

An aerial photograph of a vast forest at sunrise. The sun is low on the horizon, creating a bright glow and long shadows. A power line runs diagonally across the forest. The sky is a mix of blue and orange.

HOPEWIND UTILITY SOLUTION INTRODUCTION

A stylized red logo consisting of a square with a smaller square inside, resembling a lowercase 'h' or a similar symbol.

HOPEWIND

Shenzhen Hopewind Electric Co., Ltd.

Hopewind—Hope For A Greener World



VISION

- Become a world-class solution provider for power conversion and control.



VALUE

- Integrity and responsibility, open innovation, pursuit of excellence, collaborative growth.



MISSION

- Promote technological progress in the industry and create a better life for mankind.

Company Profile

2

Leading industries

Renewable energy
and electric drive

18 Years

Accumulated experience
on R&D, production, sales
and service

2017

IPO listing

on the Shanghai Stock
Exchange

180+ GW

Cumulative shipment of
renewable energy products

Hopewind—Hope for a Greener World

PV Power

String inverter
Central inverter
Transformer & inverter Combo



Wind Power

Doubly-fed converter
Full Power converter
Energy management system



Energy Storage System

PCS
Turnkey PCS station



Variable Frequency Drive

HV350/HV510/HV610
HV500/HD2000 low voltage
HD8000 medium voltage



Solar Power

1



TOP 7

Inverter Supplier in China

Inverters applied for the first **2GW** PV desertification control project in China.
Batch shipment of grid-forming inverters for **grid-forming** PV projects.



2



Tier 1

Photovoltaic Inverter Maker by BloombergNEF

The only Chinese inverter manufacturer **nominated for the smarter E AWARD 2024.**



3



A Comprehensive Product Range

String and centralized types,
inverter power classes range from **3kW to 3.125MW.**
listed and certified in global Markets.

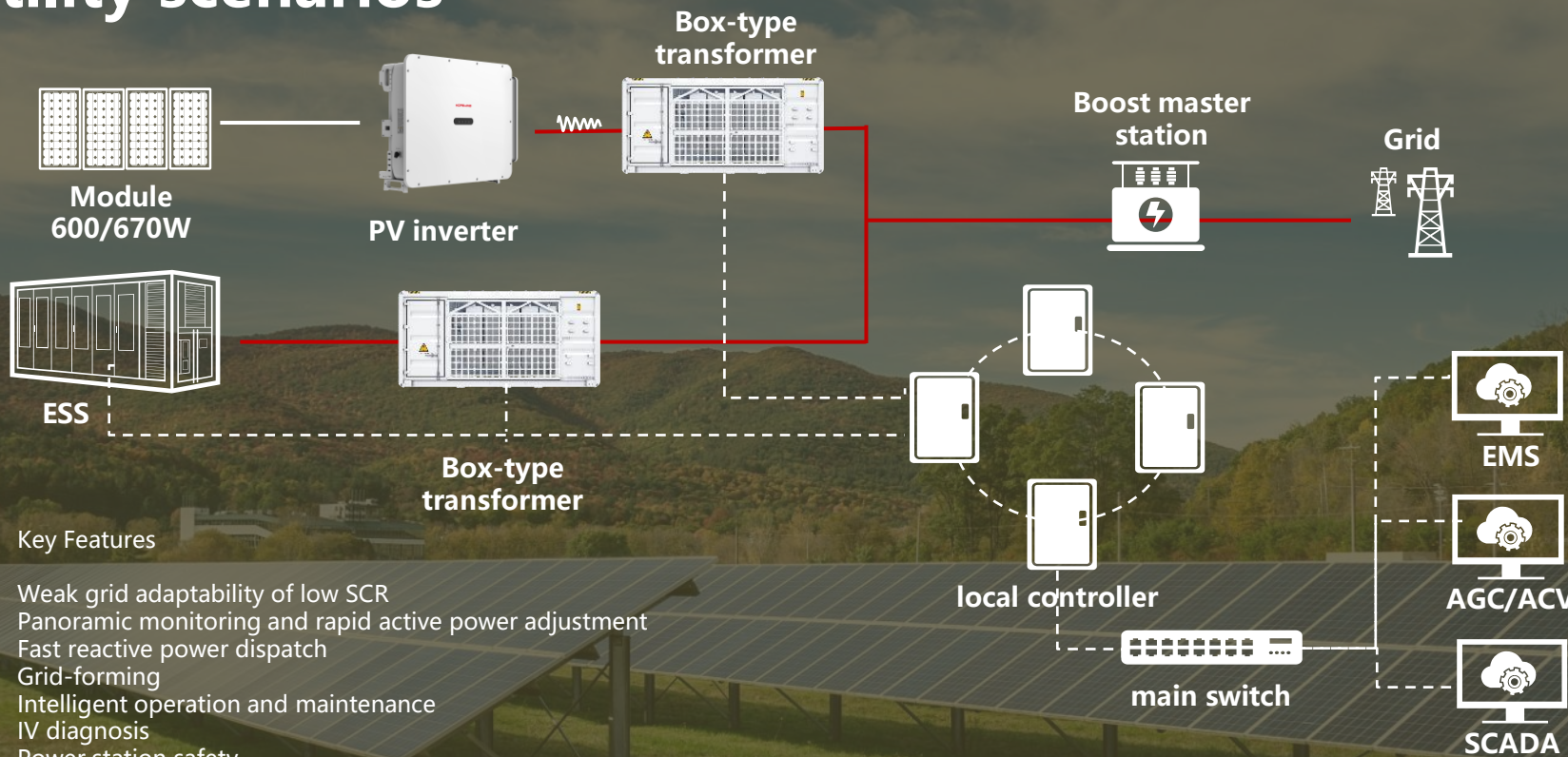
4



Extensive Distribution Channels

Developed distribution channels both on-line and off-line in **South America, APAC** and **EMEA** regions.




