

# Company Brochure

# Open Energy For All

Bringing smart solar to the entire world with rugged technology

## 03 Company Overview

- 04 Vision
- 05 Introduction
- 06 Facts & Figures
- 08 History

## 10 Business Competitiveness

## 12 Product Portfolio

## 28 Projects

- 28 Industrial and Commercial
- 30 BIPV
- 32 Residential



# Your Partner for Smart Energy Solution

Hoymiles' mission is to become the leading choice for getting started with smart energy, making good technology more impactful by ensuring it's accessible to everyone, and bringing smart solar to the entire world with high-quality products.

Hoymiles is a global MLPE (Module Level Power Electronics) solution provider, specializing in module-level inverters and storage systems. With a vision of a clean, sustainable future, we strive to lead the smart energy industry through our rugged technology and reliable products.

With our driven engineer team, 1200+ global experts and distribution & service network spanning North America, South America, Europe, Asia, Africa and Oceania, Hoymiles has empowered homeowners and professionals in more than 110 countries and regions to join the journey to true open energy.

Hoymiles officially debuted on the Shanghai Stock Exchange STAR Market in Dec. 2021 under the stock code 688032. Now we are favored by the market as a trustworthy partner to our investors, installers and end consumers.



# Hoymiles in Facts and Figures

## Quick Facts



**120**

patents & software copy-rights



**110+**

countries & regions with installation



**1 million+**

microinverters installed since 2016



**1200+**

global experts



**100%**

average annual increase in microinverter sales volume (2016-2022)



**5 million**

units as annual manufacturing capacity to be reached in 2023



**Tier 1**

institution for research of China as origin



**76+**

countries & regions covered within partnership network

## Global Certification



# Hoymiles Timeline

Hoymiles was founded by two power electronics doctors with a joint vision: to develop good technology that benefits the world. To make solar energy accessible to all, it needed to be commercialized, cutting costs and bringing equitable energy to as many people as possible.

Hoymiles was created to deliver on that mission: to make sustainable technology more impactful and accessible.

Hoymiles was officially established as a business.

2012

Our microinverters were certified by the CSA, BV, SAA, and CQC.

2014

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

2016

Hoymiles helped write the national energy industry-standard of PV on-grid microinverters and optimizers (NB/T 42142-2018 & NB/T 42143-2018).

2018

Hoymiles officially debuted on the Shanghai Stock Exchange STAR Market in Dec. 2021 under the stock code 688032.

2021

2013

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

2015

Certified as the State High-tech Enterprise.

We launched our microinverters in the US, Europe, and Australia.

2017

Raised 28 million USD in Series A funding. Our lab became a CSA authorized testing laboratory.

Launched MI 1000-1500, one of the most cost-effective 4 in 1 microinverters in the market.

2020

Certified as PV Manufacturing Model Enterprise by the Ministry of Industry and Information.

Launched the first generation of three-phase microinverter, adapted to the industrial and commercial system and the first generation of hybrid inverter.

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.

# Why Choosing Hoymiles is a Smart Choice

When you choose a technology partner, you're choosing more than the right components. Our team of driven engineers and rugged technology will help make every installation a success and allow you to grow your business with confidence.

## Global Providers

We've installed power in 110+ countries and regions (and still counting). We have partnerships and service networks with over 76 countries worldwide.

## Award-Winning

We've been listed in the Top 20 inverter companies in China, the State High-tech Enterprise, and have won awards with the State Natural Science.

## Driven R&D Team

The Hoymiles team has created many pioneering technologies and products. Our products boast high conversion rate, high power density and low per-watt cost, making them exceptionally reliable and cost-effective. We know what works and we're eager to continuously push the boundaries of open energy until it's accessible to all four corners of the world.

## Effective Manufacturing

Our manufacturing team is rigorous and accurate in everything they do. We take pride in our production, our factory output, the speed of delivery, and quality testing.

## Pioneering Technology

Our distributed technology is safer, smarter, and more efficient than most others in the industry. And it comes with a comprehensive warranty.

