



Provide the Most Competitive Products and Services

**Become a World-leading Partner
of Smart Energy Solution**



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- R&D
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01

Company Overview

Open Energy For All





Founded in
2012



5 million+
microinverters as annual
manufacturing capacity

500+ global experts



Tier 1
institution for research



120
patents & software copyrights

100%
average annual increase
in microinverter sales
volume (2016-2021)



2.5 million+
microinverters installed
since 2016

Who are we | Milestones

Hoymiles was officially established as a business.

2012

Hoymiles microinverters were certificated by CSA, BV, SAA and CQC.

2014

Dr. Yang Bo, founder of Hoymiles, won the second prize of the State Natural Science Award.

2016

Hoymiles joined the writing of national energy industry standard of PV on-grid microinverter and optimizer (NB/T 42142-2018 & NB/T 42143-2018).

2018

Hoymiles has officially debuted on the Shanghai Stock Exchange STAR Market with Stock code: 688032.

2021

2013

We began R&D cooperation with Japan Fuji Electric Co. Ltd.

2015

Certified as the State High-tech Enterprise. Hoymiles microinverters entered the USA, Europe & Australia market.

2017

Raised 28 million USD in Series A funding. Launched MI 1000-1500, one of the most cost effective 4 in 1 microinverter in the market. Our lab became a CSA authorized testing laboratory.

2020

Launched the first generation of three-phase microinverter, adapted to industrial and commercial system, and the first generation of hybrid inverter. Certified as Model PV Manufacturing Enterprise by the Ministry of Industry and Information

2022

Launched brand-new HRSD rapid shutdown series designed for string PV systems and the new-generation hybrid inverters to upgrade our energy storage solution. Opened subsidiaries in the US, Australia and the Netherlands.

Steady operation with continuous business growth



Operating Revenue (RMB Billion)

Leading the way in technology through constant innovation

Intellectual Property



36 new license intellectual properties were added in 2022, bringing the total to **216**.


R&D expenses increased by **112.75%**



Expanding manufacturing capacity to improve scalability

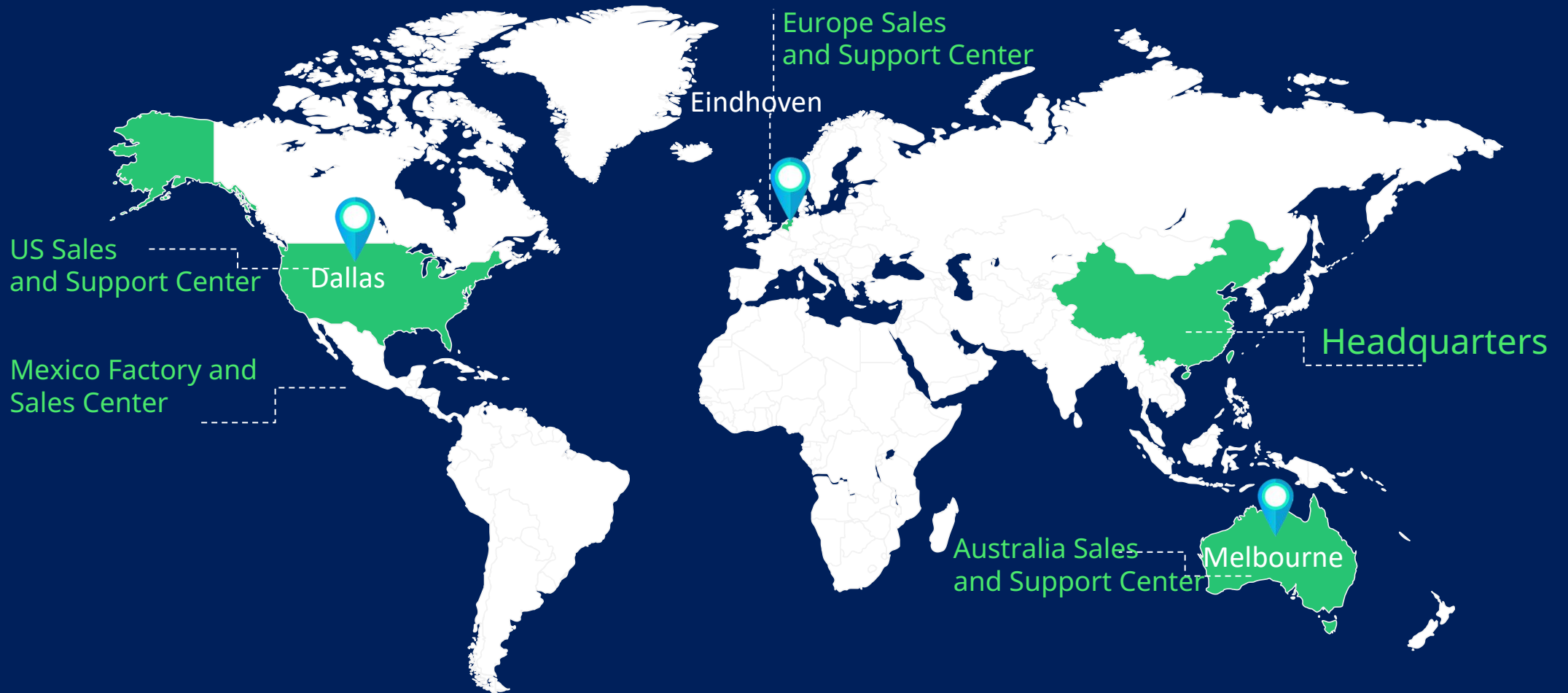
- The construction of our green smart manufacturing base is progressing smoothly
- By the end of 2023, we expect to achieve an annual manufacturing

capacity of **5 million** units.



Covering 150,000 m²

Installation in **100+** countries & regions
Partnership covering **80+** countries & regions
and still counting







Continued expansion of global operations and brand development

Hoymiles Energy Solutions Exhibition Tour
30+ expos in 2023

LinkedIn China's 2022 Most
InB2B Brand Building Award



We will focus on five major areas over the remainder of 2023

R&D

Create a diversified and multi-functional inverter product portfolio



Global Marketing

Expand the global sales network

Talent Development

Improve talent pipeline development and incentive system

Brand Development

Enhance the brand's external image

Supply Chain Improvement

Continuously optimize production capacity and supply chain delivery processes



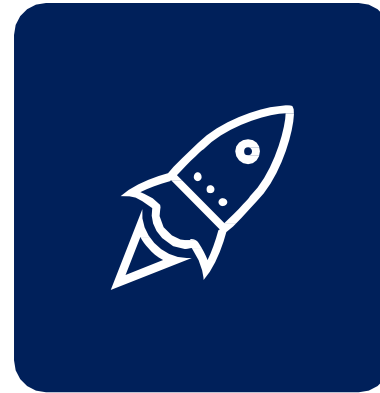
Short lead Time

2-4 weeks



Low failure rate

0.18%



Instant
trouble-shooting

1 hour



02

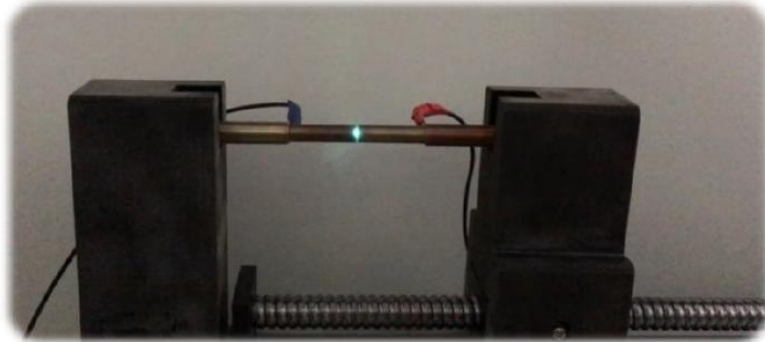
Products Details

Open Energy For All

**Build your smart energy ecosystem
with **reliable, rugged** technology**

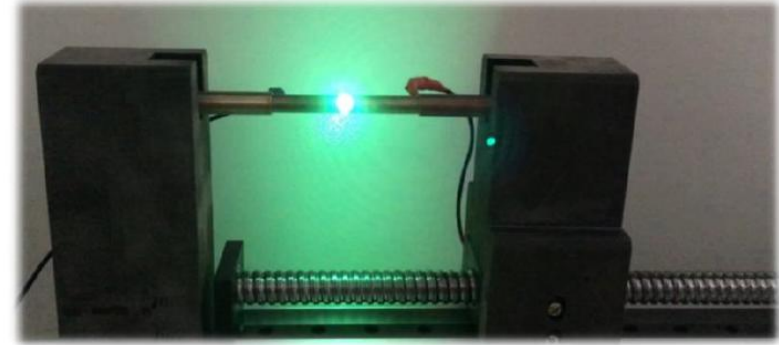


Under 40V DC



Slight drawing arc, no electric shock

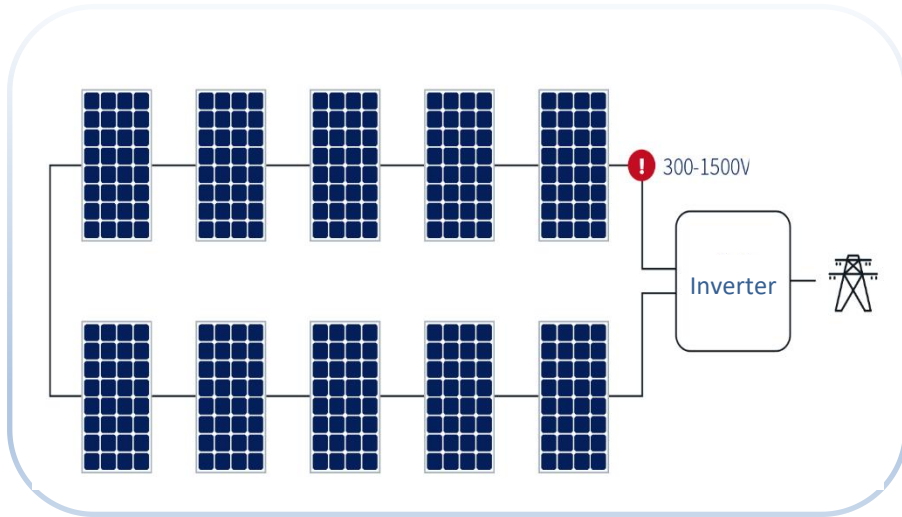
Under 600V DC



Strong drawing arc and electric shock

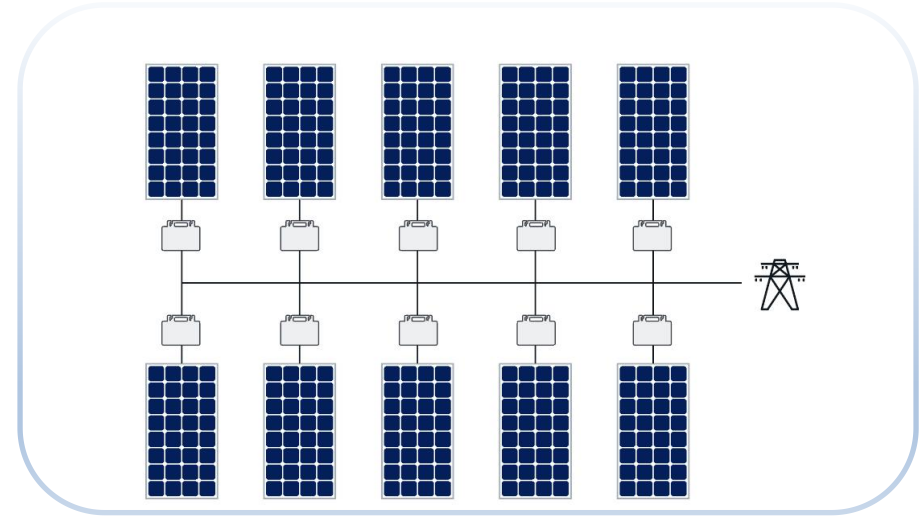


► Conflagrations of PV systems due to heavy drawing arcs caused by high DC voltage