Utility scenarios



Key Features

- Weak grid adaptability of low SCR
- Panoramic monitoring and rapid active power adjustment
- Fast reactive power dispatch
- Grid-forming
- Intelligent operation and maintenance
- IV diagnosis
- Power station safety

Utility Product

<p>hopeSunHV 250KTL</p> 	<p>hopeSunHV 250KTL</p> <p>DC input: 500~1500V AC output: 800V(3P+PE) Max. Input Current Per MPPT:45A Max. Efficiency: 99.01% Protection: IP66 Operating Temp Range: -25~+60°C Cooling System: Smart air cooling Communication: RS485 / PLC</p>
<p>HSHV320/330/350/385K-G01</p>  <p>DC input: 500~1500V AC output: 800V(3P+PE) Max. Input Current Per MPPT:60A Max. Efficiency: 99.01% Protection: IP66 Operating Temp Range: -25~+60°C Cooling System: Smart air cooling Communication: RS485 / PLC</p>	<p>HSHV/330/350/385K-G02</p>  <p>DC input: 500~1500V AC output: 800V(3P+PE) Max. Input Current Per MPPT:65A Max. Efficiency: 99.01% Protection: IP66 Operating Temp Range: -25~+60°C Cooling System: Smart air cooling Communication: RS485 / PLC</p>
<p>HSHV320/330/350/385K-G02</p>	

Solution and Value Presentation



**HSHV330/385K-
G01**

■ Low investment, high efficiency

- highest power inverter of the market, no derating in the ambient temperature of **40°C**
- Compatible with all modules (182mm/210mm/bifacial/N-type) and achieve 150% DC/AC ratio
- Supports aluminum AC cable connections
- Integrated PID recovery function, Maximum efficiency of **99.01%**, European efficiency of **98.70%**

■ Enhanced grid connectivity and environmental adaptability

- Integrated with DC/AC lightning protection
- Minimum SCR of **1.03**, exhibiting excellent adaptability to weak grids
- IP66
- Night SVG(optional)

■ Lower cost for post-installation maintenance

- 24/7 real-time monitoring through the APP and cloud-based HopeCloud platform
- Fuse-free design with intelligent DC shutdown
- Intelligent IV curve diagnosis + intelligent string monitoring
- Supports PLC communication + remote firmware upgrades

Certification



HSHV320~385K-G01

IEC/EN 62109-1, -2

IEC/EN 61000

EN 62920

EN 55011

IEC 62116; IEC 61727

IEC 60068-2

IEC 61683

EN 50530

EN 50549

IEC 63027

CEA

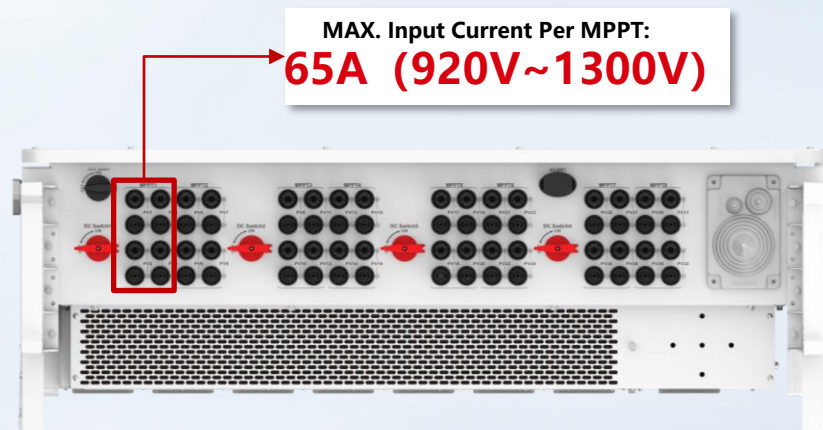
OND

MEA,PEA

Compatible With All Mainstream Components

Hopewind Solution

- High current **65A** can adapt to all mainstream photovoltaic modules on the market.



- Achieve DC/AC ratio up to **1.5**

FAQ

- A common problem faced by customers is that inverters from some other brands cannot adapt to the new versions of PV modules.

Solution Advantages



182mm ✓



210mm ✓



Bifacial ✓



type N ✓



More flexible component procurement, convenient technology upgrade and maintenance.



Inverters with high capacity ratio can reduce system costs.

Supports Aluminum Cable

Hopewind Solution



Aluminum Cable



Copper Cable



FAQ

Customers may consider the price and cost-effectiveness of cable materials to fit their budget and financial needs.

Solution Advantages



Low cost: For large inverter systems or long cable connections, using aluminum cables can reduce costs to a certain extent.



Light weight: Aluminum cables are much lighter than copper cables, making them easier to handle.

Higher Adaptable

Hopewind Solution



■ Minimum SCR ≥ 1.03

The SCR is the system short-circuit capacity: (short-circuit current \times short-circuit voltage)/equipment capacity, which represents the anti-interference ability.. Generally, the closer the SCR value is to **1**, the stronger the inverter's ability to adapt to weak grid conditions.

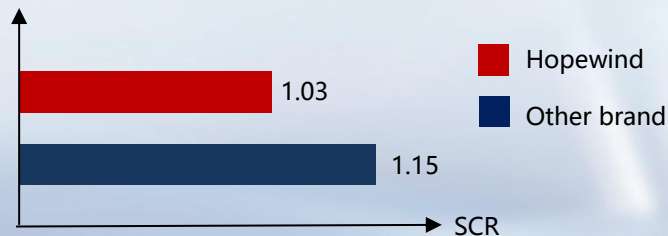
FAQ



- Mountainous and remote areas, In mountainous and remote areas, the power grid quality is poor.

Solution Advantages

Even in mountainous and remote areas, it can adapt to poor quality power grids.



Ensure Safety

Hopewind Solution

◆ Personal Security

Device integrated residual leakage current detection function. Personnel contact safety.



◆ Fire Security

Inverter integrates AFCI and DC switch to quickly identify arcs and shut them down to prevent fires.



◆ Device Security

Equipped with type II SPD to effectively protect photovoltaic inverters from lightning damage

FAQ

◆ Will operation and maintenance personnel face the risk of electric shock?



◆ Why do component fires often occur?



◆ Lightning strikes cause damage to the inverter's electronic components and circuits.



Solution Advantages



Operation and maintenance personnel can monitor leakage current in real time and receive alarm notifications to avoid potential safety risks.



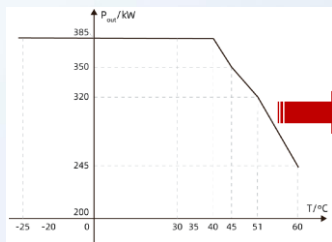
Extend the life of PV panel and reduce the frequency of repairs and replacements. Prevent fire.



Type II SPD can quickly make overvoltage events and guide the overvoltage to ground through an appropriate path.

Adapt To Harsh Environments

Hopewind Solution



-25°C~+60°C: It can still operate up to 60°C.



IP66: The inverter has efficient dustproof performance and excellent waterproof performance

C5: Anti-corrosion protection

FAQ



The country is located in a high temperature zone. Or in a desert area with high temperatures.



High dust or high humidity environment



The salt and moisture from the sea corrode the metal parts on the surface of the inverter.