## Decades of Experience

Our team has a solid academic background with decades of experience in the sustainable energy sector.

## Responsive Support

We deliver the kind of fast support you can stake your reputation on. Hoymiles College is your hub for all things education, from training videos and blog posts, to independent reviews from industry leaders.



# Our Products

When you choose Hoymiles, you're choosing a neat set of advantages. Our products have a low failure rate, high-efficiency in converting DC to AC, are of the highest industry quality, and are incredibly easy to install.

## Increased Return on Investment

- Easily install units in challenging conditions and positions
- Low start-up voltage

## Smarter

- Module-level monitoring for remote trouble-shooting & maintenance

## More Efficient

- World's leading power density
- Leading MPPT efficiency: 99.8%

## Installer Friendly

- Full product range: 1-1 to 1-6, 300W-2250W
- High cost effective (LCOE)
- Plug-and-play, easy installation
- Extensive warranty

## Safer

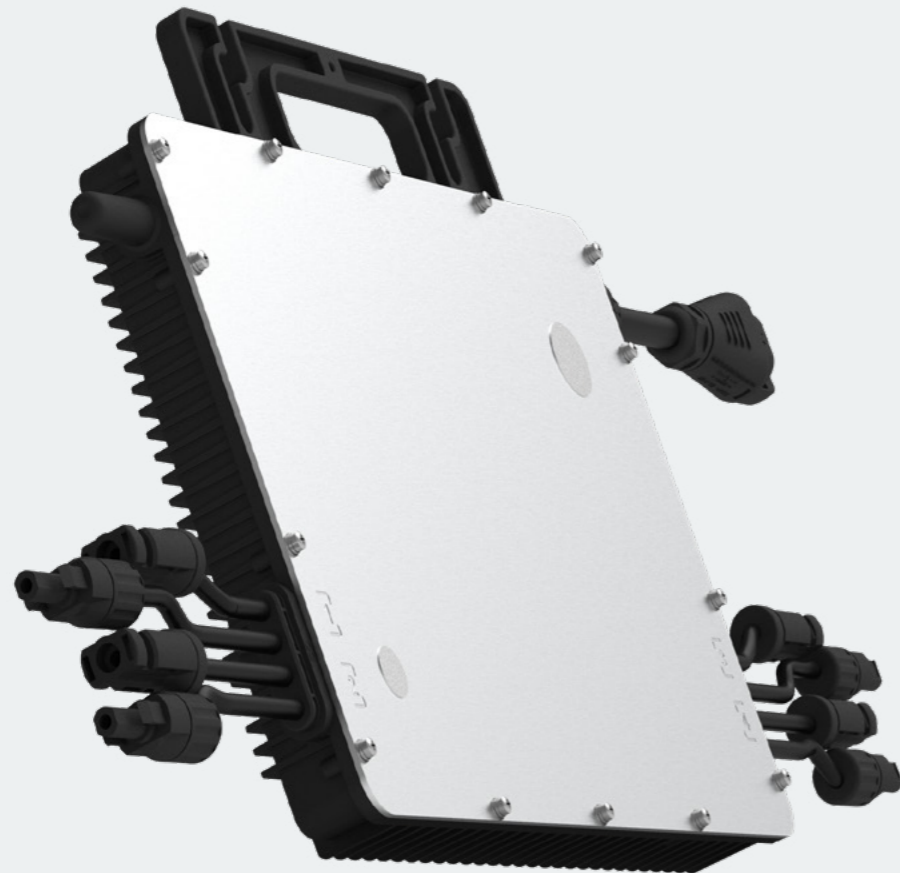
- Up to 60V DC input voltage to eliminate the risk of a rooftop fire
- IP67

## More Reliable

- Low failure rate (0.18%)
- Global compliant: EN50549-1:2019 and California Rule 21



# Single-Phase Microinverters



Turn the power from your solar panels into usable electricity with a single-phase microinverter. These are 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.

#### Plug-and-play

- Our ready-to-go microinverters get your solar ecosystem up and running quickly.