Traditional inverter

- The range of voltage is 300-1500V



Microinverter

- Only 40V on DC side

Factors of the Barrel Effect



Dust or shadow



Shielding of building



Bird droppings



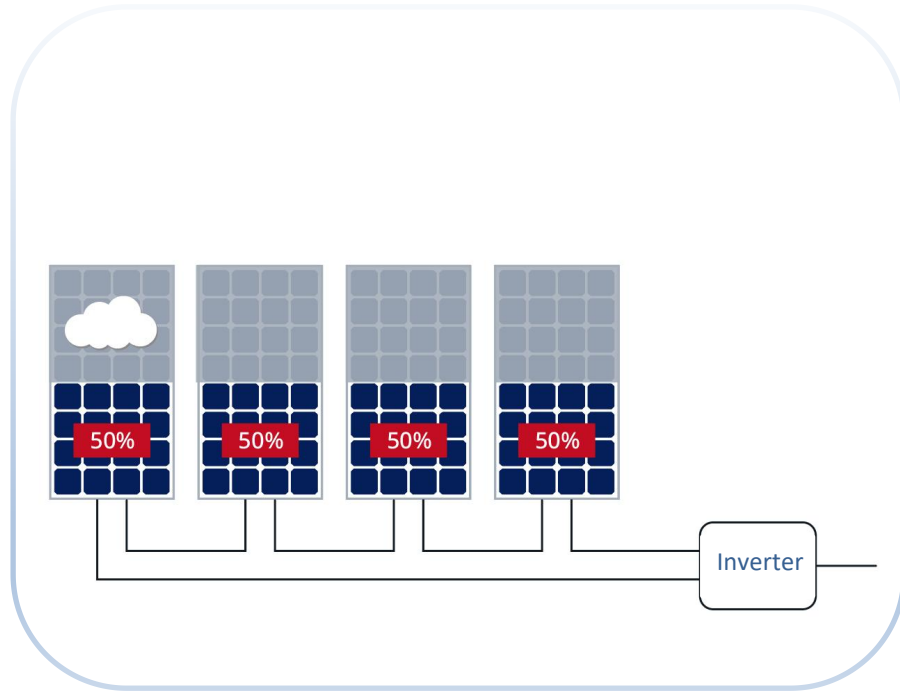
Shielding of equipment



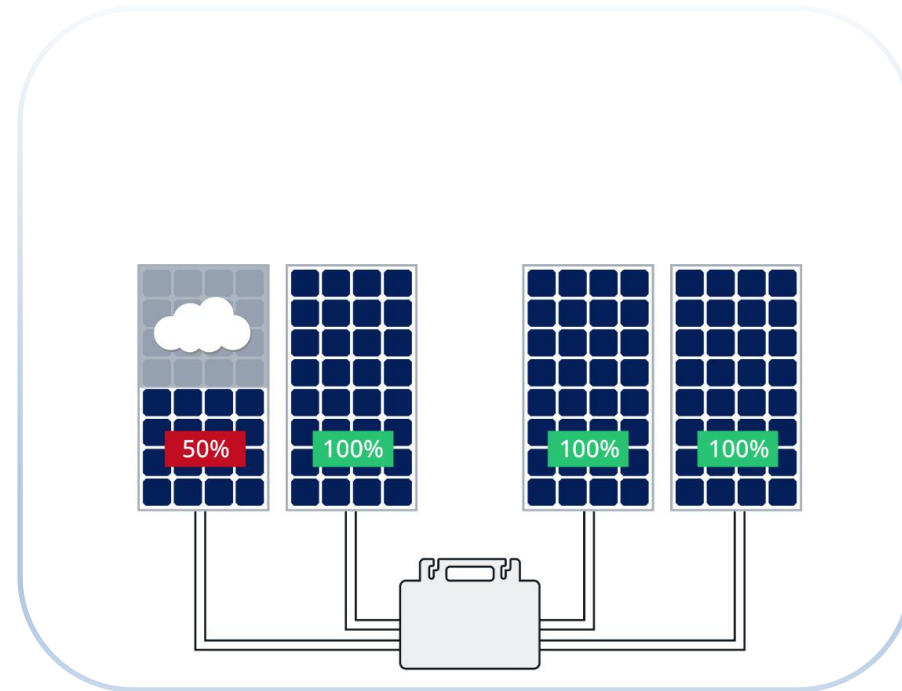
multiple roof orientation



Human factors



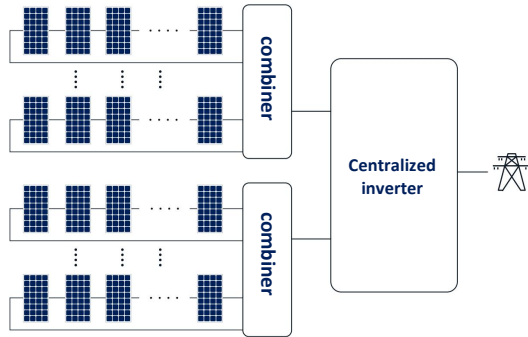
Traditional string inverter system



Microinverter system

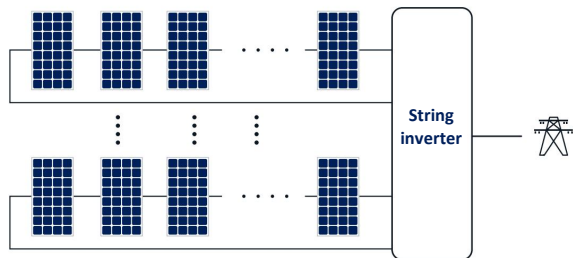
No.	Capacity	Number of households	Energy produced in traditional system (kWh)	Energy produced in microinverter system (kWh)	Proportion of energy increase
1	3.12kW	27	3319.68	3667	10%
2	3.64kW	22	3872.96	4309	11%
3	4.16kW	36	4426.24	4928	11%
4	4.68kW	26	4979.52	6076	22%
5	5.1kW	2	5426.4	5875	8%
6	5.2kW	54	5532.8	6541	18%
7	5.72kW	43	6086.08	6756	11%
8	6.12kW	2	6511.68	6791	5%
9	6.24kW	28	6639.36	7178	8%
10	6.76kW	17	7192.64	8261	15%
11	6.63kW	2	7054.32	7446	6%
12	7.28kW	15	7745.92	8459	9%
13	7.8kW	26	8299.2	9133	10%

Data source: 2016 Quzhou Village PV project



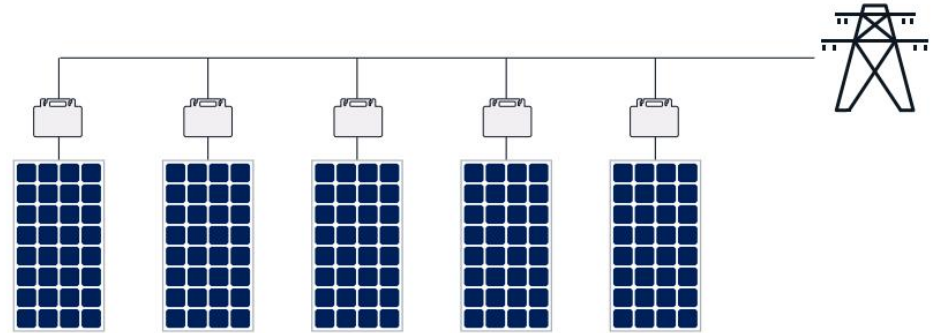
Central inverter:

Monitoring **string-level** information: Only current



String inverter:

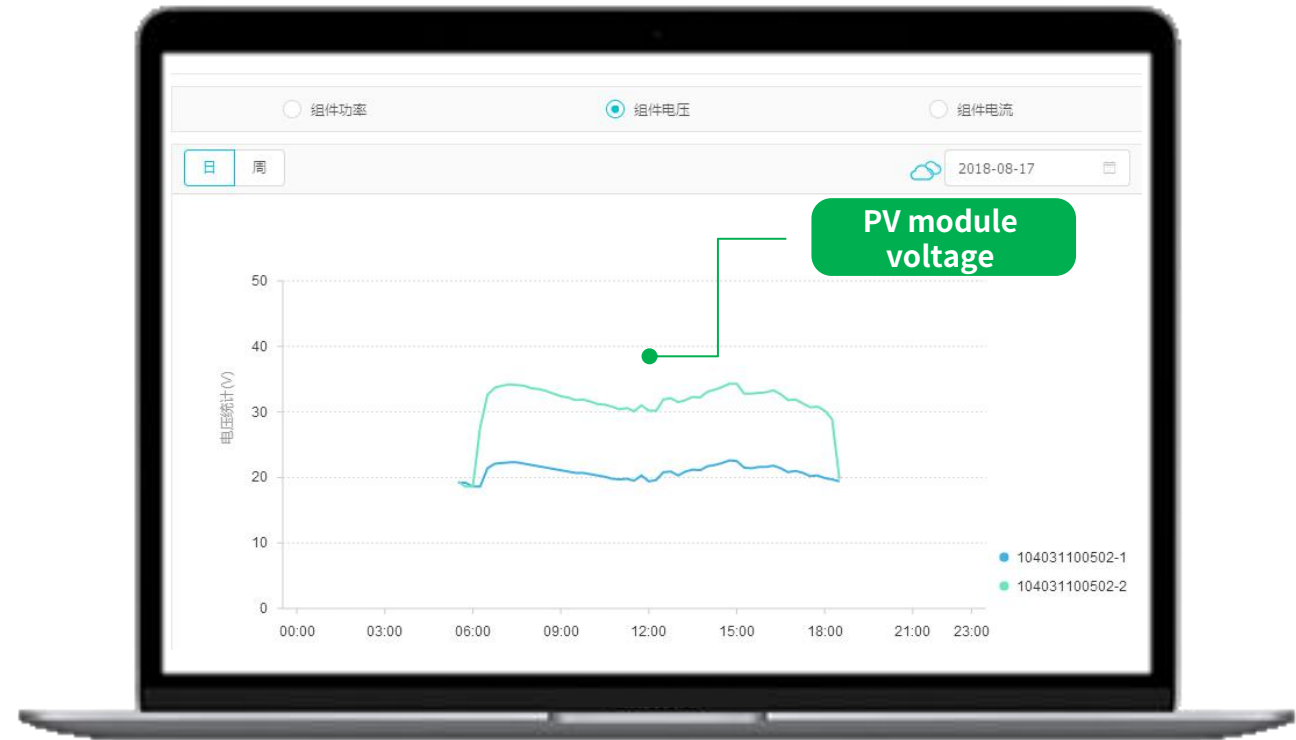
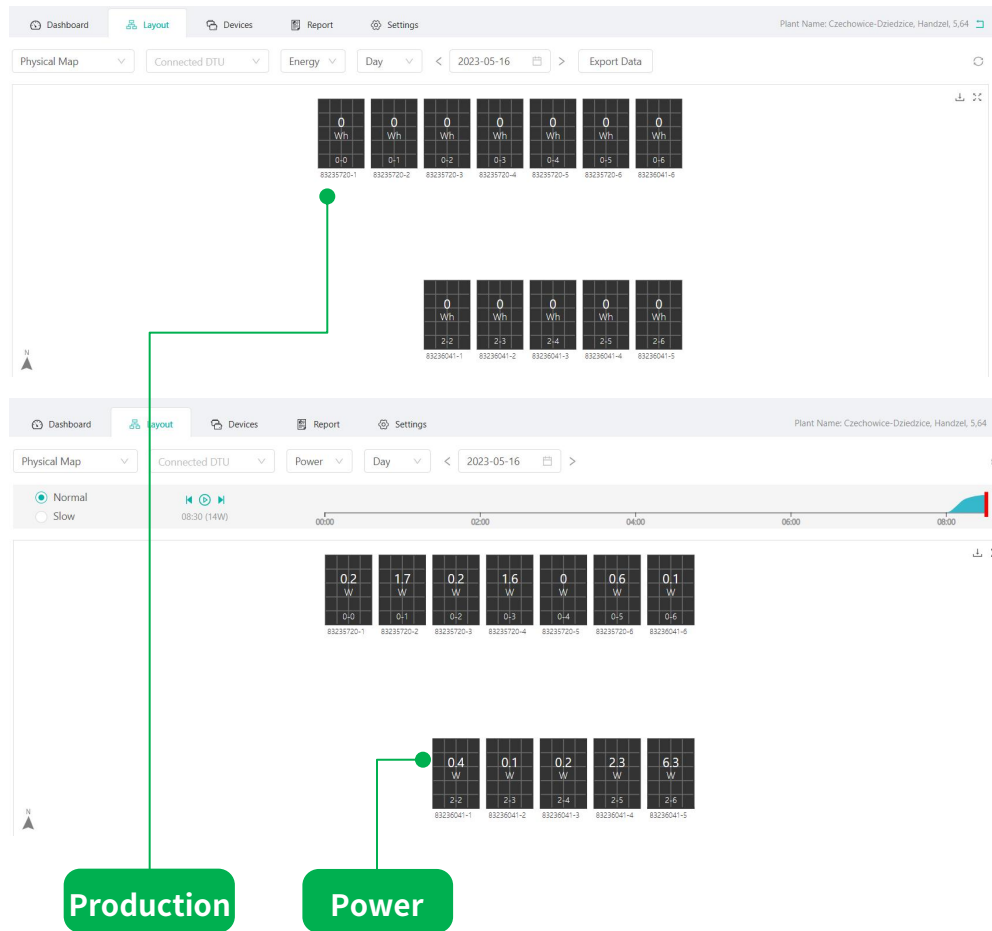
Monitoring **string-level** information: current, voltage, and power



