ESTAR ENERGY

HERF

Micro Inverters

Micro All-in-one ESS

All-in-one ESS

Hybrid Inverter

Storage Battery

Balcony Solar System

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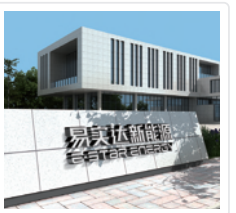
ESTAR ENERGY



Xiamen E-star Energy Co., Ltd. established in 2003, focuses on providing advanced decentralized photovoltaic products, energy storage products and smart energy management solutions for residential and commercial users. Main products include Micro inverter, All-in-one ESS, Hybrid inverter and balcony solar system.

The company's products certified the German TUV certification, the European CE certification, the United States UL certification, Australia SAA certification, Japan certification. Customers throughout the America, Europe, Asia regions and countries, so that thousands of residential and commercial owners benefits from photovoltaic and energy storage systems.

E-star Energy is actively exploring in the field of decentralized photovoltaic system and energy storage system, is committed to helping users improve the rate of self-generation and self-use, and work together to establish a friendly global green ecological environment.

60+
Export Countries

200+
R&D Engineers

150+
Patents

1000+
Group Staff

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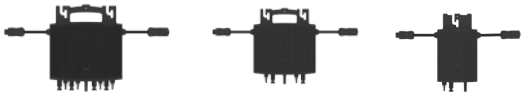
PRODUCT RANGE

Micro Inverter



4 in 1 unit | 2 in 1 unit | Single unit

Balcony Solar System

Single Panel Hanging PV System | Dual Panel Hanging PV System | Single Panel Hanging & Standing PV System | Dual Panel Hanging & Standing PV System

Micro All-in-one ESS

Single Phase

All-in-one ESS

Single Phase | Three Phases | American Standard | Single Phase

Hybrid Inverter

Single Phase - Low Voltage | Single Phase - High Voltage | Three Phase - High Voltage | Three Phase - High Voltage | Three Phase - High Voltage

Storage Battery

Wall Mounting -Low Voltage | Low Voltage | High Voltage | High Voltage

Advantages Of
Estar MLPE Microinverters

Intelligence
Component level monitoring - open a new era of efficient operation and maintenance: unattended

Efficient
Component level MPPT, to eradicate the short plate effect of wooden barrel;
Wide working voltage range, extended power generation time and improved power generation efficiency

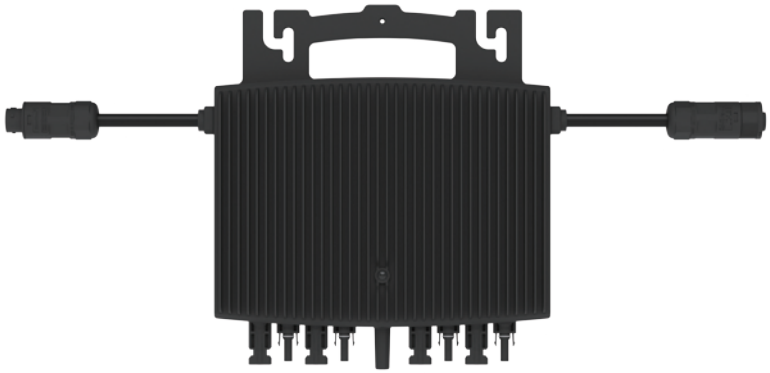
Security
DC side voltage is lower than 60V, without DC high voltage;
Safer for rooftop solar stations with rapid shutdown compliance and isolated transformer;
Enclosure protection grade: IP67

Reliable
Distributed architecture, no single point of failure, higher system reliability

Harvest the Yield for EACH of Your PV Modules
Estar MLPE (Module-level Power Electronics)

Microinverter

4 in 1 unit



HERF-1200 / HERF-1600 / HERF-1800

High CEC Efficiency 96.5%

Easy installation, Plug click connection

External strong communication with DCU

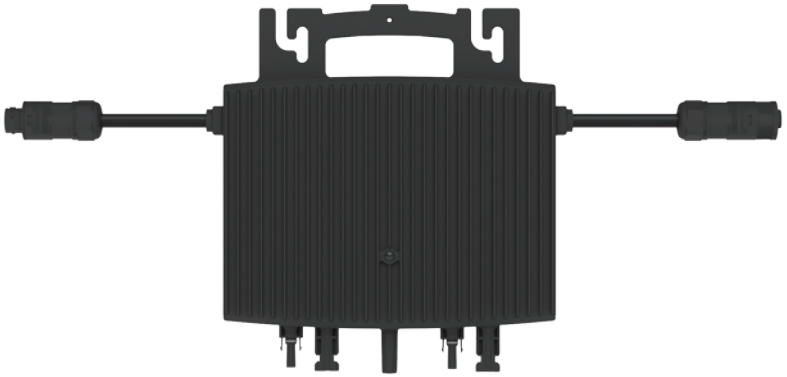
Compliant with European/US/Asia/Aus grid standard and certification