#### External Antenna

- Have confidence in stronger communication and stable monitoring.

#### Adaptable

- Match your installation and solar panel layout for an easy setup.

#### Compliant

- Adhere to legal standards like EN50549-1:2019 and the California Rule 21.

#### Scalable

- Employ 1-in-1 microinverters for single solar panels, 2-in-1 microinverters to connect two solar panels, and 4-in-1 microinverters for more demanding environments.

#### Module-Level Monitoring

- Make remote troubleshooting and maintenance management easy.

#### Natural Rapid Shutdown

- Up to 60V DC input voltage to eliminate the risk of a rooftop fire.

#### Compact

- Smaller than A4 paper size and just 3kg for manageable setup.

#### Low Failure Rate

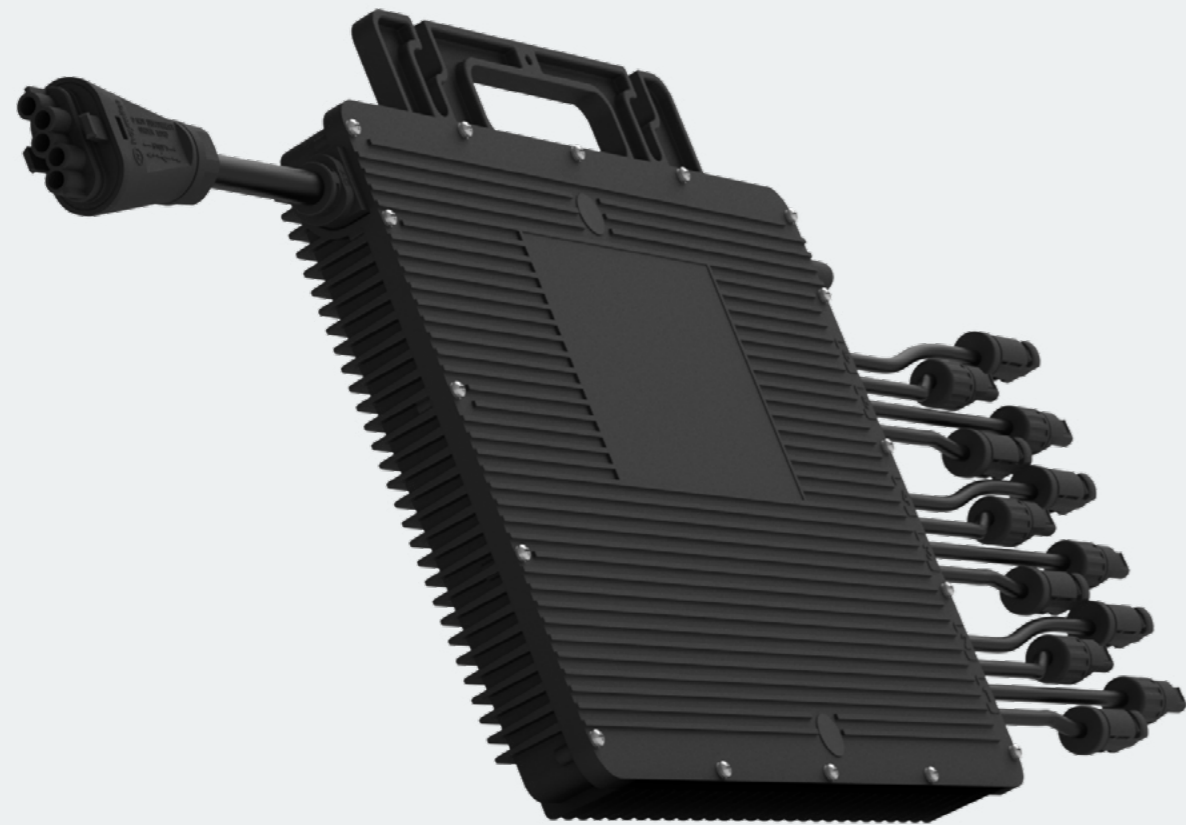
- Hoymiles microinverters stood a series of rigorous environmental and electrical reliability tests, with an annual failure rate lower than 0.18%.