Microinverter:

Achieve **module-level** monitoring

Advantages of Topology | Smart & Convenient

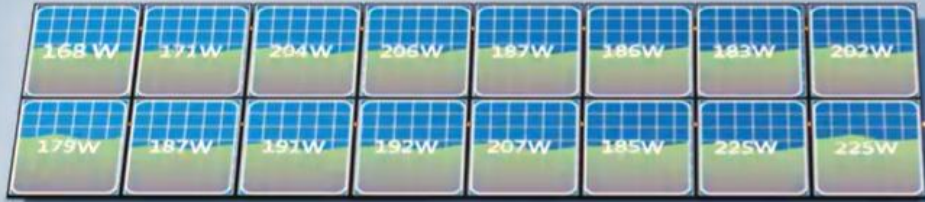


Advantage of microinverter:

- Module-level monitoring
- Remote troubleshooting

Hoymiles Microinverter

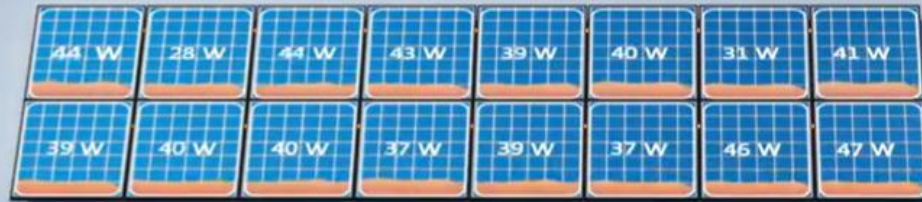
6:00 AM



3.16kW

Traditional String Inverter

6:00 AM



0.62kW

22Vdc Start-up voltage only

With high start-up voltages, string inverters only work when the sun is shining strong. Microinverters start at very low voltages, so your production happens from sunrise to sunset for a yield that's 1.5% higher.

Hoymiles Microinverter



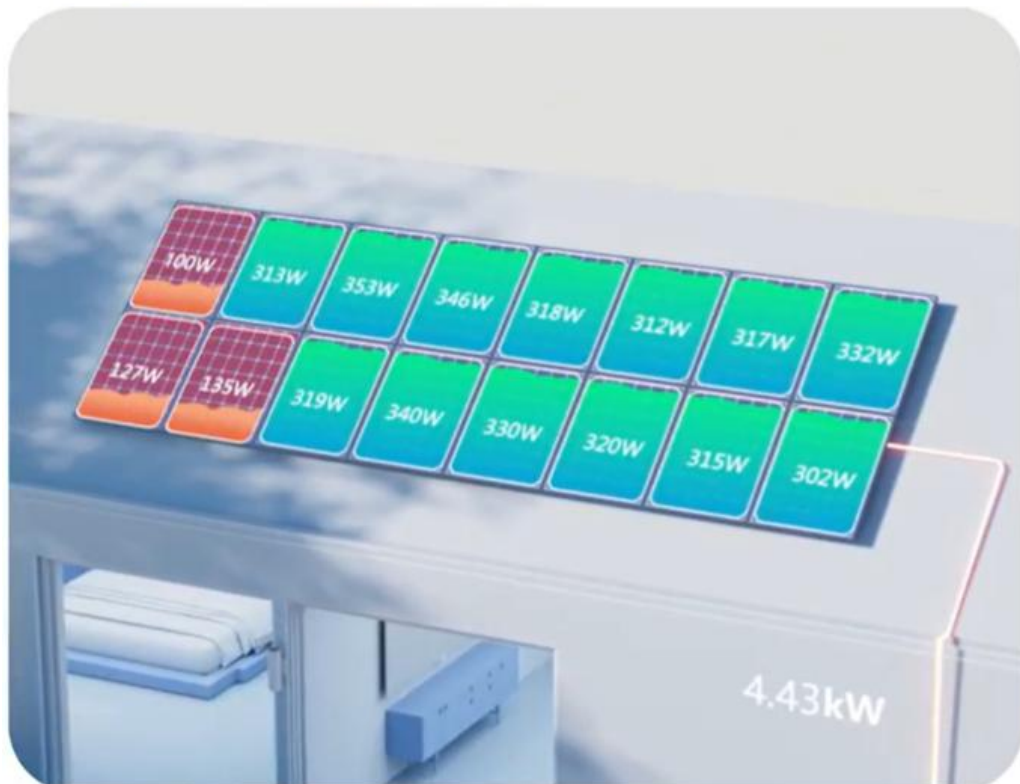
Traditional String Inverter



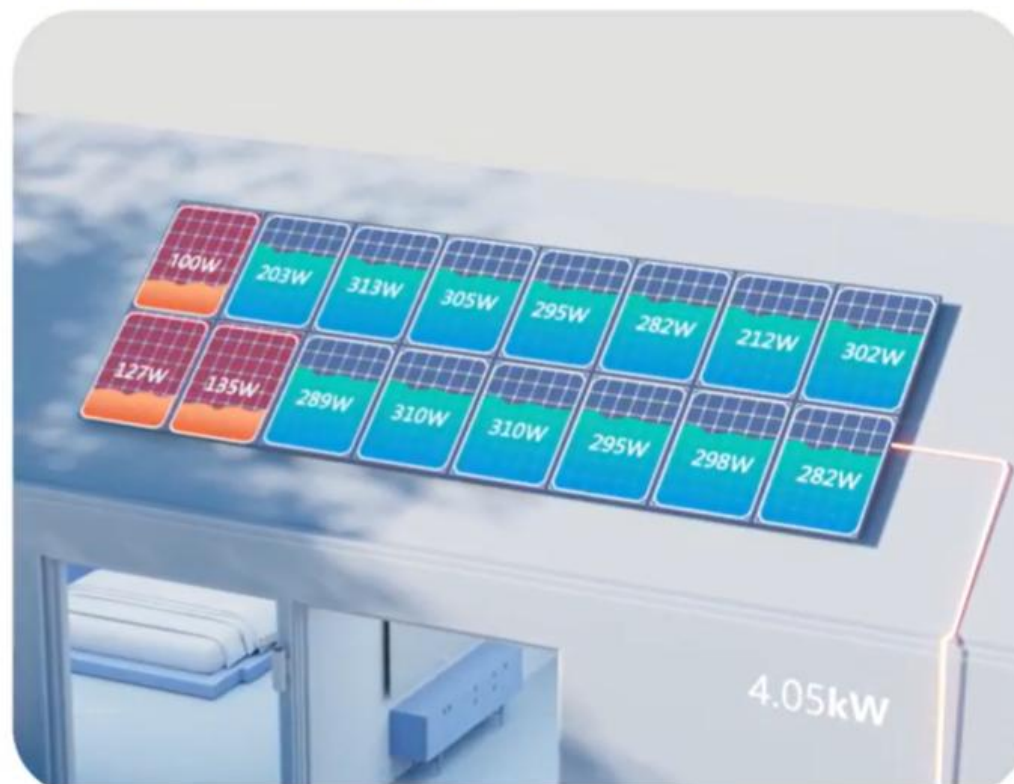
Easier Operation & Maintenance

Using traditional inverters, even one under-performing module can influence the size of your overall harvest. Microinverters realize the true potential of solar by giving you seamless, always-available performance. If one module fails or runs into issues, the rest of your system stays up and running at peak performance.

Hoymiles Microinverter



Traditional String Inverter



Module-level MPPT

Whatever the size of your solar system, panels aren't working in identical conditions. Only microinverters with outstanding module-level MPPT can adapt to these conditions, even as they change throughout the day. With Hoymiles, make sure every panel is performing at its best, increasing your power yield and reducing the time it takes to recoup your costs.

Single-Phase Microinverters

Best suited for residential use and in small commercial environments.

Our microinverters are long-lasting, easy to install, and come with incredibly low failure rates.