	HERF-1200	HERF-1600	HERF-1800
Input Data (DC)			
Recommended module power (W)	240~420+	300~540+	370~670+
Peak power MPPT voltage range (V)	16-48	16-48	16-48
Start-up voltage (V)		22	
Operating voltage range (V)		16~60	
Maximum input voltage (V)		60	
Maximum input current (A)	4×13	4×13.5	4×14
No. of MPPTs		2	
No. of Inputs per MPPT		2	
Output Data (AC)			
Rated output power (VA)	1200	1600	1800
Rated output current (A)	5.22	6.96	7.83
Nominal output voltage/range (V)		230/180-270	
Nominal frequency/range (Hz)		50/45-55	
Power factor(adjustable)		0.8 leading...0.8 lagging	
Total harmonic distortion		<3%	
Maximum units per branch	6*	4*	4*
Efficiency			
CEC peak efficiency		96.50%	
Nominal MPPT efficiency		99.50%	
Night power consumption (mW)		<50	
Mechanical Data			
Ambient temperature range (℃)		-40~+65	
Dimensions (W×H×D mm)		275×204.5×41.6	
Weight (kG)		4.9	
Enclosure rating		IP67	
Cooling		Natural convection	
Features			
Communication		Wireless_2.4G	
Isolation Type		High Frequency Transformers (Galvanically Isolated)	
Monitoring		Monitoring System	
Compliance		EN 50549-1: 2019, VDE-R-N 4105: 2018	

*1 Products marked with asterisks (*) use 10AWG cables, others use 12AWG cables.
*2 Nominal voltage/frequency range can be changed due to the requirements of local power department.
*3 Refer to local requirements for exact number of microinverters per branch.

Microinverter

2 in 1 unit



HERF-600 / HERF-800 / HERF-1000

High CEC Efficiency 96.5%

Easy installation, Plug click connection

External strong communication with DCU

Compliant with European/US/Asia/Aus grid standard and certification

	HERF-600	HERF-800	HERF-1000
Input Data (DC)			
Recommended module power (W)	240~420+	300~540+	370~670+
Peak power MPPT voltage range (V)	16-48	16-48	16-48
Start-up voltage (V)		22	
Operating voltage range (V)		16~60	
Maximum input voltage (V)		60	
Maximum input current (A)	2×13	2×13.5	2×14.5
No. of MPPTs		2	
No. of Inputs per MPPT		1	
Output Data (AC)			
Rated output power (VA)	600	800	980
Rated output current (A)	2.61	3.48	4.26
Nominal output voltage/range (V)		230/180-270	
Nominal frequency/range (Hz)		50/45-55	
Power factor(adjustable)		0.8 leading...0.8 lagging	
Total harmonic distortion		<3%	
Maximum units per branch	9	7	5
Efficiency			
CEC peak efficiency		96.50%	
Nominal MPPT efficiency		99.50%	
Night power consumption (mW)		<50	
Mechanical Data			
Ambient temperature range (℃)		-40~+65	
Dimensions (W×H×D mm)		260×197.5×35.6	
Weight (kG)		3.9	
Enclosure rating		IP67	
Cooling		Natural convection	
Features			
Communication		Wireless_2.4G	
Isolation Type		High Frequency Transformers (Galvanically Isolated)	
Monitoring		Monitoring System	
Compliance		EN 50549-1: 2019, VDE-R-N 4105: 2018	