Solution Advantages

	Hopewind	A	B
1. 350K	45°C	30°C	30°C
320K	60°C	40°C	40°C

2. Allow the inverter to operate in deserts, rivers and lakes and other dusty or moist environments.

3. Allows the inverter to operate normally in highly corrosive environments like the seaside

IV Curve Scan+ Fault Waveform Record

Hopewind Solution



IV curve scan



Fault waveform record

FAQ

- Want to understand the current-voltage characteristics of the string in an intuitive way.
- Fault recording can record the waveform data of the inverter during a fault event, including parameters such as current, voltage, and power. The customer wants to identify and locate fault causes in the inverter system by analyzing fault wave recording data.

Solution Advantages

- By scanning the IV curve of a solar panel, customers can detect and diagnose faults in PV panels.
- Customers can analyze panel efficiency and predict system energy yields.
- Help customers quickly diagnose faults.
- Fault recording data can be used for early warning and preventive maintenance of faults.

Case

High temperature scene



Photovoltaic power station



Kubuqi Desert

The maximum temperature reaches above **45°C**

High humidity scene



Photovoltaic power station



Vietnam

Proximity to pond, high **humidity**

High altitude scene



Photovoltaic power station



Xizang

The maximum altitude reaches above **4,000m**

Low temperature scene



Photovoltaic power station



Heilongjiang

The minimum temperature reaches **-25°C**

High dust scene



Photovoltaic power station



Inner Mongolia

Located in the suburbs, high **dust** scene

Mountainous scene



Photovoltaic power station



Shanxi

Located in high mountains, **rugged** environment

HOPEWIND

2GW

Photovoltaic Desertification Control
Project in Kubugi, Inner Mongolia

350kW String Inverter ▶▶▶



The Kubuqi Photohydrogen Desertification Control **2GW** Project

➤ Inner Mongolia Kubuqi Desert

Average annual power generation is **4** billion kWh

SCR **1.03** has strong adaptability to weak power grids

IP66 high protection degree

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360MW

Photovoltaic Composite Project in
Zhenkang, Lincang, Yunnan Province

◀◀◀ 350kW String Inverter



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300MW

Photovoltaic Composite Project in
Boshang, Lincang, Yunnan Province

350kW String Inverter ▶▶▶



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200MW

Agricultural-Photovoltaic Complementary
Project in Baoshan, Yunnan Province

320kW String Inverter ▶▶▶

HOPEWIND

200MW

Mountainous Distributed Photovoltaic Project in
Qinxian, Changzhi, Shanxi Province

◀◀◀ 225kW String Inverter



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200MW

Ningxia Zhongwei Zhongning Photovoltaic
Composite Project

◀◀◀ 225kW String Inverter




HOPEWIND

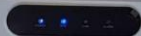
158MW

Agricultural-Photovoltaic Complementary Project in
Yangjiang, Guangdong Province

◀◀◀ 225kW String Inverter

 Hopewind

N24NB13





Hunutlu **100MW** Project

- **Emba Hunutlu power station Adana Province, Türkiye**
Hopewind 250KTL String Inverter