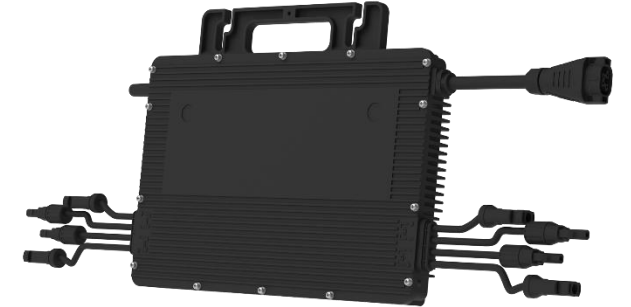
What we provide | Our Micro-inverter HMS series



HMS-450/500



HMS-900/1000



HMS-1800/2000



DTU Sub1G



Smart monitoring



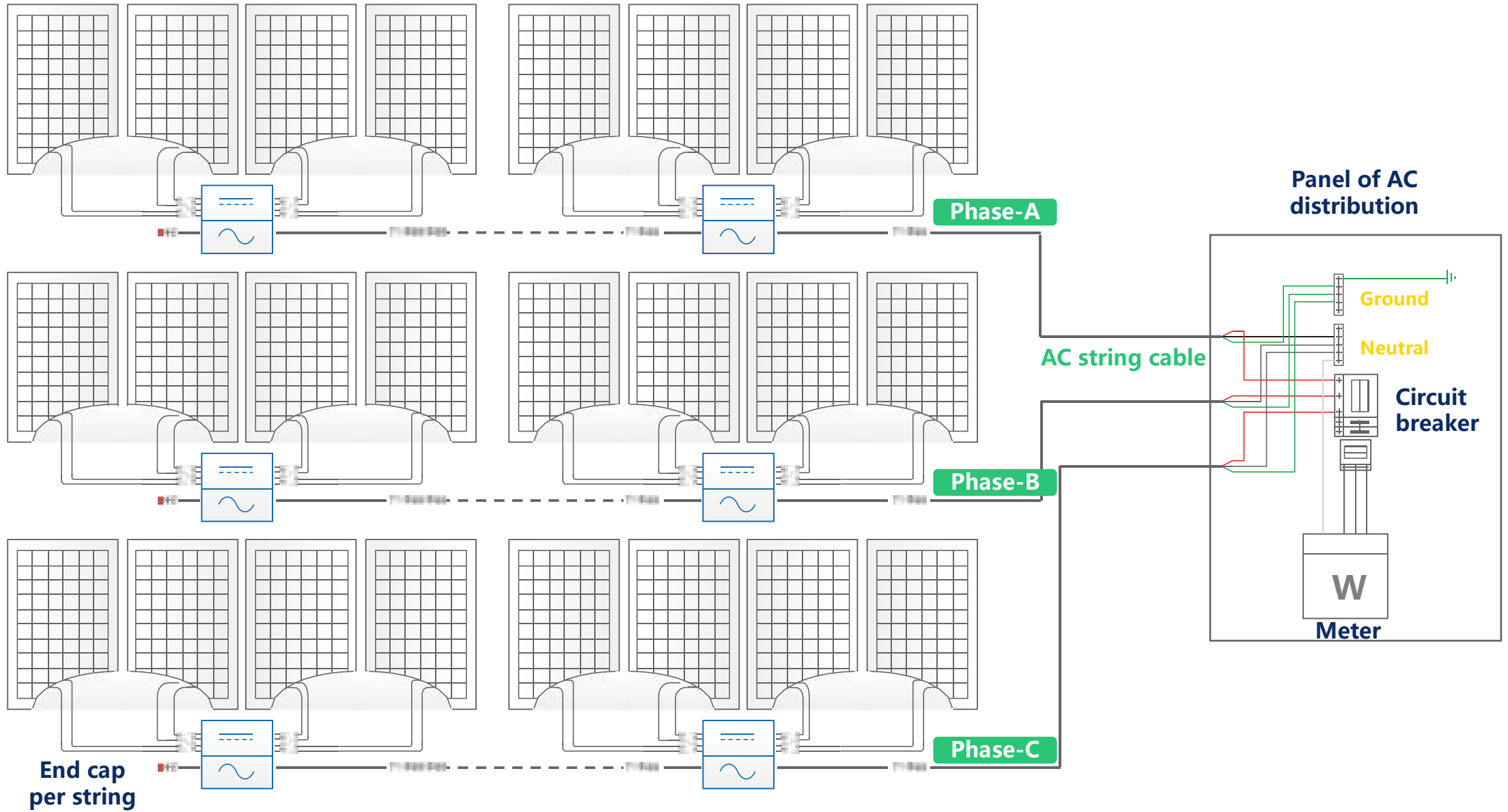
Accessories

► **Hoymiles single-phase micro-inverter series (HMS series)**

Products details | three-phase microinverters | **New Release HMS Series**

Model	<p>HMS-450/500-1T</p> 	<p>HMS-900/1000-2T</p> 	<p>HMS-1800/2000-4T</p> 
Module Compatibility	360-600/400-670Wp	360-600/400-670Wp	360-600/400-670Wp
Start Up Voltage	22V		
Operating Voltage Range	16~65V		
CEC peak efficiency	96.5%		
Max input current	15/16A	15/16A	15/16A
Dimensions/weight	182×164×30mm/1.75kg	261×223×31mm/3.0kg	331×218×34.6mm/4.5kg
Short circuit current	25A	25A	25A
	DTU-PRO-S		

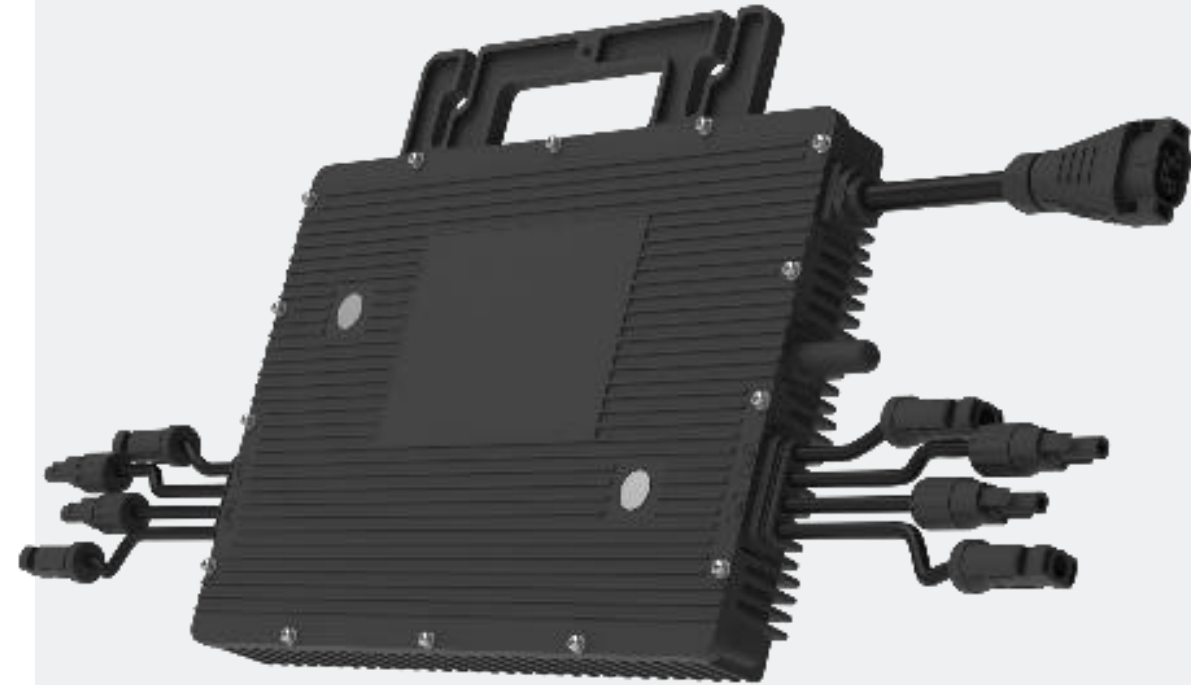
What we provide | Our Micro-inverter HMS series



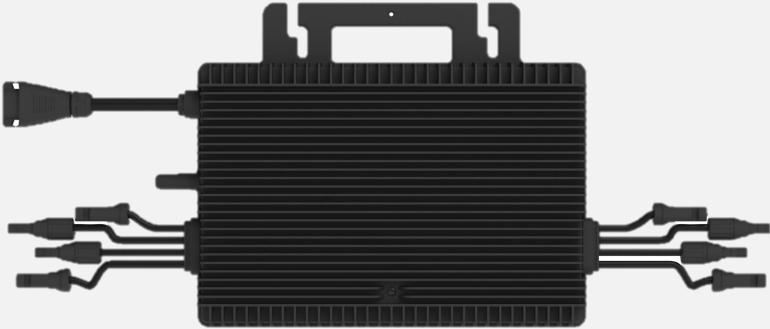
Three-Phase Microinverters

Our three-phase microinverters include reactive power control to improve the performance and stability of your installation.

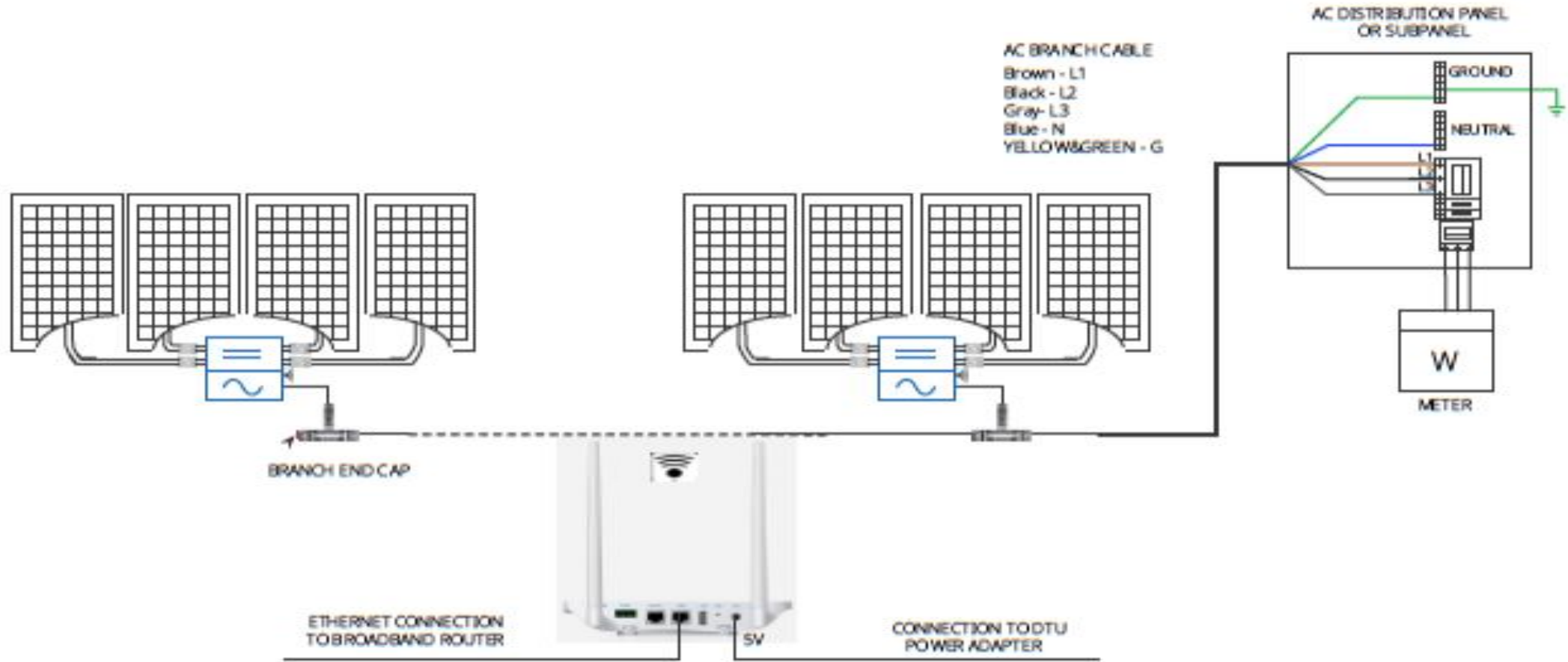
These are the first of their kind, and are able to support up to six solar panels at once - perfect for industrial settings.



Products details | **Three-phase microinverters** | **HMT Series**

Model	 <p>HMT-2000-4T</p>	
Module Compatibility	400-670Wp	
Start Up Voltage	22V	
Operating Voltage Range	16~60V	
CEC peak efficiency	96.5%	
Max input current	16A	
Dimensions/weight	182×164×30mm/5.9kg	
Short Circuit current	25A	
	DTU-PRO-S	

What we provide | Our Micro-inverter HMT series



Data Transfer Units

Our DTUs bridge your solar system and its data. Gain valuable insights into your sustainability and bring data together for easy management, quick troubleshooting, and proactive support.

All out DTUs are backed by a comprehensive 36-month warranty to give you peace of mind.





