to attached "Led Test " to test the microinverter and take a test video and then replace it.



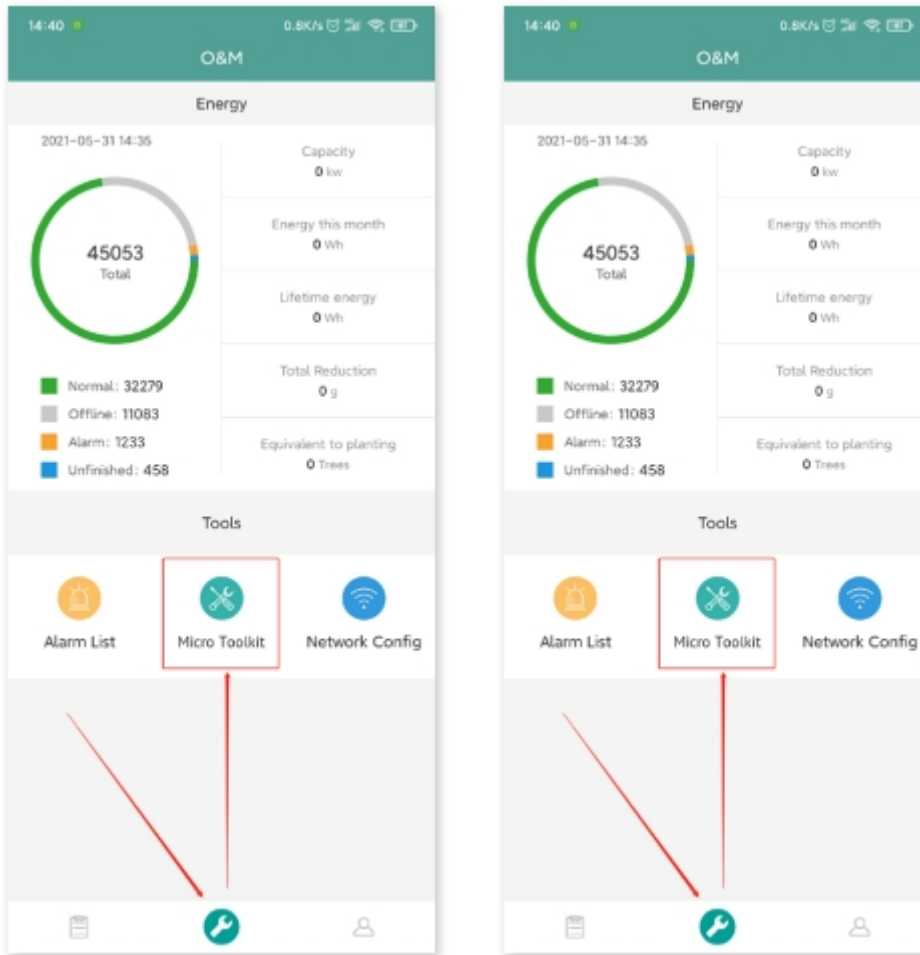
Led Test.mp4

- Collect more on site information like what is the position of this microinverter, is it placed with other microinverters or if this one is far away or have obstacles from the DTU. If the distance is relatively far, please advice the client to change the DTU location to make sure they are as close as possible to avoid signal blocking or weakening. In the meanwhile the on site Wifi signal should also be ensured;

You can use the local app and then view the signal strength determine the location of the DTU.

- 1) Click O&M and enter Micro Toolkit and click "Connection Status" .
- 2) Click O&M and enter Micro Toolkit and click "Connection Status" .

## Wireless Connection Issue about DTU and Microinverter



- If above issues have been verified and the microinverter always show offline, please take a video proof including microinverter's SN, LED statue, DC connections and the distance between DTU and the microinverter. If the video can prove these causes have been excluded, proceed with the replacement procedure.