#### Extensive Warranty

- Minimum 12-year warranty with options to extend up to 25 years.



# 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.

#### Plug-and-play

- Our ready-to-go microinverters get your solar ecosystem up and running quickly.

#### External Antenna

- Stronger communication and stable monitoring.

#### Adaptable

- Match your installation and solar panel layout for an easy setup.

#### Compliant

- Adhere to legal standards like EN50549-1:2019 and VDE-AR-N 4105:2018.

#### Reactive Power Control

- 6-in-1 microinverters with an output of up to 2250VA.

#### Module-Level Monitoring

- Make remote troubleshooting and maintenance management easy.

#### Natural Rapid Shutdown

- Up to 60V DC input voltage to eliminate the risk of a rooftop fire.

#### Increased Performance

- Sub-1G wireless ensures other devices don't interfere with installation.

#### Low Failure Rate

- Hoymiles microinverters stood a series of rigorous environmental and electrical reliability tests, with an annual failure rate lower than 0.18%.

#### Extensive Warranty

- Minimum 12-year warranty with options to extend up to 25 years.

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

## DTU-Pro

- Wi-Fi, GPRS, or 4G 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 4G

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

## DTU-W100

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

# 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

# HRSD



Our module-level shutdown devices are designed to be connected with one or two modules. 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.

#### 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

#### Lower noise

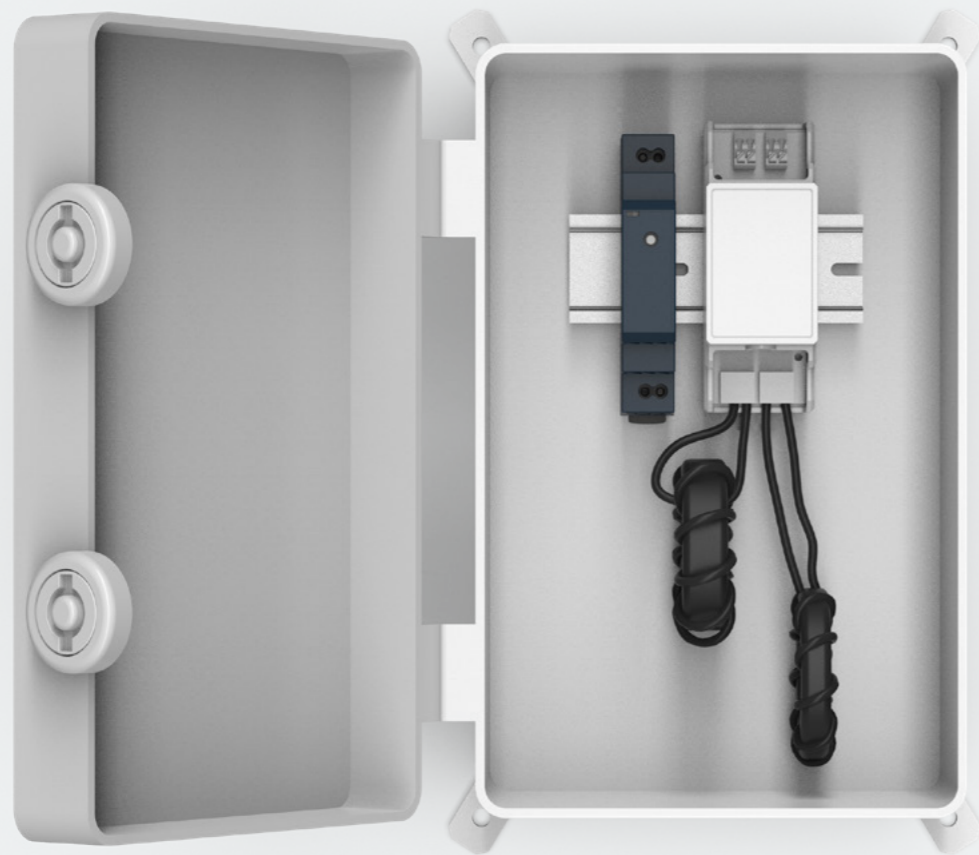
- Much lower than arc noise
- No risk of triggering Arc Fault Circuit Interrupter (AFCI)

