

Data Transfer Unit USER MANUAL

DTU-Pro-S

CONTENTS

1.	Important Safety Information	02
	1.1 Read This First	02
	1.2 Safety Instructions	02
	1.3 User	02
	1.4 Support and Contact Information	02
	1.5 Other Information	02
2.	Hoymiles Microinverter System	03
	2.1 Microinverter	03
	2.2 DTU	03
	2.3 S-Miles Cloud	03
3.	Interface Layout	03
	3.1 For Wi-Fi Version	03
	3.2 For 4G Version	04
4.	Additional Features	05
	4.1 Export Management Function (RS485 port)	05
	4.2 DRM Port (for Australia and New Zealand only)	05
5.	Installation Planning and Preparation	06
	5.1 Pre-installation	06
	5.2 Dimensions	06
	5.3 System Installation Steps	07
6.	DTU Installation	08
	6.1 Installation Instructions	08
	6.2 Online Setting	08
	6.3 Complete Installation Map	15
7.	Micro Toolkit	16
	7.1 Connect to the DTU	16
	7.2 Field Commissioning and Data Viewing	17
8.	Power Plant Creation on S-Miles Cloud	22
	8.1 Power Plant Creation	22
	8.2 Customer Login	27
	8.3 Browse Station on Webpage	28
	8.4 View Phone App	28
9.	DTU Replacement	29
10.	. LED Indicators	30
11.	. Technical Data	31

1. Important Safety Information

1.1 Read This First

This manual includes important instructions for installing and maintaining the Hoymiles Data Transfer Unit (DTU-Pro-S).

DTU-Pro-S is only compatible with Hoymiles HMS and HMT series of microinverters.

1.2 Safety Instructions

Symbol	Usage		
4 DANGER	This indicates a hazardous situation that can result in deadly electric shocks, serious physical injuries, and fire incidents.		
N WARNING	This indicates that directions must be strictly followed to avoid safety hazards such as equipment damage and personal injury.		
CAUTIONThis indicates that the act is forbidden. You should stop, use caut understand the operations explained before proceeding.			

• Note that only professionals can install or replace DTU.

- Do not try to repair DTU without Hoymiles' permission. If the DTU is damaged, please send it back to your installer for repair/replacement. Disassembling DTU without Hoymiles' permission will invalidate the remaining warranty period.
- Please read all the instructions and warnings in the technical specifications carefully.
- Do not use Hoymiles products in a way that is not suggested by the manufacturer. Otherwise it can cause death, personal injuries, or equipment damage.

1.3 User

This manual is only for professional installation and maintenance personnel.

1.4 Support and Contact Information

If you have technical queries concerning our products, please contact your installer or distributor. If further technical support is required, contact our support team at <u>service@hoymiles.com</u>. For other questions please contact <u>info@hoymiles.com</u>

1.5 Other Information

Product information is subject to change without notice. The user manual will be updated regularly. Please refer to Hoymiles official website at <u>www.hoymiles.com</u> for the latest version.

2. Hoymiles Microinverter System



The complete Hoymiles PV microinverter system is composed of PV microinverter, Hoymiles gateway DTU and Hoymiles monitoring system S-Miles Cloud.

The microinverter converts direct current to alternating current and sends each module's power generation and operation data to the DTU.

DTU can communicate with multiple microinverters, collect their operation data, and send them to S-Miles Cloud.

On S-Miles Cloud, you can check the real-time data of each PV module and perform remote operation and maintenance.

2.1 Microinverter

Microinverters convert the DC output of PV modules into grid-compliant AC power. They send their operation data and the output information of PV modules to the DTU, which is the hardware basis of the module-level monitoring. With conversion efficiency up to 96.7% and MPPT efficiency up to 99.9%, Hoymiles microinverters rank among the first class in the industry worldwide.

2.2 DTU

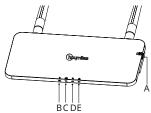
DTU is the key component in Hoymiles microinverter system. It works as the communication gateway between the Hoymiles microinverters and S-Miles Cloud. The DTU communicates with the microinverter in a wireless way and collects the operation data of the system. Meanwhile, the DTU connects to the Internet using different communication options such as Ethernet, Wi-Fi or 4G and communicates with S-Miles Cloud. The operation data of the microinverter system will be uploaded to S-Miles Cloud via DTU.

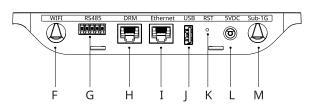
2.3 S-Miles Cloud

It collects the operation data and status of the microinverters in the system and provides module-level monitoring for the users and maintenance staff. The following diagram shows the Hoymiles Microinverter system.