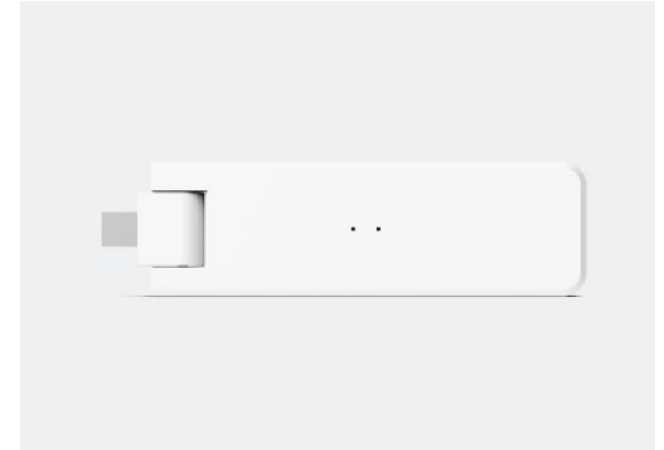
DTU-Pro-S

- WiFi or GPRS connectivity
- Dependable monitoring and data storage for your entire installation
- Consumption and load monitoring in S-Miles Cloud
- External antenna for strong, reliable communication
- Ideal for every kind of installation



DTU-lite-S

- Plug-and-play format for powerful data capture
- WiFi to feed performance data to our user-friendly monitoring platform
 - Easily monitor consumption
 - Change your settings with a single click
 - Explore potential performance issues



DTU-Lite 4G

- Increased flexibility and stability
- Fast 4G wireless and WiFi included as standard
- Optimize communication across your installation
- One of the first units of its kind
- Quick installation and guaranteed great performance

Products Details | DTU

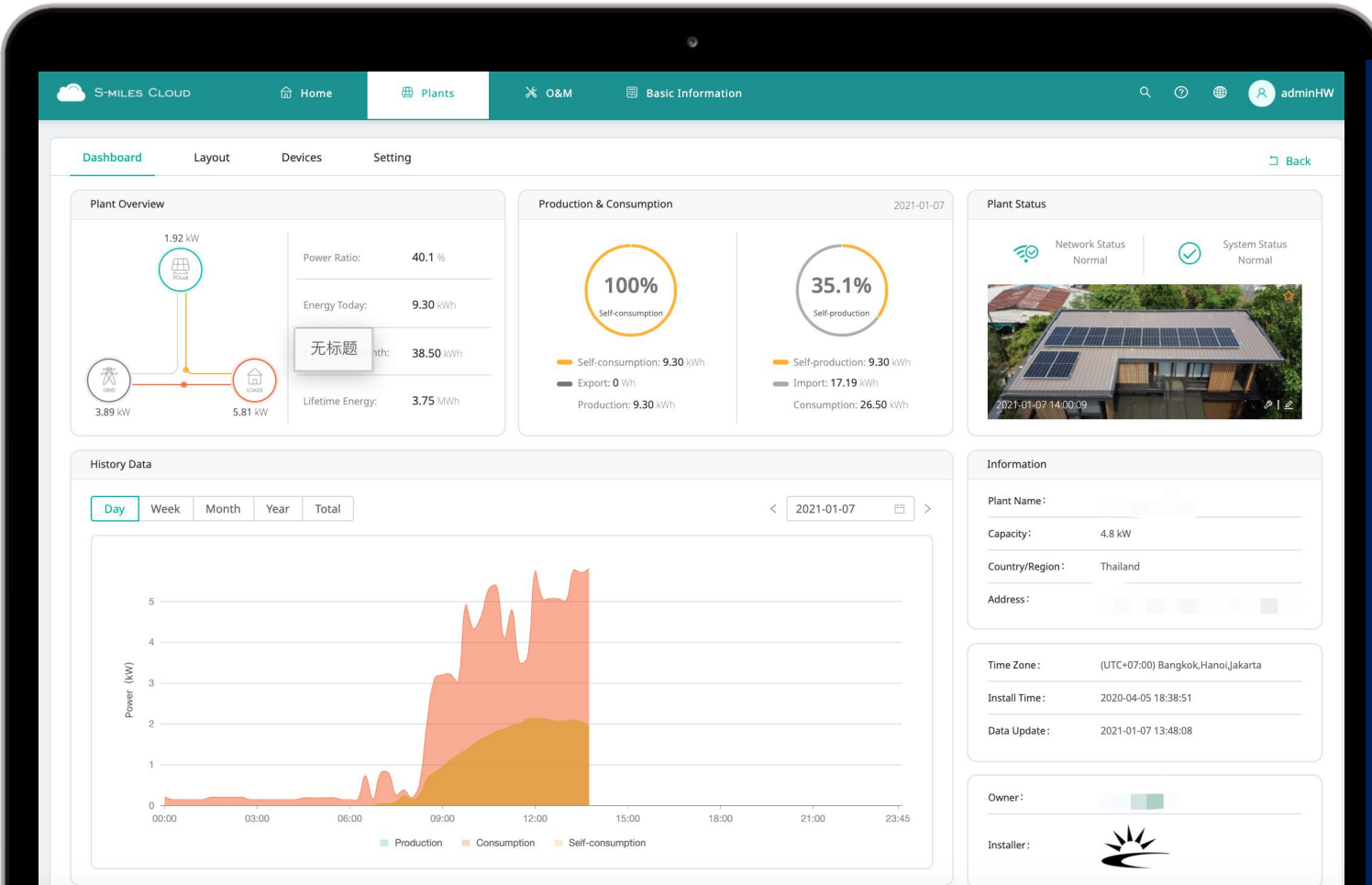
	DTU-Pro-S	DTU-Lite-S (Wi-Fi)	DTU-Wlite-S (Wi-Fi)
Compatible Micro	HMS/HMT	HMS/HMT	HMS/HMT
Panel connected limit	99	99	4
Communication Type	Sub-1G	Sub-1G	2.4GHz RF(Nordic)
Maximum Distance(open space)	400m	400m	150m
Modbus Supported	RTU/TCP	NA	NA
Control Ports	RJ45/USB/RS485	NA	NA
Export and Power limit supported	YES	NA	NA
Communication way	WIFI/Simcard(4G)/Ethernet	WIFI	WIFI

S-Miles Monitoring Platform

Monitor your entire solar ecosystem in real-time.
Available on mobile devices and web browsers, our
S-Miles Cloud is everything you need to manage and
troubleshoot your photovoltaic installation.