HOPEWIND

100MW

Heiyanwa Photovoltaic Project in
Baoshan, Yunnan Province

320kW String Inverter ▶▶▶

HOPEWIND

100MW

Ganhekou Photovoltaic Project in
Guazhou, Jiuquan, Gansu Province

225kW String Inverter ▶▶▶



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100MW

Guizhou Liupanshui
Photovoltaic Power Station Project

350kW String Inverter ▶▶▶



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160MW

Photovoltaic Power Plant Project in
Yongsheng, Lijiang, Yunnan Province

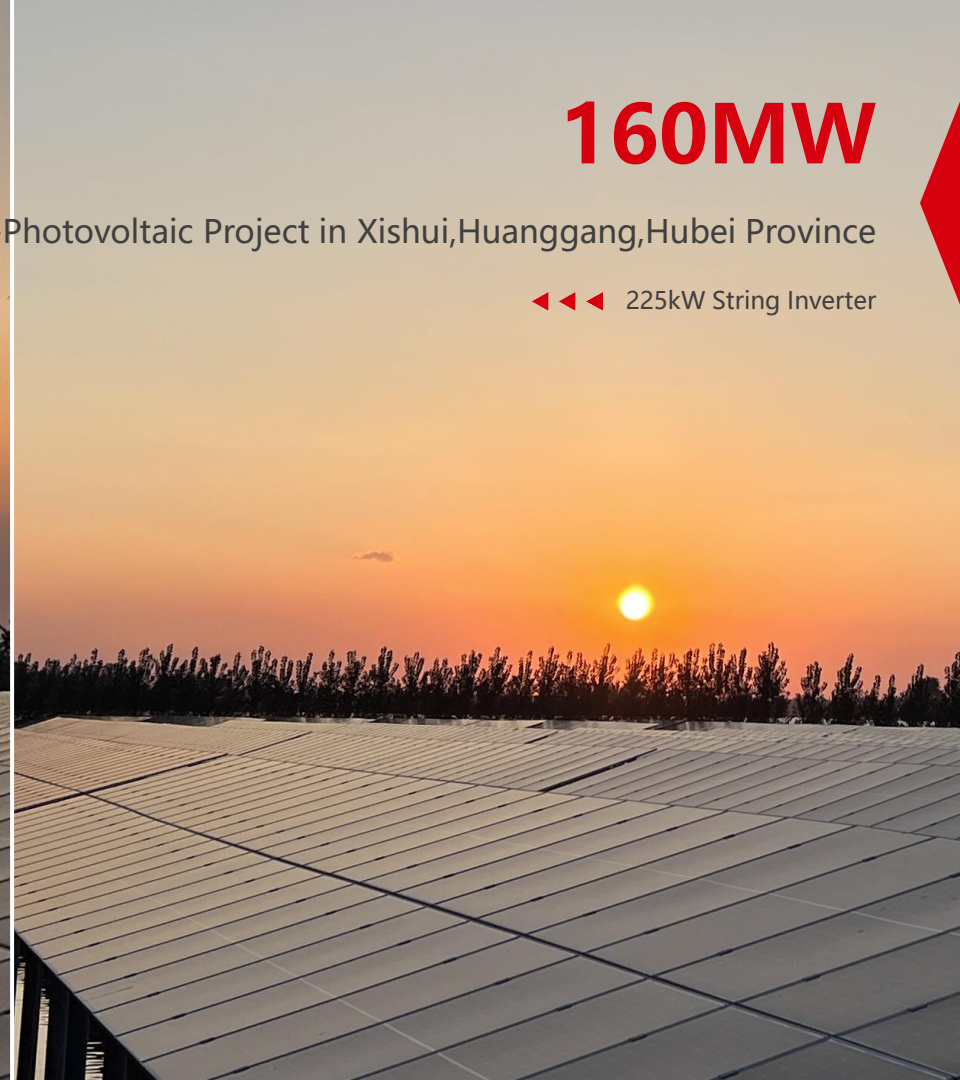
225kW String Inverter ▶▶▶

HOPEWIND

160MW

Fishery-Photovoltaic Project in Xishui, Huanggang, Hubei Province

◀◀◀ 225kW String Inverter



50MW

Yuci District Photovoltaic Project in
Jinzhong, Shanxi Province

225kW String Inverter ▶▶▶

HOPEWIND

100MW

Forest-Photovoltaic Project in kelan,Xinzhou,Shanxi Province

◀◀◀ 225kW String Inverte



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11MW

Rehabilitation of PV Poverty
Alleviation Project in Tongren, Qinghai
Province

125kW String Inverter ▶▶▶



HOPEWIND

200MW

Ningxia Tongxin Xiamaguan 200MW
Photovoltaic Sand Control Project

◀◀◀ 225kW String Inverter



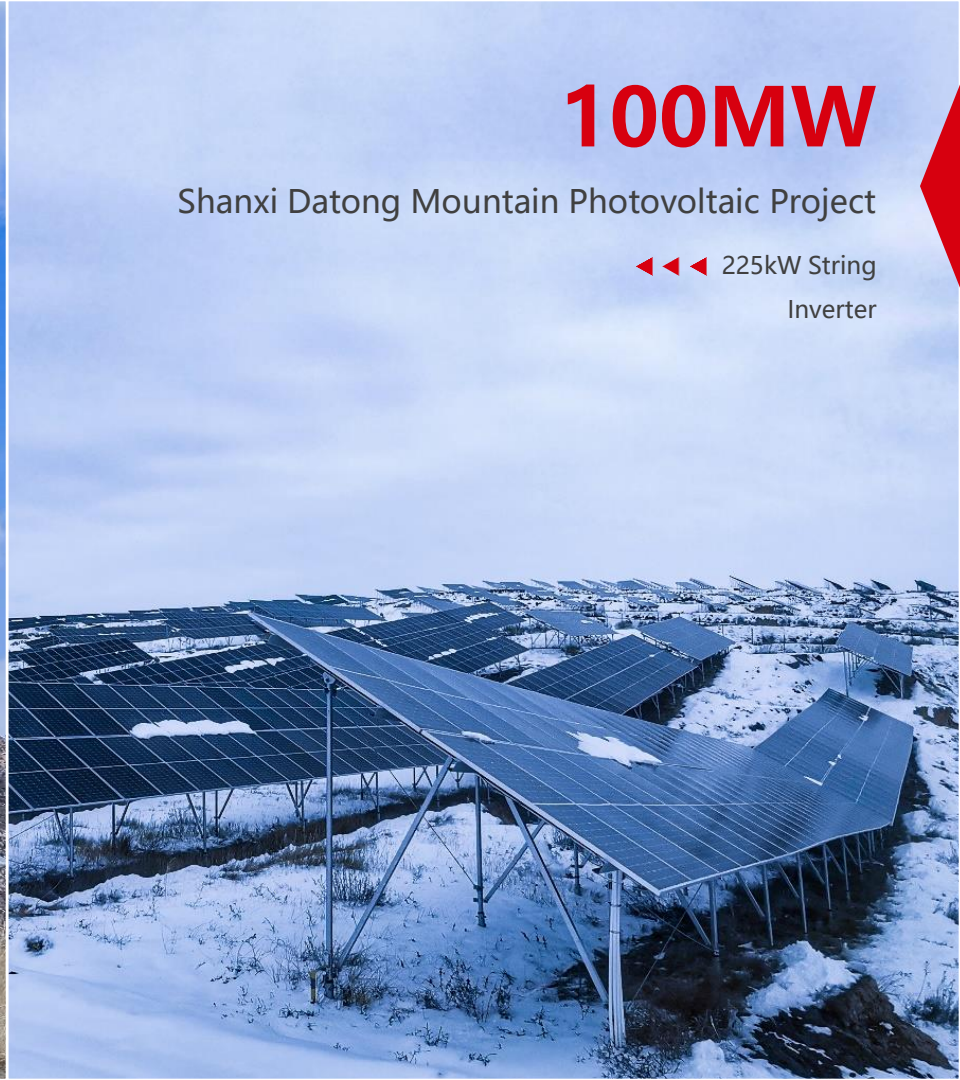
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100MW

Shanxi Datong Mountain Photovoltaic Project

◀◀◀ 225kW String
Inverter



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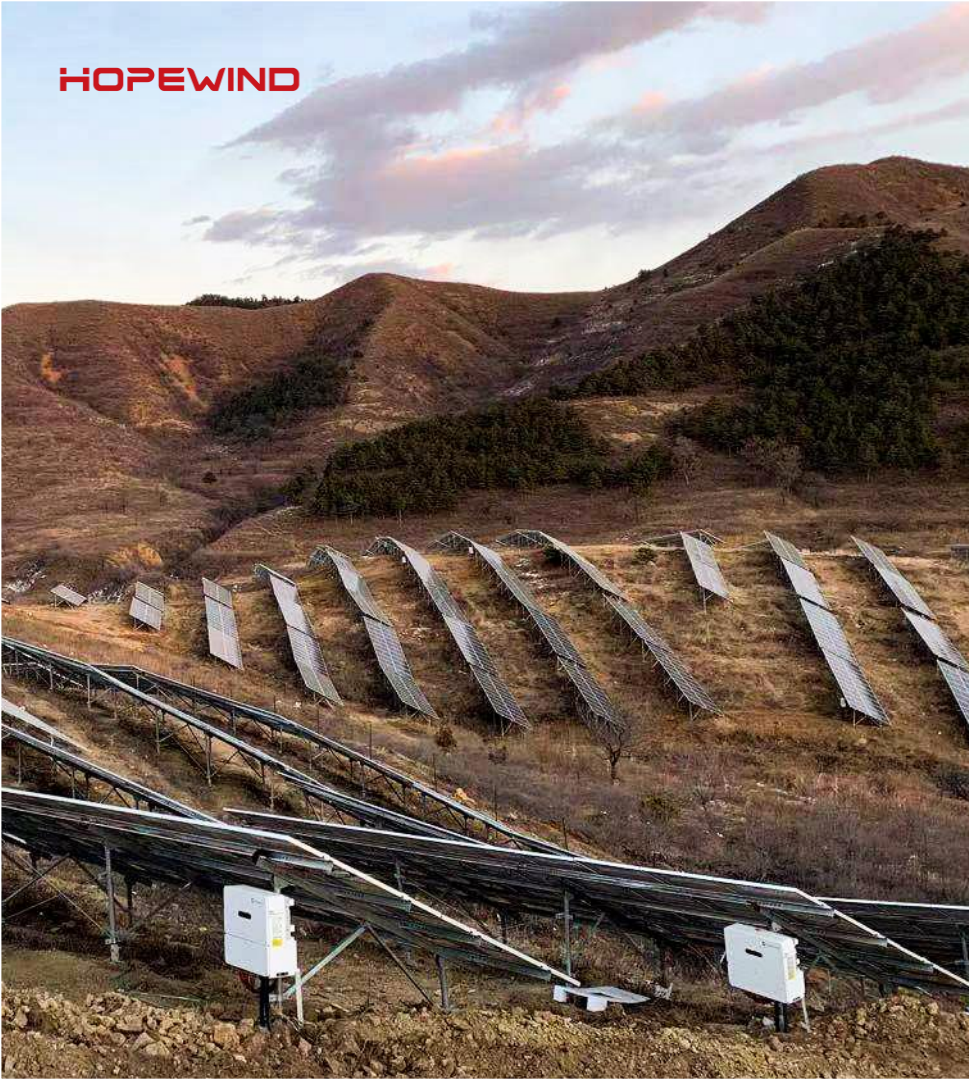
80MW