3. Interface Layout

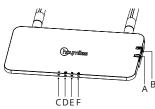
3.1 For Wi-Fi Version

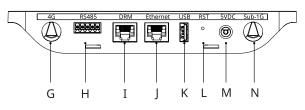




Item	Description			
А	SD Card Slot			
В	DTU Power Indicator			
С	DTU Communication Indicator (with server)			
D	DTU Communication Indicator (with microinverter)			
E	DTU Alarm Indicator			
F	Wi-Fi Antenna			
G	RS485			
Н	DRM Port (for Australia / New Zealand only)			
Ι	Ethernet Port			
J	USB Port			
К	Reset Hole			
L	Power Port			
М	Sub-1G Antenna			

3.2 For 4G Version





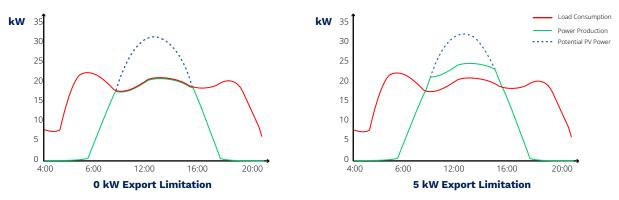
Item	Description		
A	SIM Card Slot		
В	SD Card Slot		
С	DTU Power Indicator		
D	DTU Communication Indicator (with server)		
E	DTU Communication Indicator (with microinverter)		
F	DTU Alarm Indicator		
G	4G Antenna		
Н	RS485		
Ι	DRM Port (For Australia / New Zealand only)		
J	Ethernet Port		
К	USB Port		
L	Reset Hole		
М	Power Port		
N	Sub-1G Antenna		

4. Additional Features

4.1 Export Management Function (RS485 port)

The Hoymiles Smart Power Export Management can intelligently control the output power of the PV system, and maximize your power generation without violating grid export regulations. At the same time, this system can also accurately display the power and production of the PV system with the measuring meter, so that users can trade the PV production online based on the data on S-Miles Cloud.

In Hoymiles Export Management solution, Hoymiles gateway DTU-Pro-S and additional meter (CT optional) are necessary. In the case of export limitation, the meter can be installed at the load side or the grid side. As shown below, the gateway DTU will dynamically adjust the PV power production according to the export power or load consumption as measured by the meter, so that the export power does not exceed the preset limit. To display the PV production in an accurate way, the meter needs to be installed at the output of the PV system.



Note: Please refer to Hoymiles technical note "Power Export Management System" for more details.

4.2 DRM Port (for Australia and New Zealand only)

DRM port is provided to support several demand response modes as shown below by connecting external control device with a standard RJ-45 connector. DTU-Pro-S supports DRM0/5/6/7/8 if used with Hoymiles microinverters.

Requirement				
Operate the disconnection device				
Do not consume power				
Do not consume at more than 50% of rated power				
Do not consume at more than 75% of rated power AND Source reactive power if capable				
Increase power consumption (subject to constraints from other active DRMs)				
Do not generate power				
Do not generate at more than 50% of rated power				
Do not generate at more than 75% of rated power AND Sink reactive power if capable				
Increase power generation (subject to constraints from other active DRMs)				

5. Installation Planning and Preparation

5.1 Pre-installation

5.1.1 System Capacity

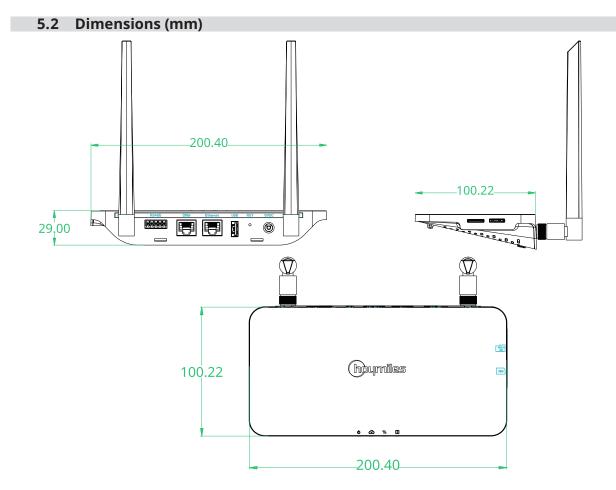
The DTU-Pro-S is capable of monitoring up to 99 PV modules. If the communication between the DTU and microinverter is affected by the installation conditions, the number of PV modules that the DTU can monitor may be reduced.

Note: The maximum number of modules is only possible in open space when installation conditions detailed in DTU and microinverter manuals are fulfilled and the microinverter and DTU are properly placed apart as required.

5.1.2 Environmental Requirements for DTU Installation:

- The DTU should be installed away from dust, liquid, acidic, or corrosive gas.
- The ambient temperature should be between -20°C and 55°C.

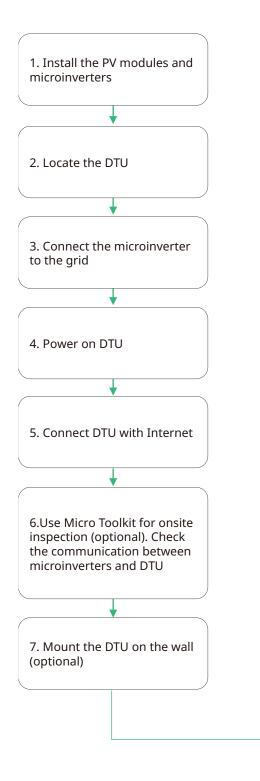
If you plan to install the DTU on the wall, please prepare two #8 (4.166 mm diameter) screws and a screwdriver in advance.