#### Endless compatibility

- Support connectivity with inverters from every leading manufacturer

#### 25 years warranty available

# 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.

### Strictly compliant

- NEC 2017/2020
- SunSpec certified

### Equipped with one / two cores

Realize rapid shutdown by simply powering off the transmitter or using an external initiator

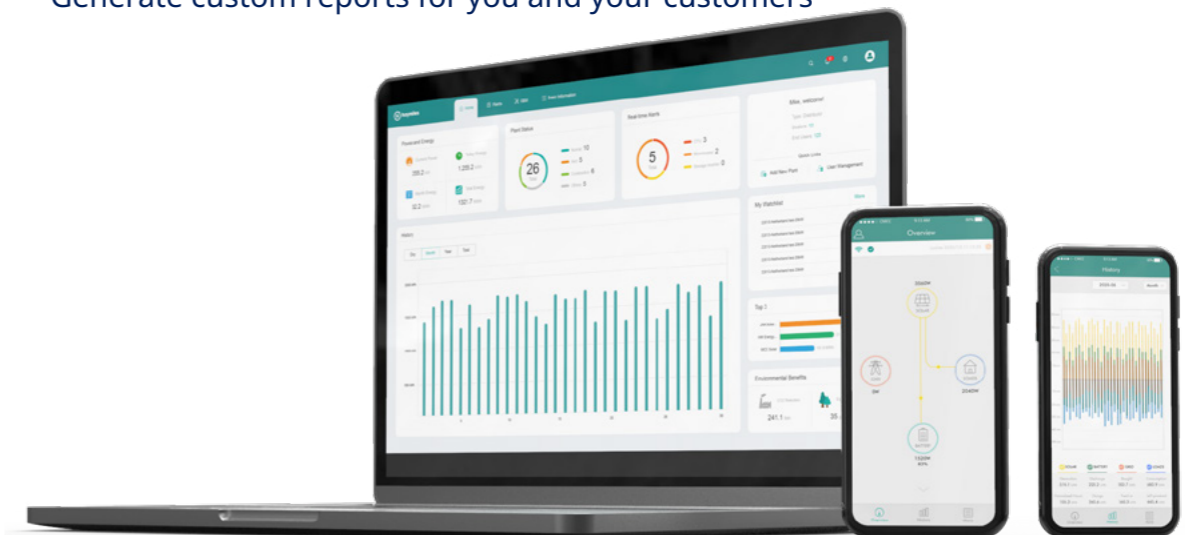
### 10 years warranty available

# 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. Maximize your performance, stay in control of your solar system, and make data-driven decisions at every stage.

- Visual data on your energy production and usage
- In-depth analytics to monitor where your energy usage is going
- Simple interface that makes managing and monitoring consumption easy
- Check on individual solar panels
- Track your monthly and lifetime energy production
- Proactive alerts to warn you of any issues
- See your environmental impact in one quick glance
- Monitor production over time and track the performance of your system
- Compare solar panel performance side-by-side
- Change settings with a simple click
- Monitor multiple plants from the same dashboard
- Generate custom reports for you and your customers



## Industrial and Commercial

# Running 100% on Solar and Supporting Forward-Thinking Businesses



When one partner wanted to build an ambitious roof-mounted power station while reducing Levelized Cost of Electricity (LCOE), they turned to Hoymiles' microinverters. The project was the first of its kind in South Africa, and the equipment used made it possible to build and operate a higher-yielding PV power station than ever before.

Working closely with our local distributor, we delivered high-performing MI-600 (2-in-1) microinverters that offer module-level monitoring and module-level MPPT. Hoymiles provided 22V startup voltage to ensure longer working time, up to 60V DC input to ensure 100% safety, and no DC wiring for a much easier installation at any scale.