Agricultural -Photovoltaic Complementary
Project in Lincang, Yunnan Province

225kW String Inverter ▶▶▶



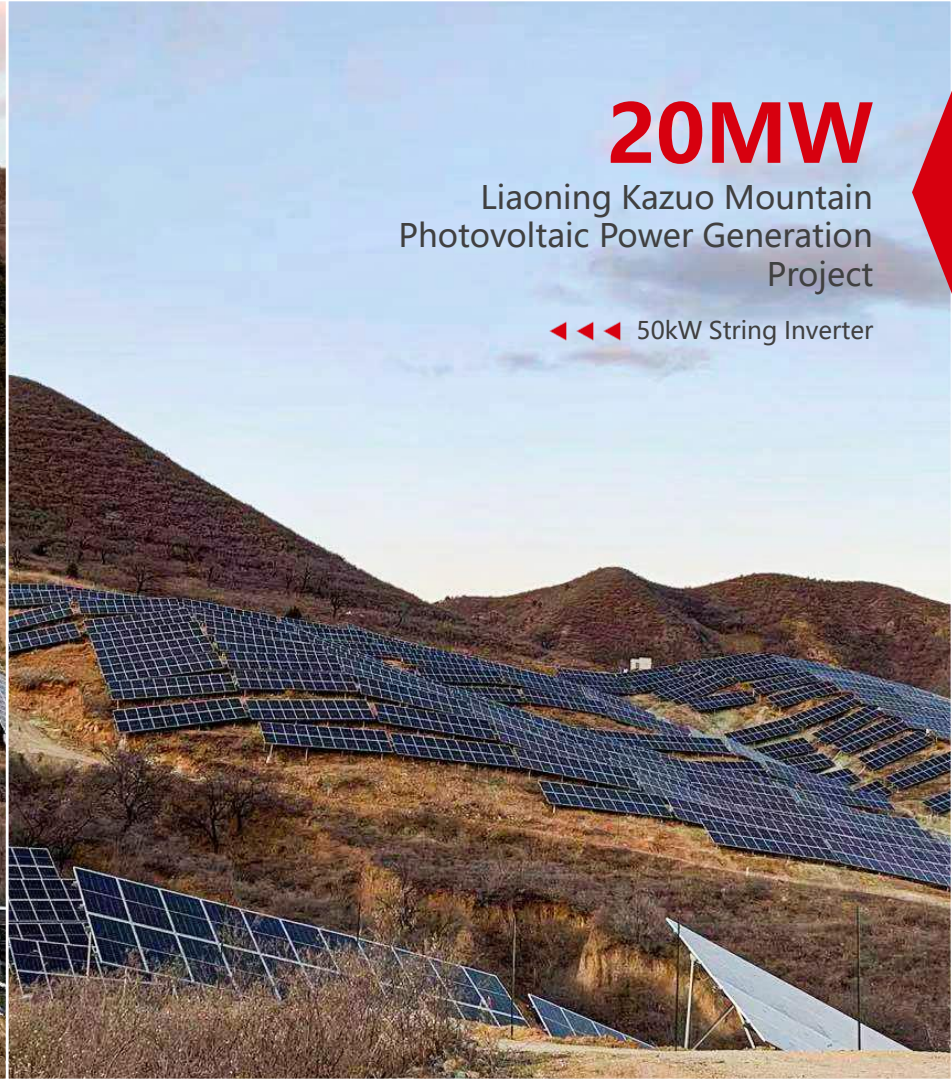
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20MW

Liaoning Kazuo Mountain
Photovoltaic Power Generation
Project

◀◀◀ 50kW String Inverter



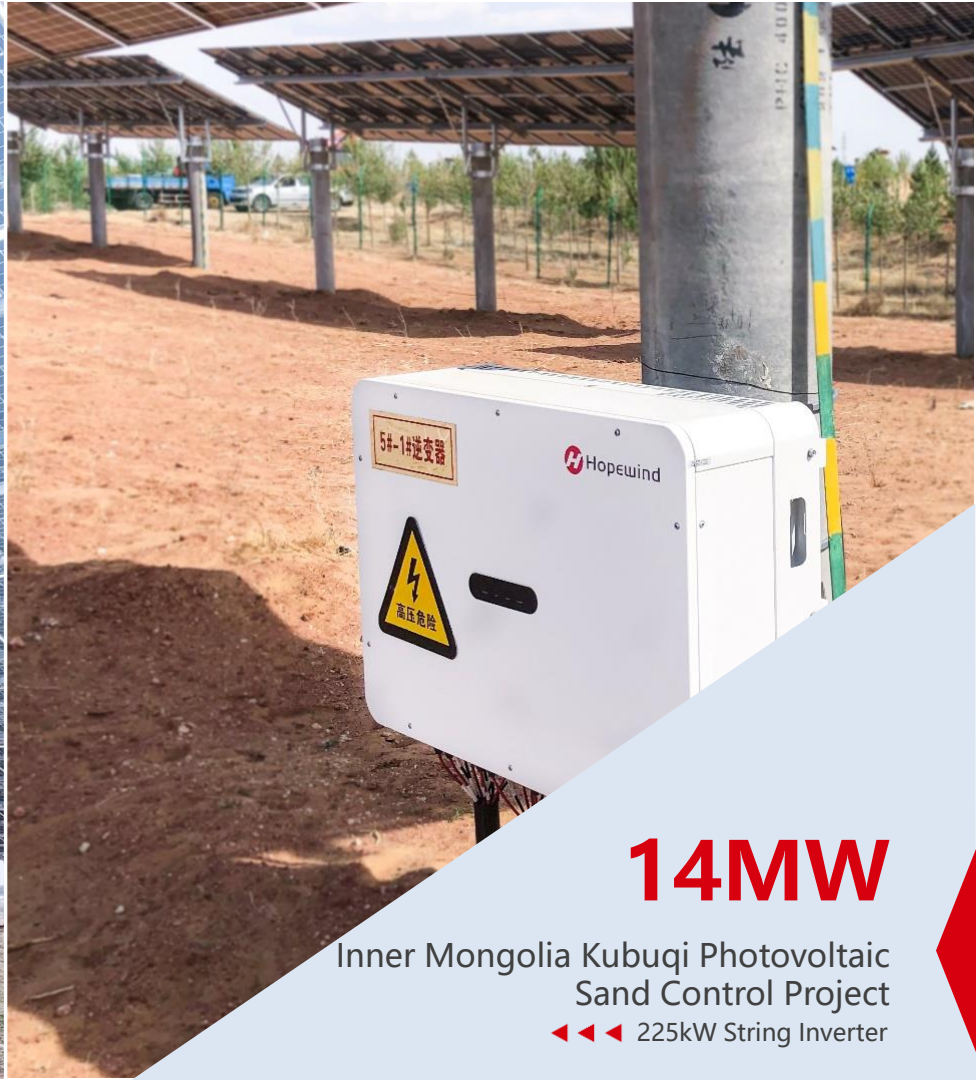
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78MW