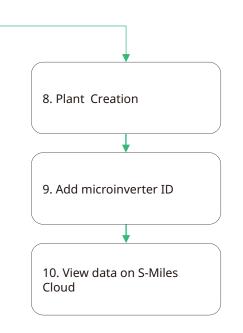


5.3 System Installation Steps

Work that needs to be done on site

Work that can be done either on site or at home. Step 6 must be done correctly in order to complete these steps on site.





6. DTU Installation

6.1 Installation Instructions

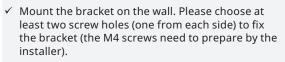
- A) Check the box for the following items:
 - ✓ Hoymiles DTU-Pro-S (Two Antennas)
 - ✓ Adapter
 - ✓ Bracket
 - ✓ 5 Pin Plug
- B) Take DTU-Pro-S out from the box, check and tighten the antenna



C) Choose an installation location.

Installation principles:

- $\checkmark\,$ Install the DTU on the top floor to increase the signal strength.
- $\checkmark\,$ Install the DTU near the center of the PV array.
- ✓ Install the DTU at least 0.5 m above the ground and more than 0.8 m away from the corner. <u>Note: To prevent signal attenuation, please do not install the DTU above metal or concrete.</u>
- D) Choose the installation method
 - Option 1: Mount the DTU on the wall



- ✓ Fix DTU-Pro-S to the bracket's upper buckle.
- ✓ Fix DTU-Pro-S to the bracket's lower buckle gently until you hear a click. Please make sure that the antennas are vertical to the wall.

Option 2: Place the DTU on table. Please make sure the antennas are vertical to the table.



6.2 Online Setting

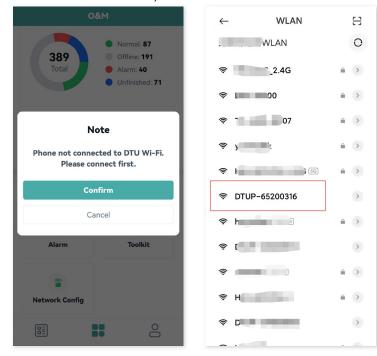
- A) Plug in the adapter to power on the DTU.
- B) Download the Hoymiles Installer app.



- C) Choose the way DTU-Pro-S connects to the Internet, and prepare the following items if needed.
 - ✓ For Wi-Fi: The network name and key of the Wi-Fi
 - $\checkmark\,$ For 4G version: 4G SIM card and APN
 - $\checkmark\,$ For Ethernet: Ethernet cable
- D) Set up the DTU connection on mobile phone.
 - ✓ Open the Installer app on smart phone/tablet and log in.
 - Click "O&M" on the bottom of the page and then "Network Config".

O&M					
389 Total	 Normal: 87 Offline: 191 Alarm: 40 Unfinished: 71 				
Energy This Month 1.13 MWh	Lifetime Energy 230,162 MWh				
Total Reduction 229,472 Ton	Carbon Emission Offset 12,539,435 Trees				
Tools	Tools				
ia Alarm	X Toolkit				
Part Config	2				

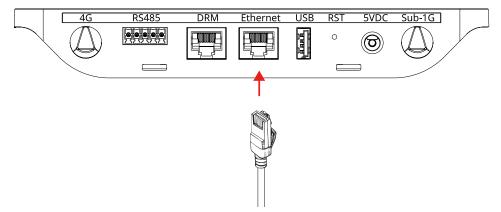
✓ Select the DTU's wireless network and click "Connect". (The network name of the DTU consists of DTUP and product serial number. In the following example, the DTU ID is 65200316 and the network name is DTUP-65200316.)



E) Set up the Internet

✓ For Ethernet

Connect the router to the DTU Ethernet port with a Lan cable.



Following the successful connection between your app and the DTU, you can click "Network Config" again and enter the Network Config page.

Select "Ethernet" and then click "Send to DTU", and a popup box will appear. Confirm and exit.

08	§М	Network Config
389 Total	 Normal: 87 Offline: 191 Alarm: 40 Unfinished: 71 	Ethemet
Energy This Month 1.13 MWh Total Reduction 229,472 Ton	Lifetime Energy 230,162 MWh Carbon Emission Offset 12,539,435 Trees	Please connect the communication module or communication port to the router with a Ethemet cable. Send to DTU
Tools		
Alarm	X Toolkit	
a Network Config	2	
	1 0	

The network configuration takes about 1 minute, so please be patient. If the network is not connected, please check the internet as instructed.

< Network Config		< Network Config
DTU AP Password Setting		DTU AP Password Setting
Connection Succeeded 595 Image: Distance of the product o	rd.	Image: Constraint of the structure of the stru

Note: If your configuration page is inconsistent with the above, please update the DTU firmware to the latest version.

🗸 For Wi-Fi

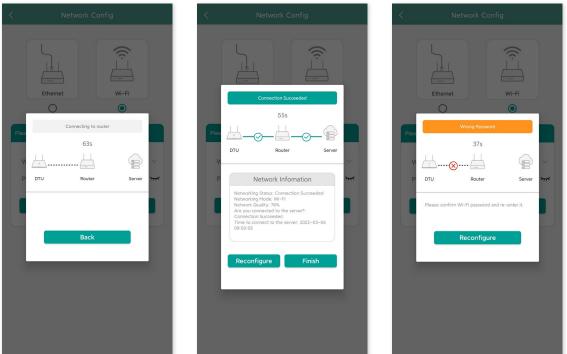
Following the successful connection between your app and the DTU, you can click "Network Config" again and enter the Network Config page.