### Project Success

Capacity: **158kW**

Location: Johannesburg, South Africa



Capacity: **31.5kW**

Location: Nova Scotia, Canada



### Commercial

Capacity: **48kW**

Location: Tallinn, Estonia



## BIPV

# Harnessing Solar for Building Integrated Photovoltaics

Building-Integrated Photovoltaics (BIPV) is an energy solution where solar panels can be used instead of a conventional rooftop. As a result, clean energy can be integrated into new buildings without disrupting architecture, cutting material costs and ensuring the long-term sustainability.

When the Shanghai Chongming Island Wisdom Valley Project needed to harness the power of clean energy as part of an integrated rooftop installation, Hoymiles' low-voltage, high-efficiency, convenient and reliable microinverters offered the perfect choice. Safe, efficient, waterproof and fireproof, this electricity-generating roof would perform for years to come.

### Project Success

Capacity: **398kW**

Location: Shanghai, China



Capacity: **8245kW**

Location: Shandong, China



Capacity: **15.28kW**

Location: Warsaw, Poland





Residential

# Powering Homes on Solar and Leading a Sustainable Life



Vini Vidi Vici is a villa in Bali. It encompasses rich function and is power-hungry. To cut back on energy costs and reduce carbon footprint, the owner decided to go solar and turn the villa into a green property. Hoymiles' compact and light-weighted microinverters offered the perfect balance between aesthetic and efficiency. They can be

reasonably laid out on the roof that has multiple orientations. The module-level MPPT is able to track and monitor each panel independently, ensuring that all panels work at their optimal status regardless of shading. This promised a good return on investment as the installation will have paid back for itself in about five years.