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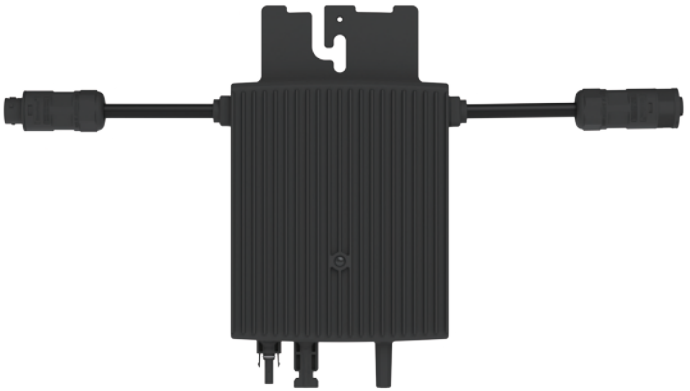
Microinverter

Single unit



HERF-300 / HERF-400 / HERF-500

High CEC Efficiency 96.5%

Easy installation, Plug click connection

External strong communication with DCU

Compliant with European/US/Asia/Aus grid standard and certification

	HERF-300	HERF-400	HERF-500
Input Data (DC)			
Recommended module power (W)	240~420+	300~540+	370~670+
Peak power MPPT voltage range (V)	16-48	16-48	16-48
Start-up voltage (V)		22	
Operating voltage range (V)		16~60	
Maximum input voltage (V)		60	
Maximum input current (A)	13	13.5	14.5
No. of MPPTs		1	
No. of Inputs per MPPT		1	
Output Data (AC)			
Rated output power (VA)	300	400	490
Rated output current (A)	1.3	1.74	2.13
Nominal output voltage/range (V)		230/180-270	
Nominal frequency/range (Hz)		50/45-55	
Power factor(adjustable)		0.8 leading...0.8 lagging	
Total harmonic distortion		<3%	
Maximum units per branch	19	14	11
Efficiency			
CEC peak efficiency		96.50%	
Nominal MPPT efficiency		99.50%	
Night power consumption (mW)		<50	
Mechanical Data			
Ambient temperature range (℃)		-40~+65	
Dimensions (W×H×D mm)		165×197×31.1	
Weight (kG)		2.35	
Enclosure rating		IP67	
Cooling		Natural convection	
Features			
Communication		Wireless_2.4G	
Isolation Type		High Frequency Transformers (Galvanically Isolated)	
Monitoring		Monitoring System	
Compliance		EN 50549-1: 2019, VDE-R-N 4105: 2018	

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*3 Refer to local requirements for exact number of microinverters per branch.

Microinverter
Accessories

Name	Function	Applicable Models
1 AC Female Connector	AC female connector is provided to make AC end cable or AC extension cable.	ALL
2 AC Male Connector	AC male connector is provided to make AC end cable or AC extension cable.	ALL
3 AC Female End Cap	IP67 female end cap is provided to seal AC female connector of microinverter.	ALL
4 AC Male End Cap	IP67 male end cap is provided to seal AC male connector of microinverter.	ALL
5 AC End Cable with EU Plug1 pcs (3meters)	AC End Cable with EU Plug	ALL

Smart Plug(EU)

Remote control, smart timing/delay/countdown, status feedback,power-off memory, voice control, sharing function, smart scene control, manual switch, power statistics (can count: current, voltage, power, power consumption)

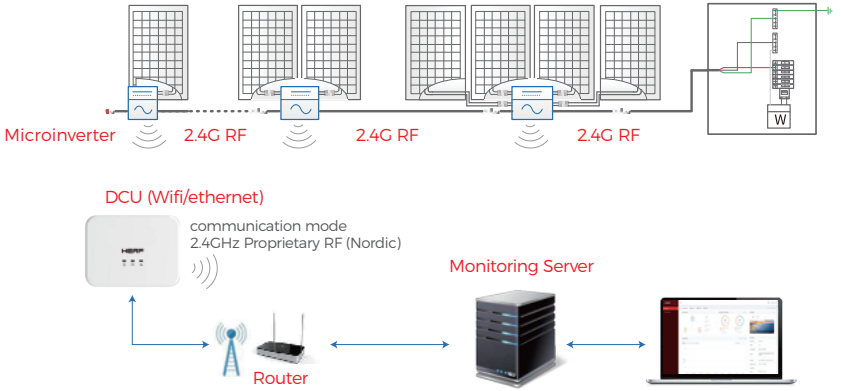
Product series	Wifi Smart Plug
Type	Smart switch module
Voltage	100-240V AC 50/60Hz
Max. Load	16A/3520W
Certification	CE/ROHS
Standby Power Consumption	0.5W/Hour
Applicable Place	Indoor
Working Temperature	-20˚C~ 50˚C
Working Humidity	5%~95% RH, non-condensing
Working Height	Less than 2000m