0	&M	< Net	work Config	
389 Total	 Normal: 87 Offline: 191 Alarm: 40 Unfinished: 71 	Ethernet	Wi-Fi	
Image: Second system Energy This Month Image: Second system 1.13 MWh Image: Second system Total Reduction Image: Second system 229,472 Ton	Lifetime Energy 230,162 MWh Carbon Emission Offset 12,539,435 Trees	Please select a WiFi ne Wi-Fi	twork and enter the pa En <mark>t</mark> er	issword.
Tools		Password	Enter	ک ہر
i i i i i i i i i i i i i i i i i i i	X Toolkit	S	end to DTU	
Part Config	2			
83				

Select the router Wi-Fi and enter the password. Click "Send to DTU".

	K Network Config
HM_	
HM_saat i	
HM_00000	
HM_	Ethernet Wi-Fi
TP-INIT_POINT	Please select a WiFi network and enter the password.
DTUP-	Wi-Fi HM_ ~
chun	Password Enter
DTS-	Send to DTU
DTS-	
HM	
DTUL-ACCOUNT	
ph	
Cancel	

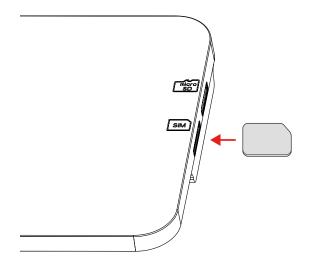
The network configuration takes about 1 minute, so please be patient. If the network is not connected, please check the internet as instructed



Note: If your configuration page is inconsistent with what is shown above, please update the DTU firmware to the latest version.

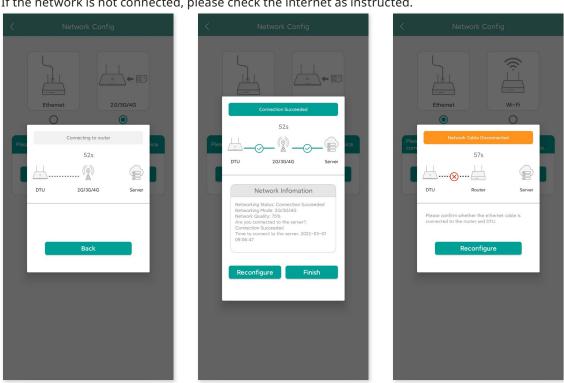
✓ For 4G

Insert the SIM Card into the SIM Card slot on the side of DTU until it clicks.



Following the successful connection between your app and the DTU, you can click "Network Config" again and enter the Network Config page. Select "2G/3G/4G". Click "Send to DTU".

	IG: ellek Sella k	
0	&M	< Network Config
389 Total	 Normal: 87 Offline: 191 Alarm: 40 Unfinished: 71 	Ethernet
Energy This Month 1.13 MWh Total Reduction 229,472 Ton	(Al) Lifetime Energy 230,162 MWh Carbon Emission Offset 12,539,435 Trees	Please insert the SIM card into the communication device.
Tools		
Alarm	X Toolkit	
Page 2015 Retwork Config	2	



The network configuration takes about 1 minute, so please be patient. If the network is not connected, please check the internet as instructed.

Note: If your configuration page is inconsistent with what is shown above, please update the DTU firmware to the latest version

If the connection fails, you need to fill in APN information according to the following instruction. Pease get APN information from your telecom operator.

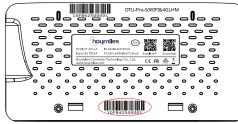
Click "Toolkit" on the O&M page and enter the Could Communication page. Then click "Network Config" and enter the APN setting page.

O&M	< Cloud Communication	< Network Config
389 Offline: 191 Total Alarm: 40 Unfinished: 71	Connection Status Last DTU Connection to the platform: 2G/3G/4G Last Connection Time: Last Connection Status: 🕤	APN Login Account Password SIM
Image: Second system Image: Second system Image: Second system Image: Second system Image: Second system Image: Second sy	Status of Connection to the Phone This Time: 🛜	IMEI Server Domain Send to DTU
Tools	2G/3G/4G > *If you want to change the Internet access mode, choose O&M > Network Config to change it. 2	
2 Network Config	1	

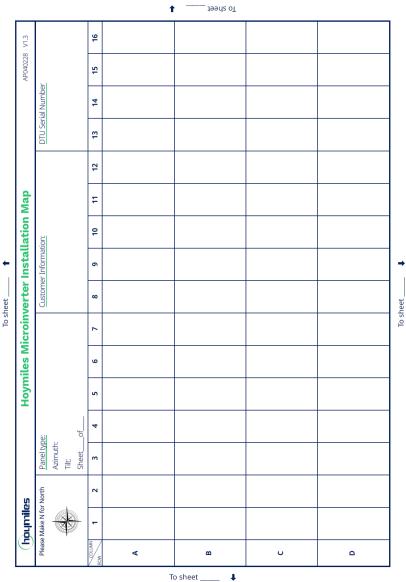
6.3 Complete Installation Map

Please complete the installation map.