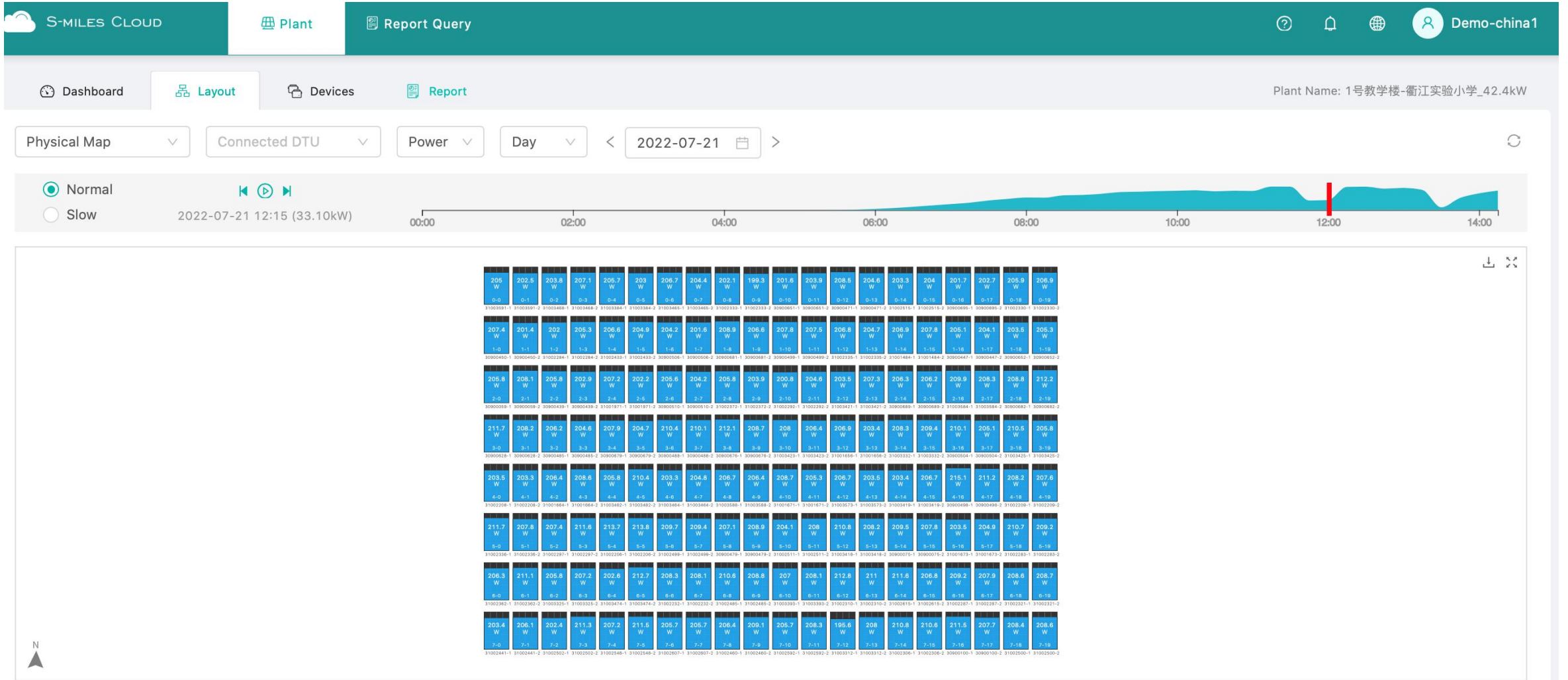


What we provide | S-Miles platform

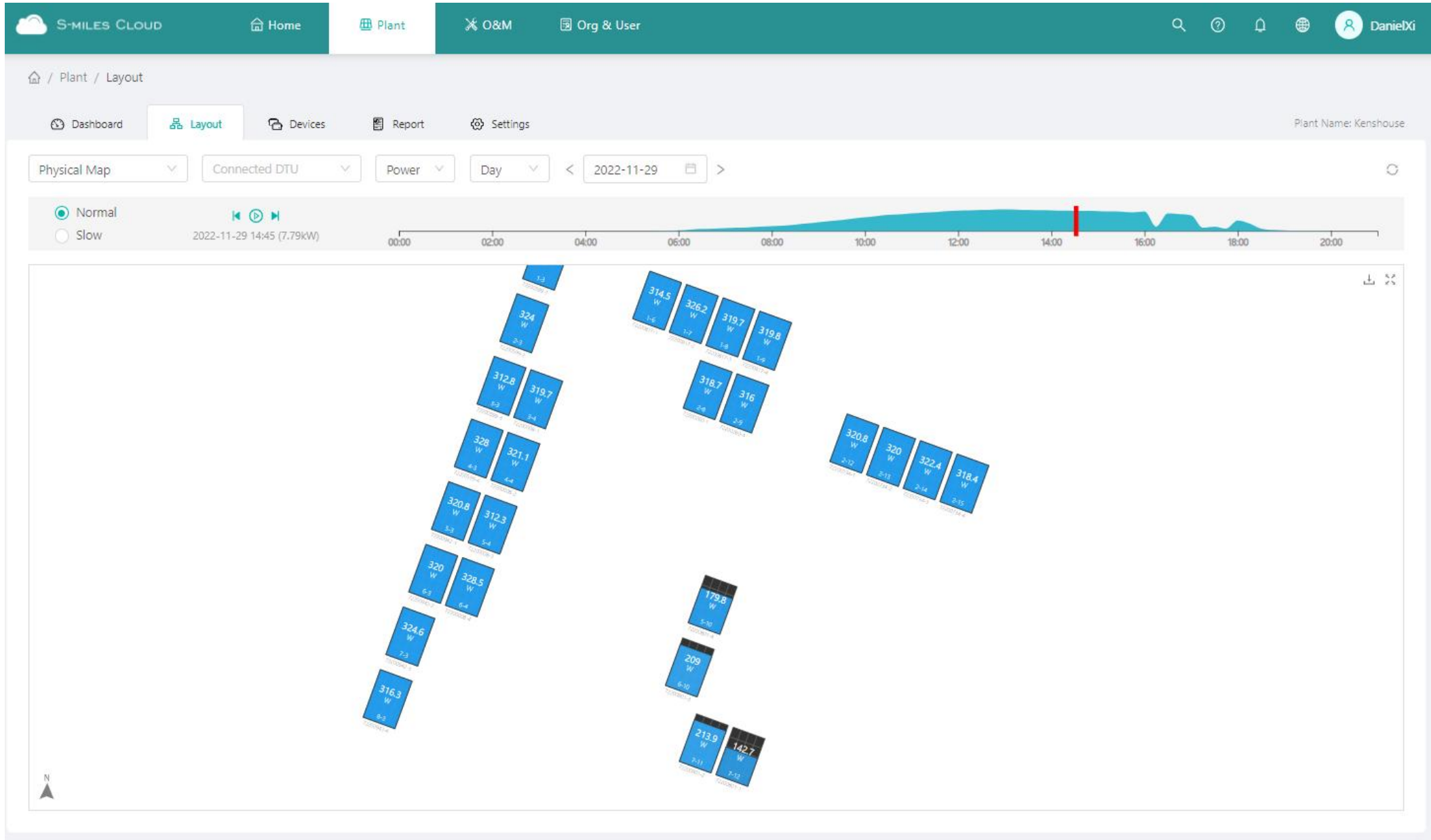


- Visual data on energy production and usage
- Dynamic energy flow
- Friendly UI that makes monitoring easier
- Check on individual solar panels performance
- Track your monthly and lifetime energy production
- Alarm system to show you of any issues
- 7 days local data storage when internet break
- Historical data review.
- Electricity savings calculation in Thai Baht\$
- Change settings with a simple click
- Monitor multiple plants from the same dashboard

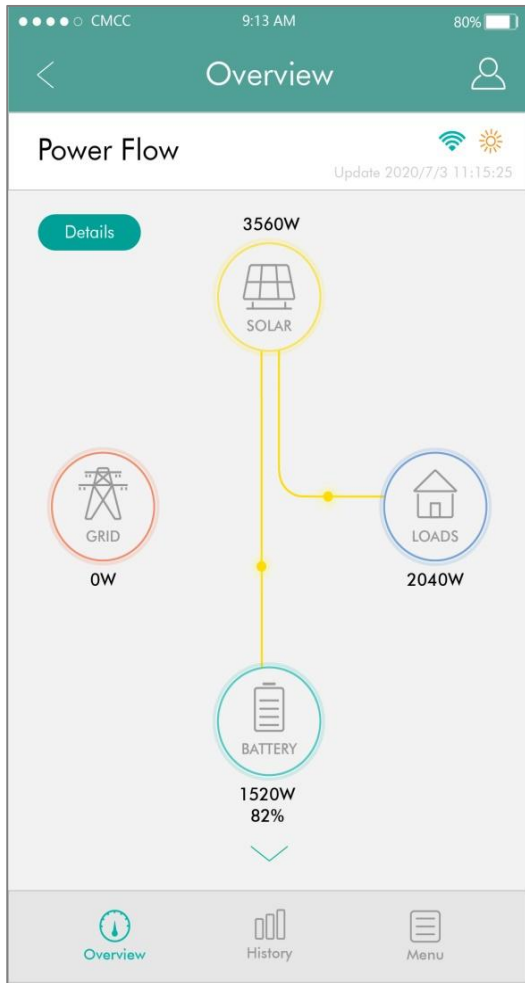
What we provide | S-Miles platform



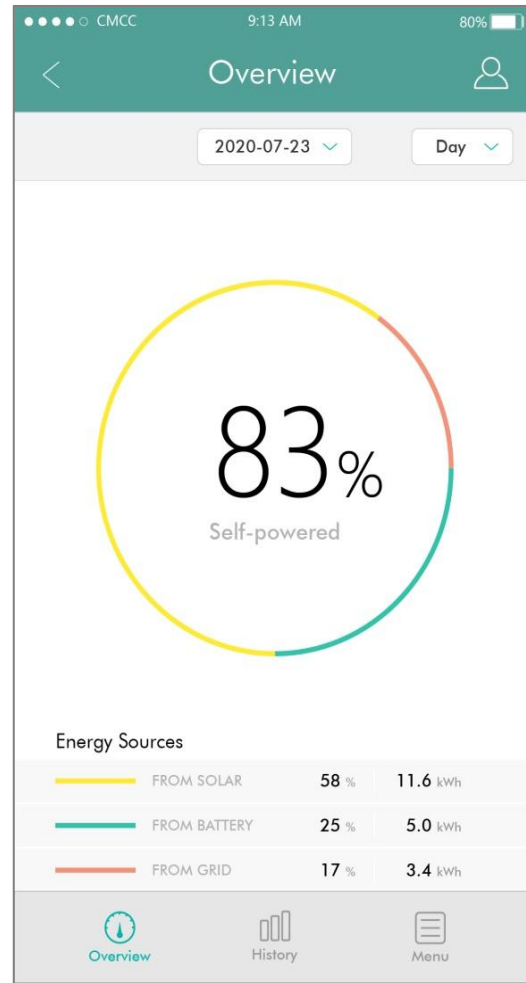
What we provide | S-Miles platform



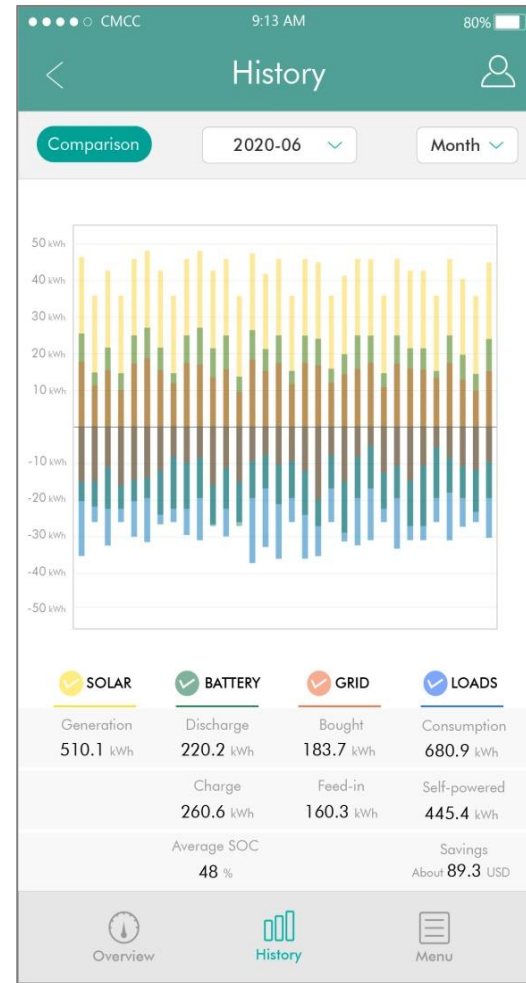
What we provide | S-Miles platform



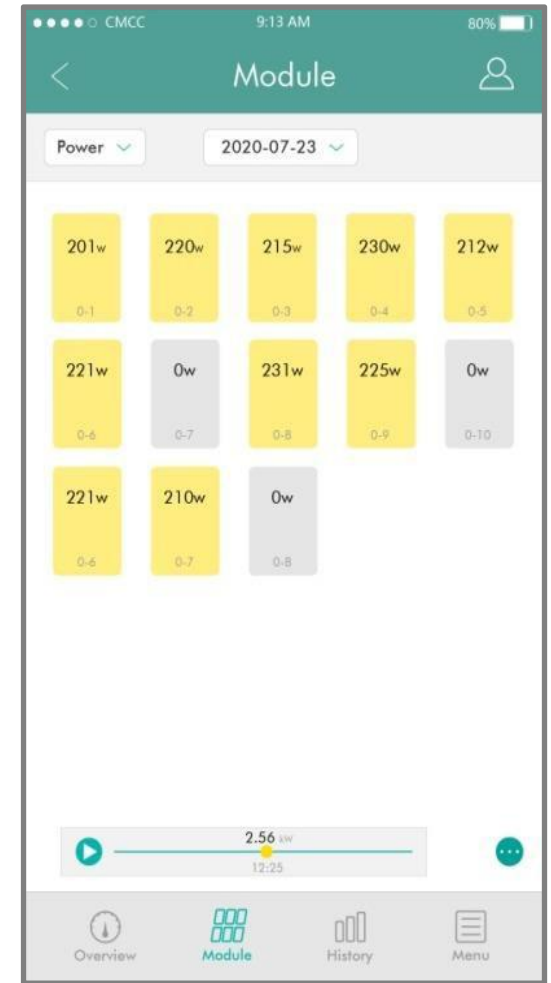
Energy flows



Powered ratio



Historical Data



Modular Data

04

Warranty

Open Energy For All

Standard Warranty Period:

Microinverter:

Standard 12 years,
extendable to 25 years.

DTU:

3 years Standard.



HOYMILES WARRANTY EXTENSION CERTIFICATE
Certificate number: HM [REDACTED]

Hoymiles Power Electronics Inc. provides 25-year warranty for full range of Hoymiles Microinverters as per Warranty Regulations and Liability by Hoymiles.

Warranty Period: 25 Years for Microinverter

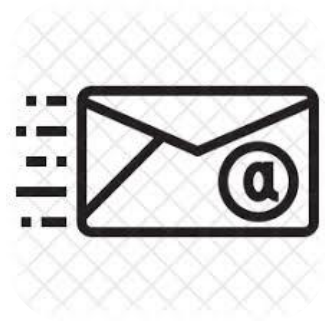
Product Model: [REDACTED]
Serial Number: [REDACTED]
Quantity(units): **1**
Warranty Effective Date: **2021-10-03**
Expiration Date: **2046-10-03**
Authorized distributor: [REDACTED]
Signature by Hoymiles Technical Support Manager: *[Signature]*

Hoymiles Power Electronics Inc.
No. 18 Kangjing Road,
Hangzhou 310015, P.R. China
hoymiles.com
Tel: +86-571-2805 6101
E-mail: sales@hoymiles.com



Replacement Process

Step 1
Feedback problems



Issue feedback send to service@hoymiles.com.

Step 2
Comfirm faulty



Tech. support firm inverter faulty.

Step 3
Fill up RMA form



You would get RMA form from our tech support team or download from Hoymiles official website.

Step 4
Arrange shipment



We will arrange shipment to sent brand new device ASAP.