Wireless Communication
for Both Microinverter & Cloud

Model	DCU
Communication to Microinverter[1]	
Type	Wireless_2.4G
Maximum distance (open space)	200m
Max. number of connected microinverter	25
Communication to Cloud	
Signal	Wi-Fi (802.11b/g/n)[2]/Ethernet
Sample rate	Per 15 minutes
Communication to Meter	
Signal	RS485
Maximum distance (RS485 cable)	500m
Interaction	
LED	LED Indicator×3
APP	Local APP
Power Supply (Adapter)	
Type	External adapter
Adapter input voltage/frequency	100 to 240 V AC / 50 or 60Hz
Adapter output voltage/current	5V / 2A
Power consumption	2.5W (typical), 5W (maximum)
Mechanical Data	
Ambient temperature (℃)	-20˚C to 55˚C
Dimensions (W×H×D mm)	114×87×28.5
Weight (kG)	0.20 kg
Installation options	Wall mounting / Desktop mounting
Features	
Compliance	CE

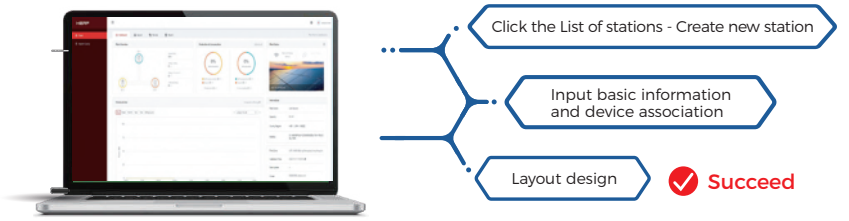
*1 Depending on the installation environment, please refer to user manual for more details.

3rd Generation
Monitoring Platform



How to set up a monitoring system?

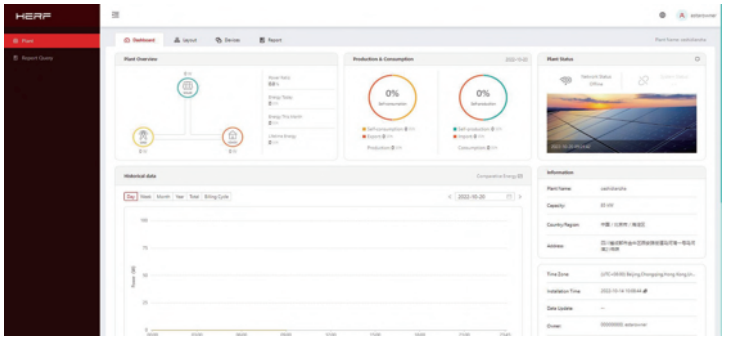
Download and access the monitoring application easily with the use of your Smartphone/Pad; each PV monitoring station will be setup in 3 easy steps



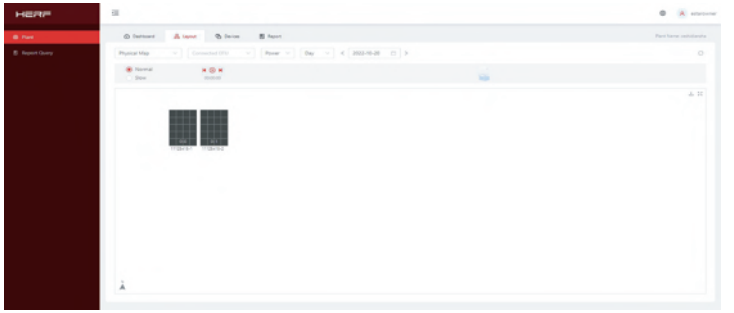
Privacy protection of personal information
Compliant with GDPR (the General Data Protection Regulation) of EU

Key features of new smart monitoring system

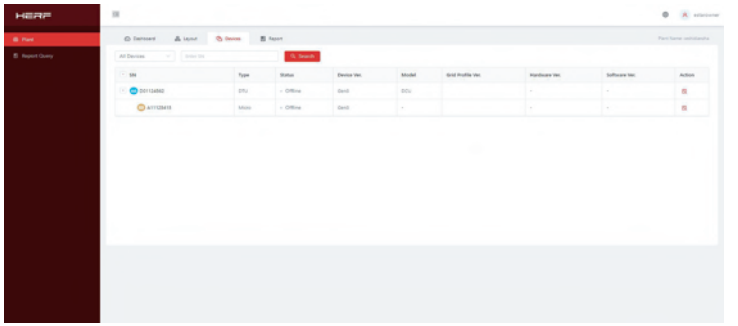
Module-level remote monitoring for microinverter's operating status in real time.