A) Peel the serial number label (as circled below) from the DTU and place it on the installation map.



B) Complete system information of the installation map shown as follows.



7. Micro Toolkit

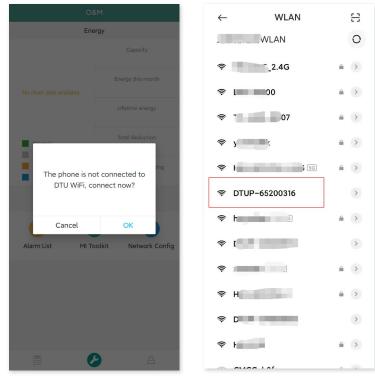
Micro Toolkit is one of the toolkits that come with the S-Miles Cloud app. It can be used for on-site inspection after the PV power station is complete, so that the operation of microinverter can be monitored without Site Creation.

7.1 Connect to the DTU

- ✓ Open the Installer app on smart phone/tablet and log in.
- ✓ Click "O&M" on the bottom of the page and then " Toolkit".

0	&M
389 Total	 Normal: 87 Offline: 191 Alarm: 40 Unfinished: 71
Energy This Month 1.13 MWh Total Reduction 229,472 Ton	Lifetime Energy 230,162 MWh Carbon Emission Offset 12,539,435 Trees
Tools	
کم Alarm	X Toolkit
Patwork Config	2
	1 0

✓ Select the DTU's wireless network and click "Connect". (The network name of the DTU consists of DTUP and product serial number, and is password-free by default.)



7.2 Field Commissioning and Data Viewing

7.2.1 Data Overview

1. Click O&M and enter Micro Toolkit.

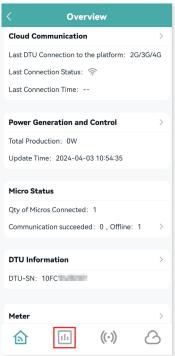
O	&M
389 Total	 Normal: 87 Offline: 191 Alarm: 40 Unfinished: 71
Energy This Month 1.13 MWh Total Reduction 229,472 Ton	(AII) Lifetime Energy 230,162 MWh Carbon Emission Offset 12,539,435 Trees
Tools	
کن Alarm	X Toolkit
a Network Config	2

2. If you have already created the power station on the monitoring platform, you can directly view the data and information on the overview page.

7.2.2 Add Microinverter

If power station is not yet created on the platform, you need to type in microinverter SN to view power station data as instructed below.

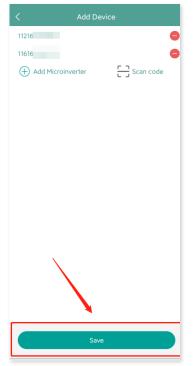
1. Click "Power generation" button.



2. Press the "Add Device" button to add the microinverter to the list. (The microinverter added here is only used for on-site debugging, and it will not be uploaded to the server, nor can it replace the power station creation on S-Miles Cloud.)

C Pow	ver Generat	tion and	Con
Add	Device	Sel	f-check
1141	0	W	\odot
	III	((•))	3

3. Confirm that the microinverter ID in the list is correct, and tap save.



7.2.3 View Microinverter Data

1. Click "Power Generation". You can see the list of the microinverter and PV power of each microinverter.

< Power Generat	ion and Control
Add Device	Self-check
1141	o w 💮
会	()

2. If you want to see more details of one microinverter, just click the serial number, then you can check the input and output data on the page shown as below.