Anhui Maanshan PV ground station Project

3.125MW / 2.5MW Centralized Inverter

225kW String Inverter ▶▶▶



14MW

Inner Mongolia Kubuqi Photovoltaic
Sand Control Project

◀◀◀ 225kW String Inverter

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2.1MW

Photovoltaic Project in Jixian, Heilongjiang
Province

◀◀◀ 350kW String Inverter

String-C&I



HOPEWIND



417.6kW

Shenzhen Airport Floating Photovoltaic Project

110kW String Inverter ▶▶▶



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5.18MW

Infinitus Yingkou Plant Photovoltaic Project
in Shandong Province

◀◀◀ 110kW/60kW String Inverter



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660kW

Post Logistics Sorting Center Photovoltaic
Project for Yishui Bus Station, Shandong Province

110kW String Inverter ▶▶▶



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9.5MW

Jiangsu Xuzhou High-Tech Industrial
Development Zone C&I PV Project

50kW/60kW/100kW/110kW String Inverter ▶▶▶



17MW

Shandong Qingdao Commercial
and Industrial Rooftop PV Project

◀◀◀ 50kW/110kW/320kW/350kW String Inverter

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6.4MW

Jiangsu Xuzhou Rooftop
Distributed Photovoltaic Project

225kW/320kW String Inverter ▶▶▶

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6.5MW

Liaoning Dalian Distributed
Photovoltaic Project

◀◀◀ 225kW String Inverter



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10MW

Jiangchuan District String Inverter
Photovoltaic Project in Yuxi, Yunnan Province

◀◀◀ 225kW/320kW String Inverter



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15.78MW

Distributed Photovoltaic Project in
Guangrao, Dongying, Shandong Province

350kW String Inverter ▶▶▶



HOPEWIND

9.5MW

Distributed PV Project in Shizuishan, Ningxia

◀◀◀ 33kW/50kW/110kW String Inverter



HOPEWIND



15MW

Tianjin C&I Photovoltaic Power
Generation Project

225kW String Inverter ▶▶▶



HOPEWIND

7.361MW

Guangdong Zhaoqing XEDA Shoe Industry C&I Rooftop PV Project

◀◀◀ 225kW / 125kW / 80kW String Inverter



HOPEWIND



5.9MW

Liaoning Yingkou Thermal Power Plant Rooftop

+ Ground PV Power Project

◀◀◀ 225kW / 80kW String Inverter



HOPEWIND



4.25MW

Guangdong Shanwei Haifeng Distributed
Photovoltaic Project

◀◀◀ 225kW String Inverter



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2.6MW

Shaanxi Xi'an Locomotive Maintenance
Section Distributed Photovoltaic Project

110kW / 50kW / 33kW String Inverter ▶▶▶



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1.26MW

Zhejiang Huzhou C&I Photovoltaic Rooftop Project

◀◀◀ 100kW / 110kW String Inverter



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1.3MW

Zhejiang Wenzhou Rooftop Distributed Photovoltaic Project

◀◀◀ 100kW / 110kW String
Inverter



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2.21MW

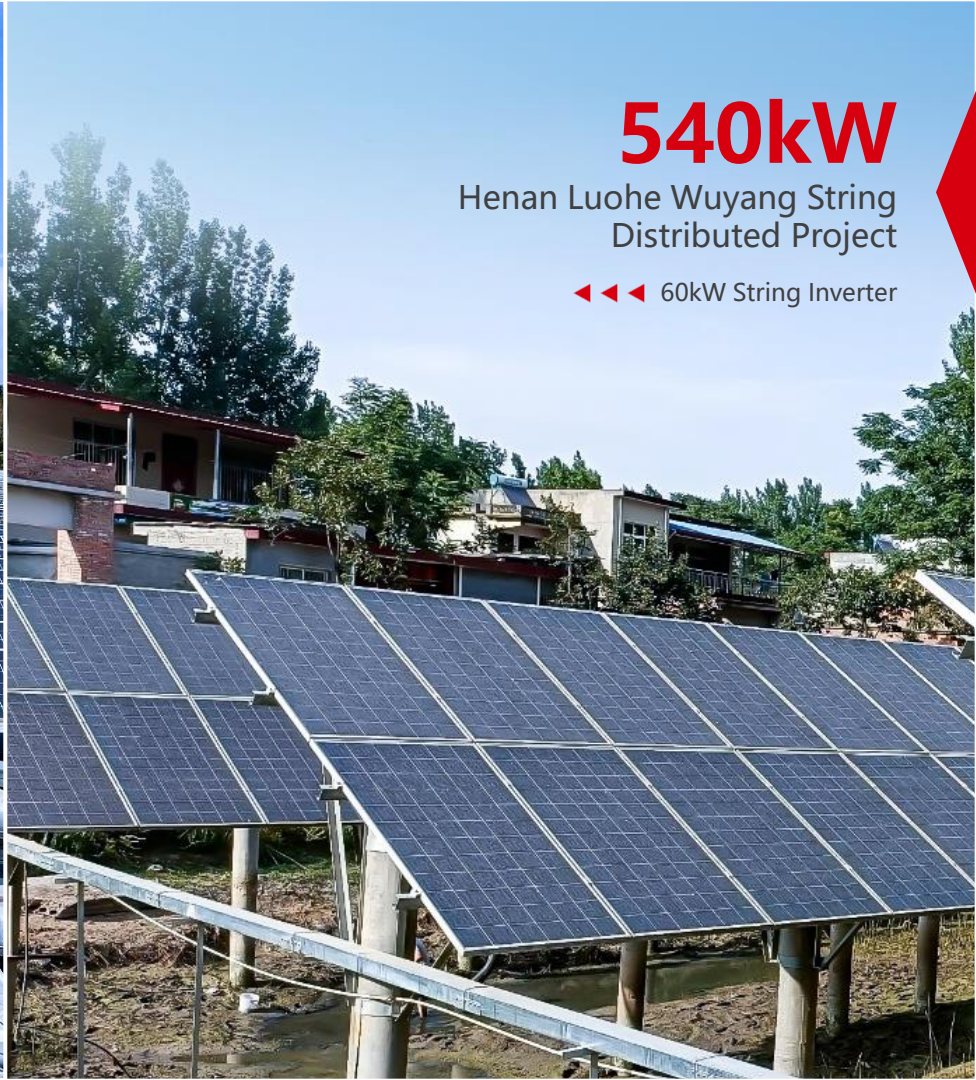
Yunnan Wenshan Photovoltaic Power
Generation Project