Step 5
Customers first



Sovled the problems. Until the customer is satisfied

Energy Storage

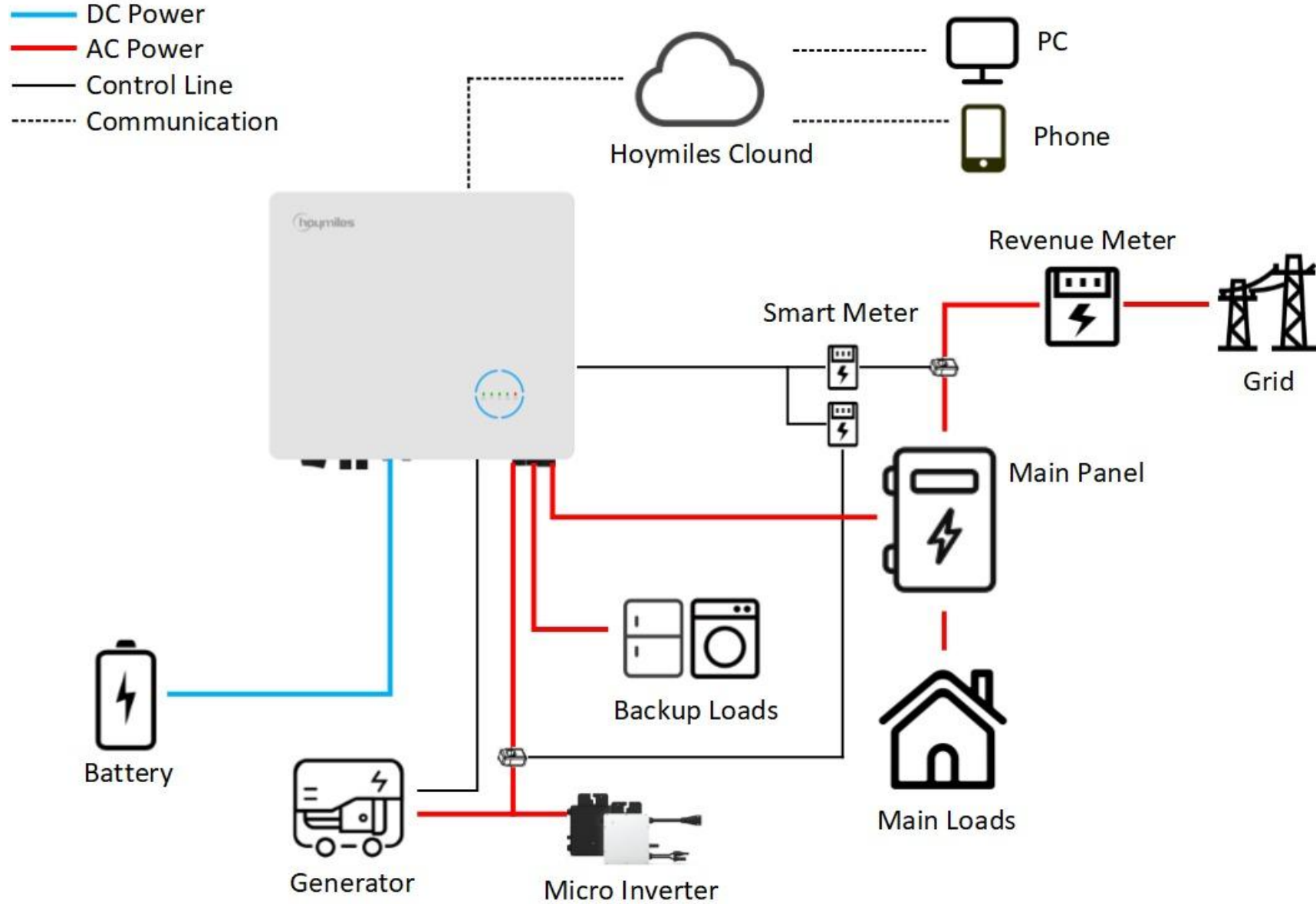
Hoymiles high-performing next-generation hybrid inverters come with single-phase series and three-phase series, featuring a wide operating power range from 3–12kW. The intelligent EMS function supports self-consumption mode, economic mode, and backup mode for multi-scenario applications.



- Max. efficiency 97.6%, European efficiency 97.0%
- Double MPPT tracker, up to 14A MPPT current
- DC/AC ratio up to 150%
- Built-in dry contact flexibly monitors earth fault alarm and provides load control or generator control
- Ultralight for easy installation and space-saving
- Support both DC-coupled and AC-coupled systems
- Remote monitoring through Hoymiles S-Miles Cloud
- EMS integrates with self-consumption, economic mode, and backup mode for multi-scenario applications



What have we done | products | energy storage



Rapid Shutdown Device

When installed with and receiving a "permission to operate" signal from Hoymiles Transmitter, HRSD starts proper operation of the PV system.

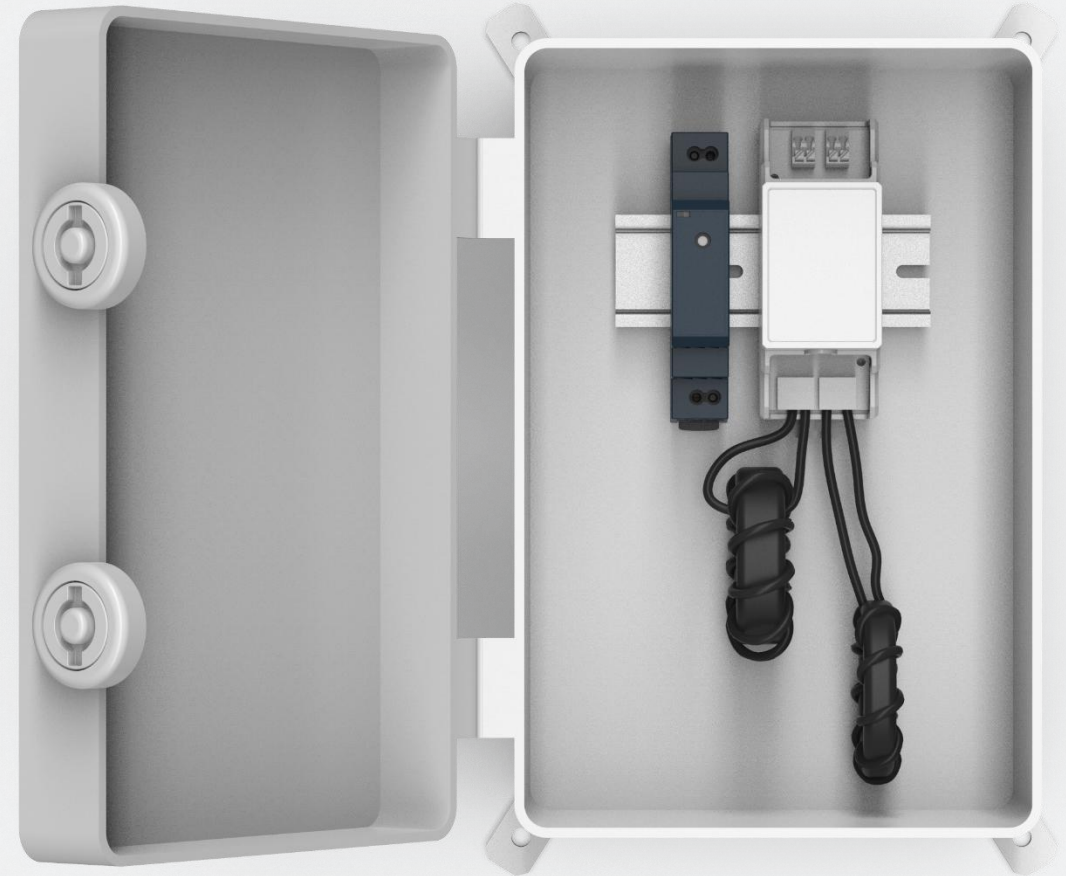
In case of emergency, the PV system would enter module-level rapid shutdown mode by simply disconnecting the AC power of the Transmitter or using an external initiator, bringing your PV system to safety in 30s.

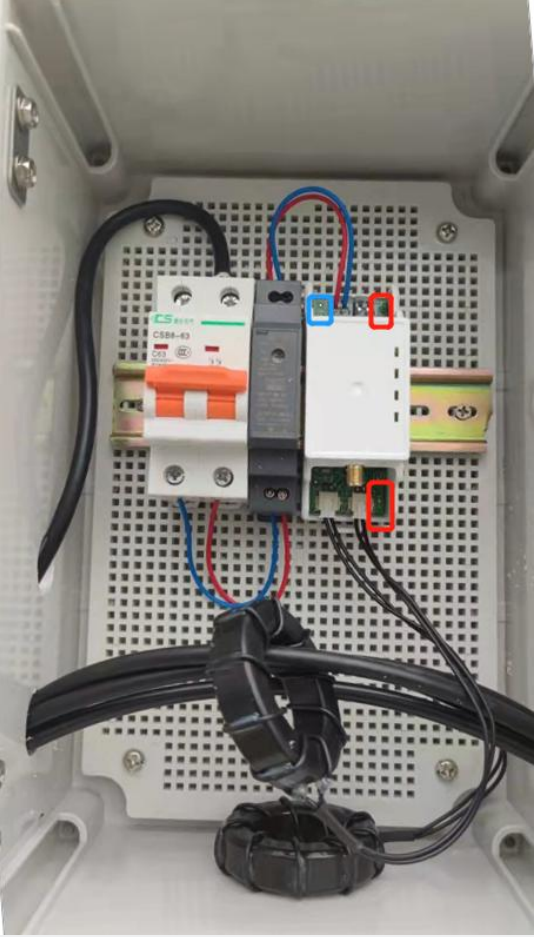
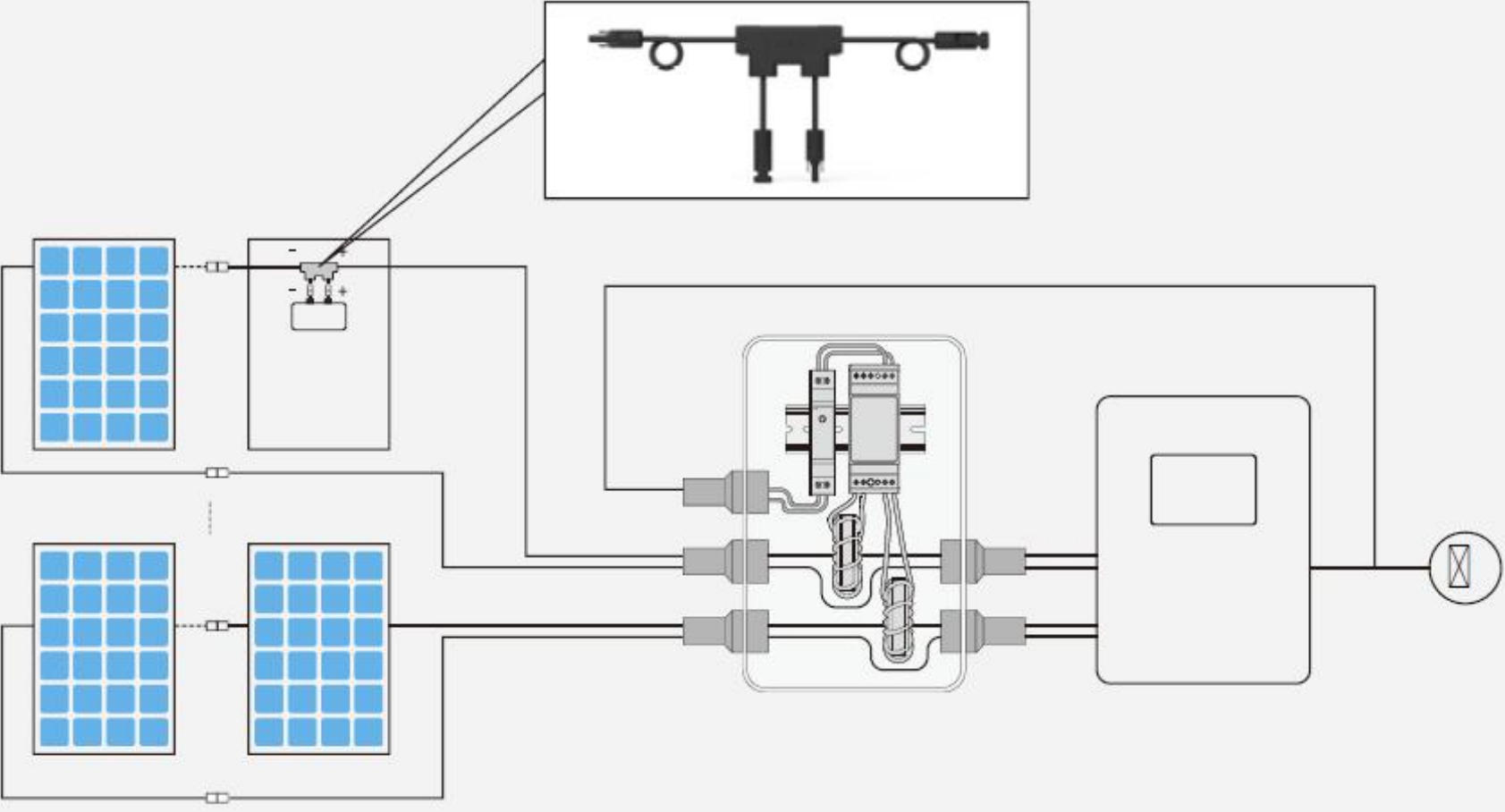


Transmitter

Hoymiles' Transmitter comes with a stand-alone version and a kit version and is used with HRSD to complete the Hoymiles rapid shutdown solution.