Connection Status MI-SN: 116161004118 Update time: 2021-05-31 14:48:25 Update time: 2021-05-31 14:48:25 PV power: 0W Input port2 PV power: 0W Input port2 PV current: 0.02A PV voltage: 1.3V PV current: 0.02A PV voltage: 46.4V PV current: 14.47A PV voltage: 46.4V PV power: 670.5W Output grid port AC voltage: 23.9V AC frequency: 50Hz AC voltage: 678.5W	< Real-time data 🧇	
Update time: 2021-05-3114:48:25 PV power: 0W input port2 PV current: 0.02A PV voltage: 1.3V PV power: 0W Input port3 PV current: 0.03A PV voltage: 46.4V PV power: 1.4W PV current: 1.4.7A PV voltage: 46.4V PV power: 670.5W Output grid port AC voltage: 237.9V AC frequency: 50Hz AC active power: 638.3W	Connection Status	
Update time: 2021-05-3114:48:25 PV power: 0W input port2 PV current: 0.02A PV voltage: 1.3V PV power: 0W Input port3 PV current: 0.03A PV voltage: 46.4V PV power: 1.4W PV current: 1.4.7A PV voltage: 46.4V PV power: 670.5W Output grid port AC voltage: 237.9V AC frequency: 50Hz AC active power: 638.3W	PV = PV = PV =	
PV power; 0W PV power; 0W PV power; 0W PV current; 0.02A PV voltage; 1.3V PV power; 0W PV power; 0W PV power; 0W PV current; 0.03A PV voltage; 46.4V PV power; 1.4W PV power; 670.5W PV current; 14.47A PV voltage; 46.4V PV power; 670.5W PV current; 64.5% PV voltage; 237.9V AC cotive power; 638.3W PV power; 638.3W		
Input port2 PV current; 0.02A PV voltage; 1.3V PV power; 0W PV voltage; 1.3V Input port3 PV voltage; 46.4V PV power; 1.4W PV voltage; 46.4V PV power; 1.4W PV voltage; 46.4V PV power; 670.5W PV voltage; 46.4V Output grid port PV voltage; 237.9V AC voltage; 237.9V AC frequency; 50Hz AC active power; 638.3W Microinverter		
PV current: 0.02A PV voltage: 1.3V PV power: 0W PV power: 0W PV current: 0.03A PV voltage: 46.4V PV power: 1.4W PV power: 1.4W PV current: 14.47A PV voltage: 46.4V PV power: 670.5W Output grid port AC voltage: 237.9V AC frequency: 50Hz AC active power: 638.3W	PV power: 0W	
PV power: 0W Input port3 PV current: 0.03A PV voltage: 46.4V PV power: 1.4W Input port4 PV current: 14.47A PV voltage: 46.4V PV power: 670.5W Output grid port AC voltage: 237.9V AC active power: 638.3W Kicroinverter	Input port2	
Input port3 PV current: 0.03A PV voltage: 46.4V PV power: 1.4W PV power: 14.47A PV current: 14.47A PV power: 670.5W Output grid port AC voltage: 237.9V AC active power: 638.3W Microinverter	PV current: 0.02A PV voltage: 1.3V	
PV current: 0.03A PV voltage: 46.4V PV power: 1.4W PV current: 14.47A PV voltage: 46.4V PV power: 670.5W Output grid port AC voltage: 237.9V AC frequency: 50Hz AC active power: 638.3W Microinverter	PV power: 0W	
PV power: 1.4W Input port4 PV voltage: 46.4V PV power: 670.5W Output grid port AC voltage: 237.9V AC sctive power: 638.3W Microinverter	Input port3	
Input port4 PV current; 14.47A PV voltage; 46.4V PV power; 670.5W Output grid port AC voltage; 237.9V AC active power; 638.3W Microinverter	PV current: 0.03A PV voltage: 46.4V	
PV current: 14.47A PV voltage: 46.4V PV power: 670.5W Output grid port AC voltage: 237.9V AC frequency: 50Hz AC active power: 638.3W Microinverter	PV power: 1.4W	
PV power: 670.5W Output grid port AC voltage : 237.9V AC frequency: 50Hz AC active power: 638.3W Microinverter	Input port4	
Output grid port AC voltage : 237.9V AC frequency: 50Hz AC active power: 638.3W Microinverter	PV current; 14.47A PV voltage; 46.4V	
AC voltage : 237.9V AC frequency : 50Hz AC active power : 638.3W Microinverter	PV power: 670.5W	
AC active power; 638.3W Microinverter	Output grid port	
Microinverter	AC voltage : 237.9V AC frequency : 50Hz	
	AC active power: 638.3W	
Temperature : 67.8°C	Microinverter	
	Temperature: 67.8°C	

Note: If the microinverter signal is so weak that the real-time data are not updated, move the DTU closer to the microinverter.

7.2.4 View Communication Status with Microinverter

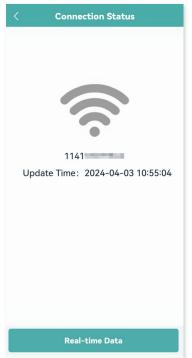
1. Re-enter Micro Toolkit and tap "Connection Status".

< Overview
Cloud Communication
Last DTU Connection to the platform: 2G/3G/4G
Last Connection Status: 🛜
Last Connection Time:
Power Generation and Control
Total Production: 0W
Update Time: 2024-04-03 10:54:35
Micro Status
Qty of Micros Connected: 1
Communication succeeded: 0 , Offline: 1 \rightarrow
DTU Information >
DTU-SN: 10FC
Meter >
<u>ک</u> ((۰)) اا

2. On this page, you can check the signal strength between the DTU and each microinverter. Tap the signal icon to enter the respective microinverter page (signal quality is constantly refreshing).

<	Connecti	on Status	
((;			
1141			
	111	((·))	3

3. You can also Tap the button to switch the signal quality and real-time data page.



Note: If the microinverter has no signal, please check whether the microinverter is powered on or refer to the microinverter user manual for troubleshooting.

8. Power Plant Creation on S-Miles Cloud

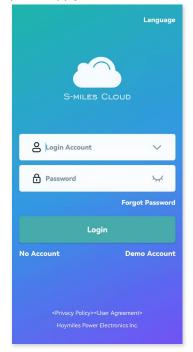
This is a brief description of how to create a new site. You can refer to "Quick Installation Guide for S-Miles Cloud Online Registration" for detailed account creation instructions.

8.1 Power Plant Creation

1. Install Hoymiles Installer app by searching "Hoymiles" in the App Store (iOS) or the Play Store (Android).



2. Open the app and log in with your installer account and password. If you are a new installer with Hoymiles, please apply for an Installer account from your distributor in advance.



3. Select the "Plants" icon on the bottom, and then select " \oplus " on the right top side of the page to add station.



Fill in the station details and press "Next". Select one from the three types of plant: Home Plant, Enterprise Plant, and Large Professional Plant.