100kW、70kW、50kW String Inverter ▶▶▶

540kW

Henan Luohe Wuyang String
Distributed Project

◀◀◀ 60kW String Inverter



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9MW

Huizhou 9MW C&I Rooftop Photovoltaic Project

◀◀◀ 22kW / 30kW / 60kW / 100kW / 110kW String

Inverter

HOPEWIND

10MW

C&I Rooftop Photovoltaic Project in Zhangzhou, Fujian Province

◀◀◀ 225kW String Inverter



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6.358MW

C&I Rooftop Photovoltaic Project in Nantong, Jiangsu Province

◀◀◀ 350kW String Inverter

HOPEWIND



3.1482MW

C&I Rooftop Photovoltaic Project in
Suzhou, Jiangsu Province

◀◀◀ 225kW String Inverter

HOPEWIND

4.8MW

C&I Rooftop Photovoltaic Project in
Wuxi, Jiangsu Province

225kW String Inverter ▶▶▶



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6MW

C&I PV Project in Junhan Industrial
Park, Huizhou, Guangdong Province

◀◀◀ 225kW String Inverter

HOPEWIND

5MW

High voltage grid connection C&I PV
Project in Fuzhou, Fujian Province

◀◀◀ 225kW String Inverter



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480MW

Shandong Dezhou Qihe Whole County Promotion Project

◀◀◀ 10kW~110kW String Inverter



Anhui Province



Shandong Province



Shanxi Province



Zhejiang Province



**Hebei
Province**



**Henan
Province**



Tibet



Overseas Cases



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1.35MW

Ground-Mounted Solar Plant at a Textile
Factory in Paldi Kankaj, Gujarat, India

◀◀◀ 110kW String Inverter



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30MW

Sand Town Solar 30MW Project in
Perak, Malaysia

◀◀◀ 385kW String Inverter, MV Transformer Station



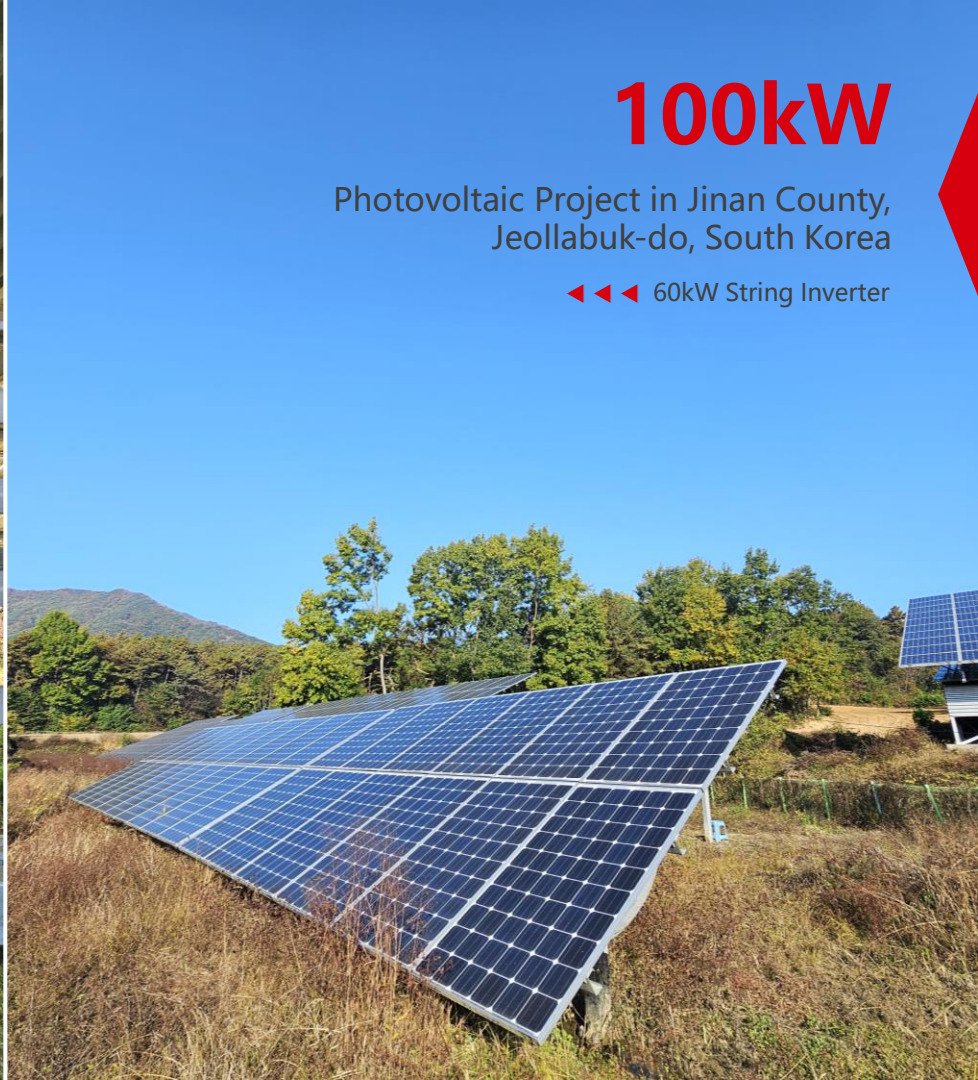
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100kW