When paired with Hoymiles rapid shutdown HRSD and powered on, HT10 sends a "permission to operate" signal to HRSD, to make PV modules connected in series and then connect to a string inverter, thus producing power.





Rapid shutdown

Voltage lower than 80V within 30s within 1ft of the PV array

Voltage lower than 30V within 30s outside 1ft of the PV array

Strictly compliant

NEC 2017/2020

SunSpec certified

Wide adaptability

Operating within -40 to +85°C

Streamlined installation

Plug & play, no configuration required

Cost-effective and efficient

One or two inputs available

Lower minimum start-up voltage of 8V

High efficiency

Lower power consumption and wider operating voltage range

PLC communication

Realize rapid shutdown with Transmitter/

Long communication distance: 500meter/ or more

Lower noise

Much lower than arc noise

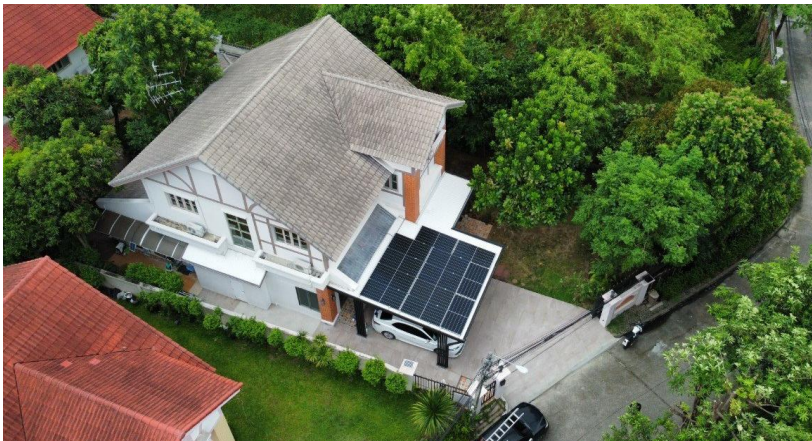
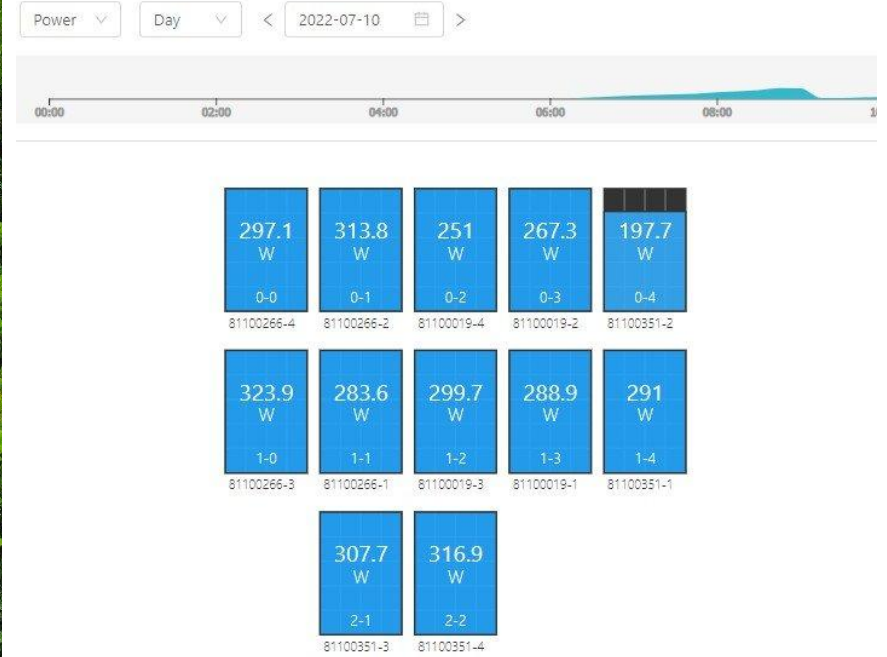
No risk of triggering Arc Fault Circuit Interrupter (AFCI)

Endless compatibility

Support connectivity with inverters from every leading manufacturer

25 years warranty available

What have we done | projects



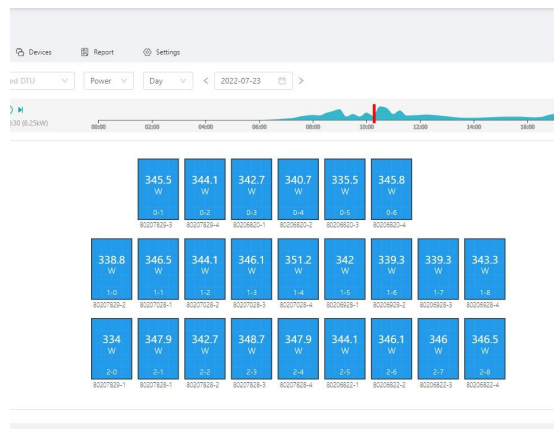
Location:
Bangkok, Thailand

Capacity:
5.64kW

Completion:
2021

Further Info:
Residential,
HMS-2000

What have we done | projects



Location:
Bangkok, Thailand

Capacity:
11.28kW

Completion:
2022

Further Info:
Residential,
HMS-2000

What have we done | projects

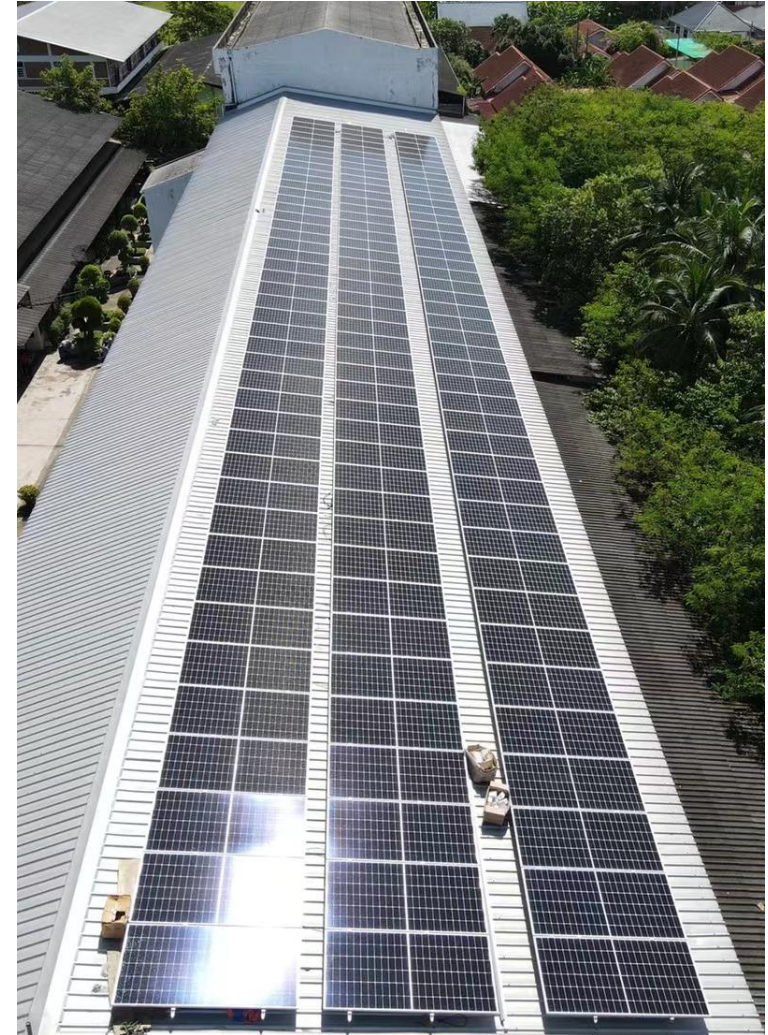


Location:
Bangkok, Thailand

Completion:
2020

Capacity:
60kW

Further Info: Commercial,
33pcs of HM-1500





Location:
Bangkok, Thailand

Capacity:
390kW

Completion:
2022

Further Info:
Commercial,
HMS-2000

What have we done | projects



Location:
Bangkok, Thailand

Capacity:
35kW

Completion:
2018

Further Info:
Solar Farm,
MI-600

What have we done | projects



Location:
Kuala Lumpur,
Malaysia

Capacity:
35kW

Completion:
2022

Further Info:
Commercial,
HM-1500

What have we done | projects



Location:
Wolfville,
Nova Scotia

Completion:
2020.06.15

Capacity:
94.38kW

Further Info:
Hotel Roof Project,
26 pcs of MI-300,
26 pcs of MI-600,
52 pcs of MI-1200

What have we done | projects



Location:
Morocco

Capacity:
60kW

Completion:
2019.09.11

Further Info
Commercial,
52 pcs of MI-1200

Location:
Sheet Harbour, Canada

Capacity:
35.1kW

Completion:
2021.02.14

Further Info
23 pcs of MI-1500





Location:
Central Missouri, US

Capacity:
281kW

Completion:
2020.08

Further Info:
Farm Project,
186 pcs of MI-1200



Location:
Sao Paulo

Capacity:
12kW

Completion:
2020.02

Further Info
8 pcs of MI-1200



Open Energy for All



05

Packing Information

Open Energy For All



N.W. 净重 Kg/Unit	G.W. 毛重 Kg/Unit	Carton Packing 纸箱包装 规格 Units/Carton	G.W. 纸箱包装 毛重 Kg/Carton	Carton Dimension (length*width*height) 纸箱包装尺寸 (mm)	Cartons/ Pallet 单 托箱数 (每层箱数* 层高)	Qty/Pallet 单托数量 (Units)	G.W./Packed Pallet 单托重量- 打包后(含 托盘重) (Kg)	Packed Pallet Height 单托高度 (m)	单托体积 (M3)	单箱体积 (M3)	单箱重量 (KG)	托盘尺寸
5.1	5.4	5	27.5	545*265*295mm	8*5	200	1117.1	1.615	1.95	0.043	27.5	1.1x1.1 17.1KG



Series 系列	N.W. Kg/Unit	G.W. Kg/Unit	每箱毛重 (kg)	Carton Packing 纸箱 包装规格 Units/Carton	Cartons/Palle t 单托箱数 (每层箱数*层 高)	Qty/Pal let 单托数量 (Units)	整托高度(m)	托盘	单托体积(M3)	单箱体积 (M3)
DTU-LITE-S	0.043	0.126	8.10	56	4*8	1792	2.25	1m*1.2m 20.2kg 140mm	2.52	0.073
DTU-PRO-S	0.26	0.61	21.20	33	4*8	1056	2.17		2.52	0.073





for HMS-2000 model:

5pcs/box

8boxs/layer (total 40pcs)

6layers/pallet (total 240pcs)



HMS-2000 for a 20feet container:
10pallets /container (total 2400pcs)