## Project Success

Capacity: **13.2kW**

Location: Bali, Indonesia



Capacity: **126.75kW**

Location: Ningxia, China



## Project Success

Capacity: **500kW**

Location: Yerevan, Armenia



Capacity: **4.08kW**

Location: Nicosia, Cyprus



Capacity: **63.6kW**

Location: Pärnu county, Estonia



## Project Success

Capacity: **30kW**

Location: Kyiv, Ukraine



Capacity: **2.4kW**

Location: Canet-en-Roussillon, France



Capacity: **3.6kW**

Location: Saubens, France



## Project Success

Capacity: **5.4kW**

Location: Luc-la-Primaube, France



Capacity: **15kW**

Location: Kuala Lumpur, Malaysia



Capacity: **15.84kW**

Location: Malabon City, Philippines



## Project Success

Solar Farm

Capacity: **35kW**

Location: Bangkok, Thailand



Golf Course

Capacity: **250kW**

Location: Ayutthai, Thailand



Commercial

Capacity: **15.36kW**

Location: Bangkok, Thailand



## Project Success

Farm Project

Capacity: **281kW**

Location: Central Missouri, US



Capacity: **29kW**

Location: Panama City



Capacity: **12kW**

Location: Sao Paulo



## Project Success

Capacity: **12kW**

Location: Goiania



Capacity: **36kW**

Location: Goiania



Capacity: **77.52kW**

Location: Goiania



## Project Success

Capacity: **3.02kW**

Location: Guadalajara



Capacity: **2.31kW**

Location: Mexico City



### Commercial

Capacity: **60kW**

Location: Morocco



## Project Success

Capacity: **117kW**

Location: Morocco



### Residential

Capacity: **7kW**

Location: Bystrzyca, Poland



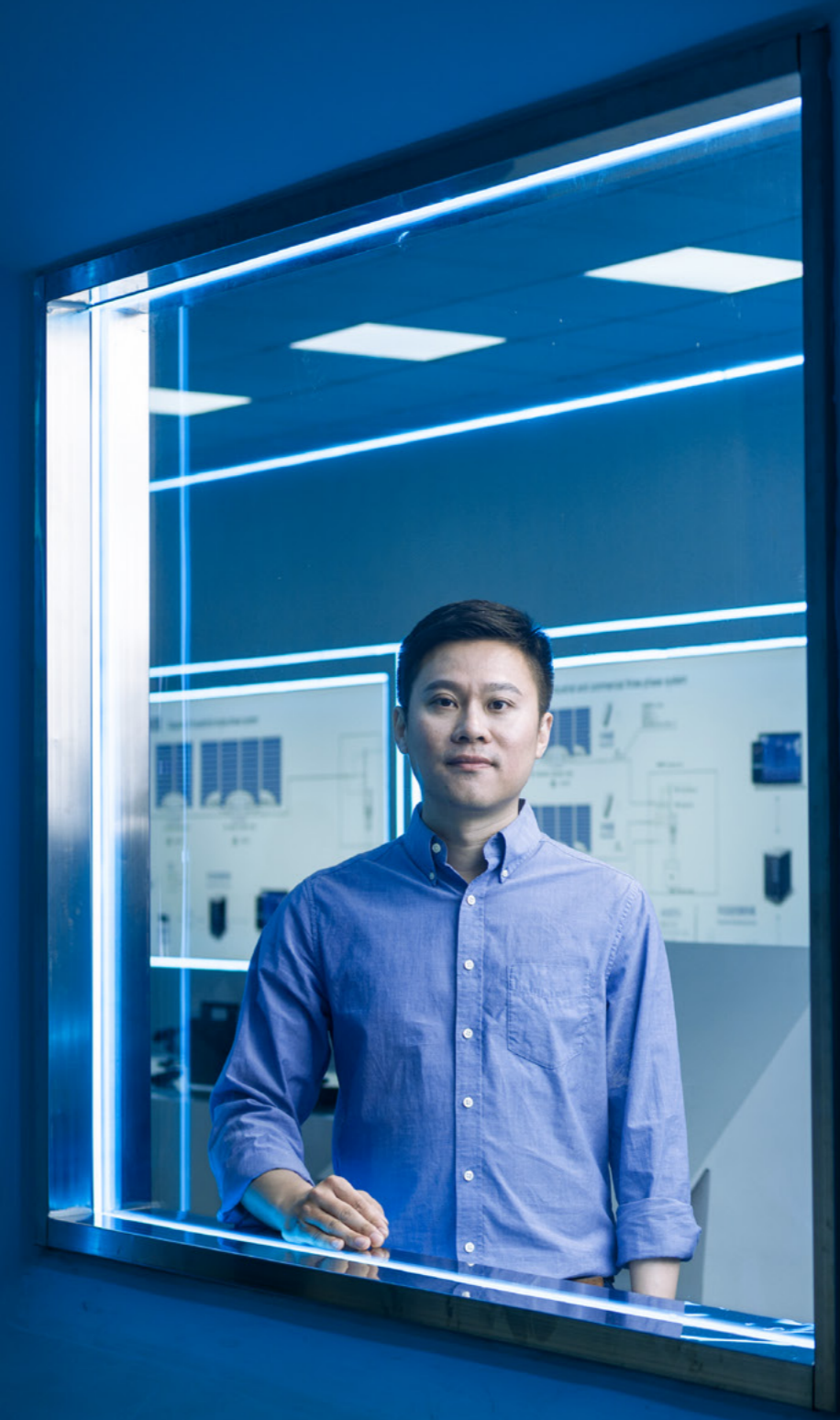
Capacity: **12kW**

Location: Wroclaw, Poland



# At Hoymiles, we're committed to creating sustainable energy for everyone.

Through research-backed solar system development, we're helping businesses and individuals reduce their energy emissions and optimize their spending. Our mission is to help more organizations tap into open energy sources, whether it's for a residential project or an industrial or commercial project.



## Contact Details

Hoymiles Power Electronics Inc.  
Floor 6, Building 5, 99 Housheng Road,  
Gongshu District, Hangzhou, P.R.China  
hoymiles.com

400-6281-653

info@hoymiles.com  
sales@hoymiles.com  
support@hoymiles.com

[LinkedIn](#) | [Facebook](#) | [Twitter](#) | [YouTube](#)