Photovoltaic Project in Jinan County,
Jeollabuk-do, South Korea

◀◀◀ 60kW String Inverter



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83kW

C&I Photovoltaic Project at a chemical
factory in Bharuch, India

75kW String Inverter ▶▶▶

HOPEWIND

300kW

C&I Photovoltaic Project in Gyeongsangnam-do, South Korea

◀◀◀ 110kW String Inverter



HOPEWIND

200kW

Privately Invested Power Station in Gyeongsangnam-do, South Korea

◀◀◀ 60kW String Inverter



HOPEWIND



40kW

C&I Photovoltaic Project in Inje City,
Gangwondo, South Korea

60kW String Inverter ▶▶▶



100kW

C&I Photovoltaic Project in Jinju City,
Gyeongnam, South Korea

◀◀◀ 60kW String Inverter

HOPEWIND



200kW

Photovoltaic Project in Kimje-City,
Jeonbuk, South Korea

110kW String Inverter ▶▶▶



135kW

Photovoltaic Project in Hapcheongun,
Gyeongnam, South Korea

◀◀◀ 60kW / 110kW String Inverter

HOPEWIND



260kW

Photovoltaic Project in Cheongju-City,
Chungbuk, South Korea

◀◀◀ 60kW / 110kW String Inverter

HOPEWIND

100MW

Hunutlu Power Plant in Adana, Turkey

40kW/50kW/60kW/225kW String Inverter ▶▶▶



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12MW

Tutqu-Doku SPP PV project in Turkey

◀◀◀ 110kW String Inverter

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2.7MW

Turket Meat Factory C&I PV Project in
Bursa, Turkey

◀◀◀ 100kW String Inverter

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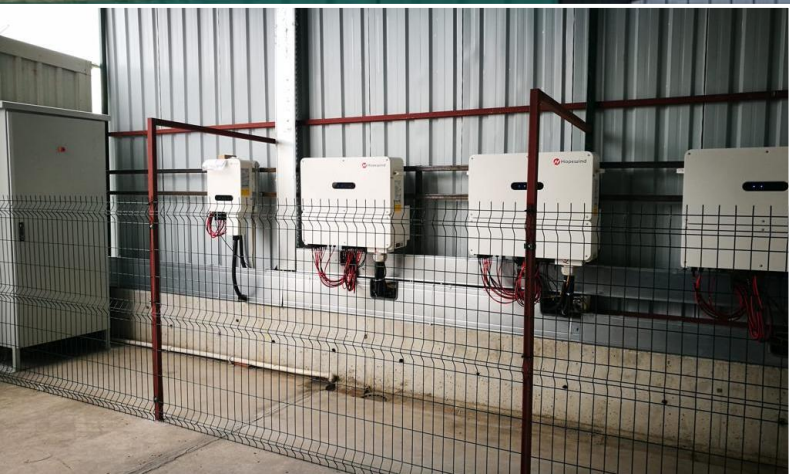


1MW

PV project in Pyeongchang, Gang
won-do, South Korea

◀◀◀ 50kW String Inverter

HOPEWIND



1.56MW

Greenwatt Factory C&I PV project
in Bursa, Turkey

◀◀◀ 60kW/110kW String Inverter

HOPEWIND

5MW

PV Project in Van city, Turkey

◀◀◀ 110kW String Inverter



HOPEWIND



2.7MW

Pronen Factory PV Project in
Denizli, Turkey

◀◀◀ 100kW String Inverter



1.2MW

C&I PV Project in izmir, Turkey

◀◀◀ 100kW String Inverter

HOPEWIND



689kW

Textile Factory PV Project in Turkey

◀◀◀ 75kW/100kW String Inverter

HOPEWIND



360kW

Turkey

◀◀◀ 60kW String Inverter

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1.6MW

Turkey



HOPEWIND



Residential Case

Vietnam

◀◀◀ 8kW String Inverter

HOPEWIND

Residential Case

Vietnam

◀◀◀ 8kW String Inverter



HOPEWIND

C&I Case

Vietnam

◀◀◀ 70kW String Inverter



HOPEWIND



1MW

Vietnam

70kW String Inverter ▶▶▶

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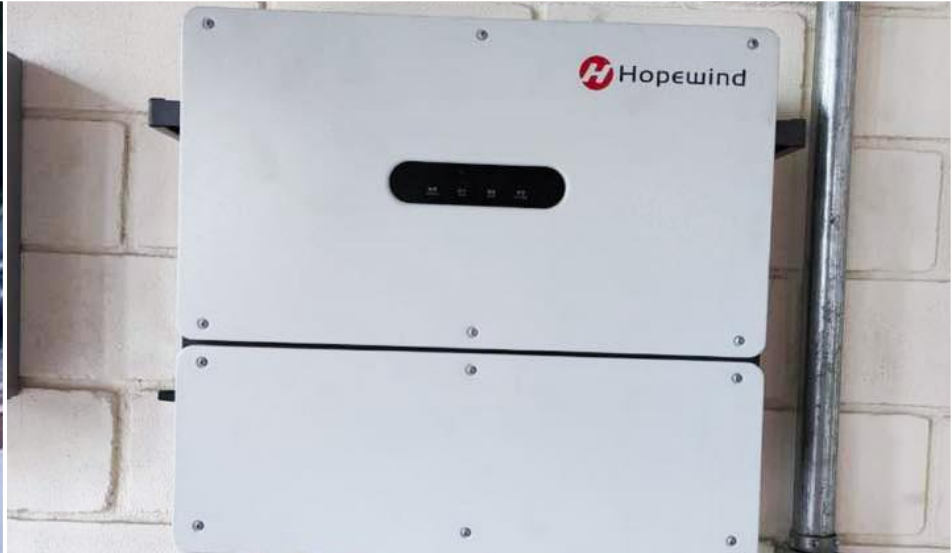


C&I Case

Brazil

12kW / 20kW / 30kW / 60kW String Inverter ▶▶▶

HOPEWIND



Residential Case

Brazi

8kW / 30kW / 36kW / 75kW String Inverter ▶▶▶

HOPEWIND

Residential Case

Brazil, Pakistan

◀◀◀ 5kW / 8kW / 10kW String Inverter



HOPEWIND



700kW

South Korea

◀◀◀ 50kW String Inverter

HOPEWIND

Solar Power Plant

South Korea

◀◀◀ 50kW String Inverter

HOPEWIND

HOPE FOR A GREENER WORLD

THANK YOU

HOPEWIND

THANK YOU

180GW+ SHIPMENTS WORLDWIDE