< Inform	nation 🖳
* Plant Name	Please enter
* Plant Type	Please select >
* Installed capacity (kW)	Please enter
* Time Zone	Please select >
* Address	Please select 오
* Area	Please select >
Please upload pictures in jpg	p. png. bmp format within 5M
Ne	ext

4. Select owner for the plant. Create a new one if there is none.

<u>⊕</u>	Password Confirm Password Name Email	Owner Information		<	Add Owne
bgin Account: Confirm Password Name Email	Degin Account: Confirm Password Name Email	Q Select Owner	0 (+	* Login A	ccount
sgin Account: Confirm Password Name Email	sgin Account: Confirm Password Name Email		同	* Passwor	rd
Email	Email	ogin Account: 📷		* Confirm	Password
				* Name	
Phone Number	Phone Number			Email	
				Phone N	lumber
		Previous Ne	ext		Save

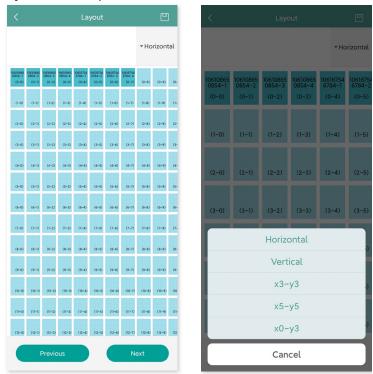
5. Press "Add DTU ID". Scan or manually input the DTU ID.

<	Devic				A	dd Device	
	+ Add	DTU		* DTU-ID	Please en	ter DTU-SN	
P	revious	Next				Finished	

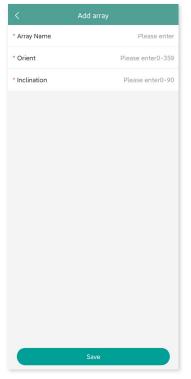
6. Scan or manually input the microinverter ID. Press "Finish" when all microinverter IDs have been input.



7. Customize the layout based on the installation (or click the tick box on the top right to select preset layouts). Then tap "Next".



8. Save the design layout and fill in the information.



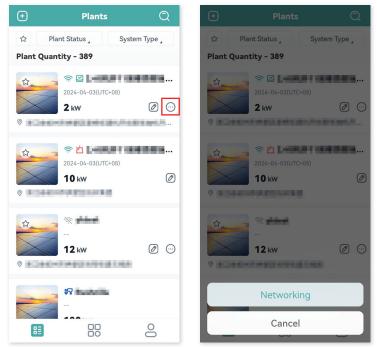
9. Upload a picture of the site and tap "Next".



10. Please enter the currency unit and your electricity price. Click the "Networking" button and tap "Save" to complete the site creation.

< Settings	
Export Management	\bigcirc >
Power Balance Config	\bigcirc >
Plant Name	National
Currency	Select >
Electricity Price per Unit	Enter
Allow Owner to View Layout	
Default PV Module Layout	Power ,
Maximum power for a single PV module(W)	⑦ 200~700
Networking ③	
Previous	Finish

- 11. The new site will appear on the station list under the Installer account. Please wait about 30 minutes, and the station will appear online where you can see the ID of all microinverters.
- 12. Networking will fail if the DTU is not powered on. Please tap networking again after the DTU is powered on.



8.2 Customer Login

- A. Please download the End User app by searching "Hoymiles" in App Store (IOS) or Play Store (Android).
- B. Log in with the password and username that have been set up by the installer on the previous step.
- C. Customers will be able to view all details once the data start to upload. If it's the first power station created, normally it takes around 30 mins for the data to come through.
- D. Customers can also view power generation details on the S-Miles Cloud monitoring platform at global.hoymiles.com.

8.3 Browse Power Plant on Webpage

Log in to your account and browse the station on webpage.

		S-MILES CLOUD		
		Lagin A Please enter passwort. Please enter passwort. Please enter passwort. Lagin Lagin Lagin		
		regent		
			9 0 L # 0.	
C SHILES CLOUD Power Generation	Home B Plants X O		Q O L D (R)	
Power Generation	Home Plants X o Plant Status Add Con Add Con	bM Excit Information a Office-132 a Monet 75 a Mone		
Power Generation	Home Home K O	MM Bitic Information All Devices office 130 infinite 4 and 12 an	Hello, datketuzhongditi Artiana Co	
Power Generation	Home Home K O	MM Bitic Information All Devices office 130 infinite 4 and 12 an	Hello, datketuzhengolat Minansatar 4738 Dipatty 4500K Cover Querts 148 Dipatty 4500K Cover Querts 148 Gast Liefs Gast Dest Number of New Plants	
Peer Generation	Home Home K O	Al Excit Information office: 18 words 72 words 72 wo	Hello, dakehuzhongolni Minoversin 4739 Di 235 Topostor 0 Casto Part Custo Part Custo Part Partanta Topostor Managament Number of New Plants	
Percer Generation length is block len	Home Home K O	Al Excit Information office: 18 words 72 words 72 wo	Hello, dakehrutanongoldi Minorentian 4737 Dir 235 Reparter 0	
Preer Generation	Home Home K O	Al Excit Information office: 18 words 72 words 72 wo	Helin, datebutzongoli Animato O Derity LIMOX Core Genety, IL Data Uas Thi 235 Thi 235 T	

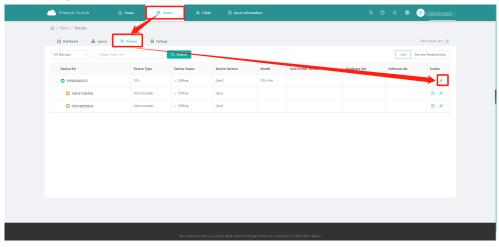
8.4 View Phone App

Download the app on your mobile phone and view station information.