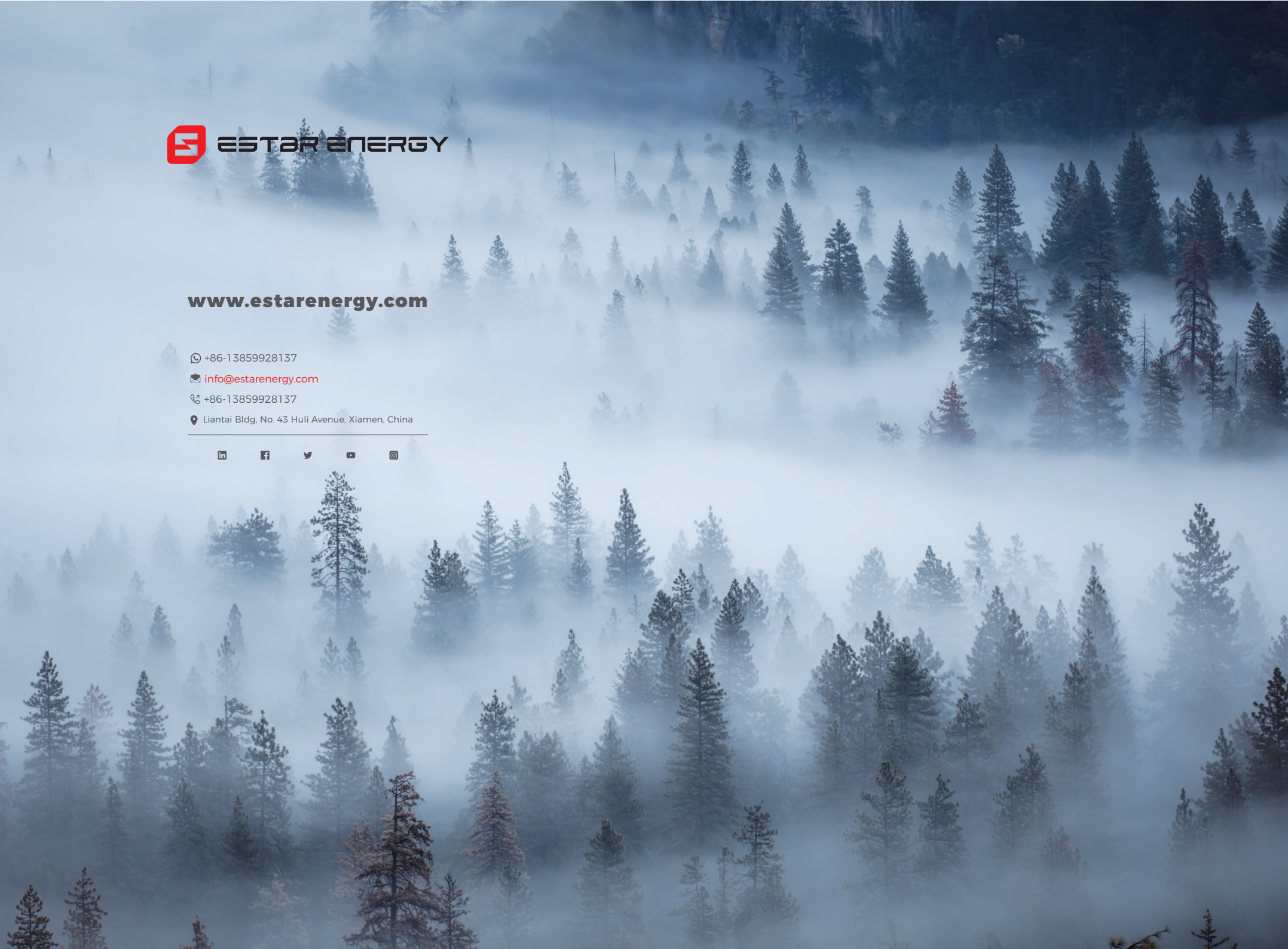


Availability for downloading module-level operating & failure report.



Smart operation for adding, cancelling, checking & revising power station data.





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