2.99kW Current Power 4.56kW Capacity		Lesniaki2d	< Lesniaki2d
4.56kW Capacity	ê o	Data update:2021-06-04 11:16:13	XXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4.56kW Capacity		2 99/14/	
4k,		Current Power	
			4k
			0 00:00 05:45 08:15 10:45 13:15 15:45 18:1

9. DTU Replacement

- 1. If you need to replace the original DTU, please complete the installation according to the instructions in this manual. Otherwise data on the monitoring platform may be lost.
- 2. Log in to your account on the web. Select "Devices > Action > Device Maintenance" for the plants that need a DTU replacement.



3. Click "Replace Device", enter the current device SN and click "OK" to complete DTU replacement.

S-MILES CLOUD	🛱 Home	🖶 Plants	ж оем	🗄 Basic Infi	Device Maintenance			×
					DTU-SN:	10F809840552	Creation Time: 2021-07-26 13:	:08:17 (UTC+08)
🛈 Dashboard 🛛 🖓 Layout	P Devices	Settings			Plant:	text	Qty of Microinverters Connected 2	
All Devices Y Please ent			D, Search		Hardware Ver.:		Software Ver.: -	
Device SN	Device T	ype	Device Status	Device Version	Device Maintenance:	C Restart		
10F809840552	υτσ		- Offline	Gen3	l I	Replace Device	Anti-theft Settings	
0 106187546784	Microim	erter	 Offline 	Gen2	, i	Collect Microinverter Ver. Info	🖁 Networking	
106108650854	Microim	erter	Offline	Gen2		Delete Device		
				ou use the latest version of C				
-				evice Maintenance	Replace Device			
	🔒 Home		× •	evice maintenance	Replace Device			×
				DT	Original Device	SN: 10F809840552		
🕜 Dashboard 🖷 Layout					* Current Device	SN: Device SN		
			λ. Search	Hardwan				
Device SN	Device T	pe	Device Status	Device Mainter				
10F809840552			- Offline					
0 106187546784			Offline					
			• Offline					
	_							
			We recommend					Cancel OK

10. LED Indicators

You can also learn about the system status via LED indicators.

LED Mark	LED Color	Description	
		DTU power on or power off	
රා		Network communication	
t1		Microinverter communication	
\triangle		Fault State	

LED States

LED Indicator	Status	Description		
All		Firmware upgrading		
		Starting up		
4		DTU power on		
		DTU power off		
Ĝ		DTU is communicating with Hoymiles S-Miles Cloud		
		Internet disconnected		
		Internet connected and server disconnected		
		Local app connected		
		DTU is connecting to microinverters		
ţ,		No MI ID (Please create power station on the web)		
		MI IDs Incomplete		
♪		Normal		
		DTU alarm occurred		
		Microinverter alarm occurred		
		Meter alarm occurred		

11. Technical Data

Model	DTU-Pro-S (Wi-Fi Version) DTU-Pro-S (4G Vo				
Communication to Microinverter					
Signal	Sub)-1G			
Maximum distance (open space)	400	0 m			
Monitoring data limit from solar panels ¹	g	9			
Communication to S-Miles Cloud					
Ethernet	RJ45 × 1, 100Mbps				
Wireless ²	Wi-Fi: 802.11b/g/n	4G: TDD-LTE, FDD-LTE 3G: SCDMA 2G: GSM/GPRS			
Sample rate	Per 15 minutes				
Communication to Peripherals					
RS485	COM × 1, 9600bps, Modbus-RTU				
Ethernet	RJ45 × 1, Modbus-TCP				
DRM (For AU/NZ only)	RJ45 × 1, DRM0/5/6/7/8				
Interaction					
LED	LED Indicator × 4 – RUN, Cloud, MI, ALM				
APP	S-Miles Toolkit				
Power Supply (Adapter)					
Туре	External adapter				
Adapter input voltage/frequency	100 to 240 V AC/50 or 60 Hz				
Adapter output voltage/current	/2 A				
Power consumption	Typ. 1.5 W / Max. 3.0 W	Typ. 2.5 W / Max. 5.0 W			
Mechanical Data					
Ambient temperature (°C)	-20 to +55				
Dimensions (W \times H \times D mm)	200 × 101 × 29 (without antennas)				
Weight (kg)	0.20				
Installation method	Wall mounting / Desktop mounting				
Environmental rating	Indoor-IP20				
Compliance					
Certificates	CE, FCC, IC,	RCM, Anatel			
Microinverter Compatibility					
Microinverter Model	HMS series.	, HMT series			

*1 This depends on the installation environment. Please refer to user manual for more details. *2 Extended antenna is recommended if the DTU is installed inside a metal box or under a metal/concrete roof.