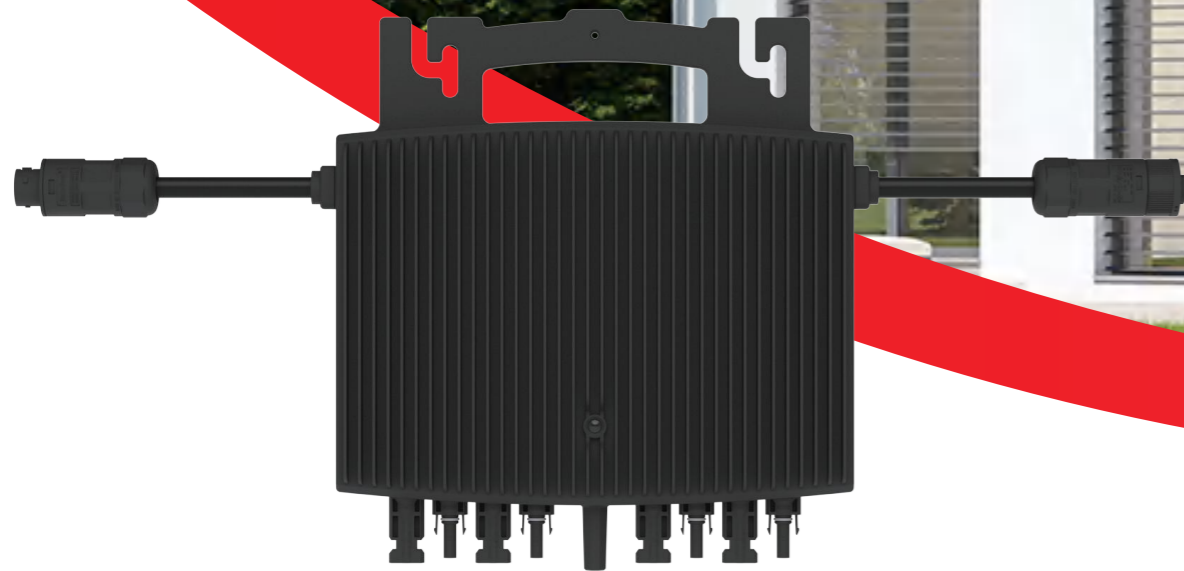


Microinverter



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

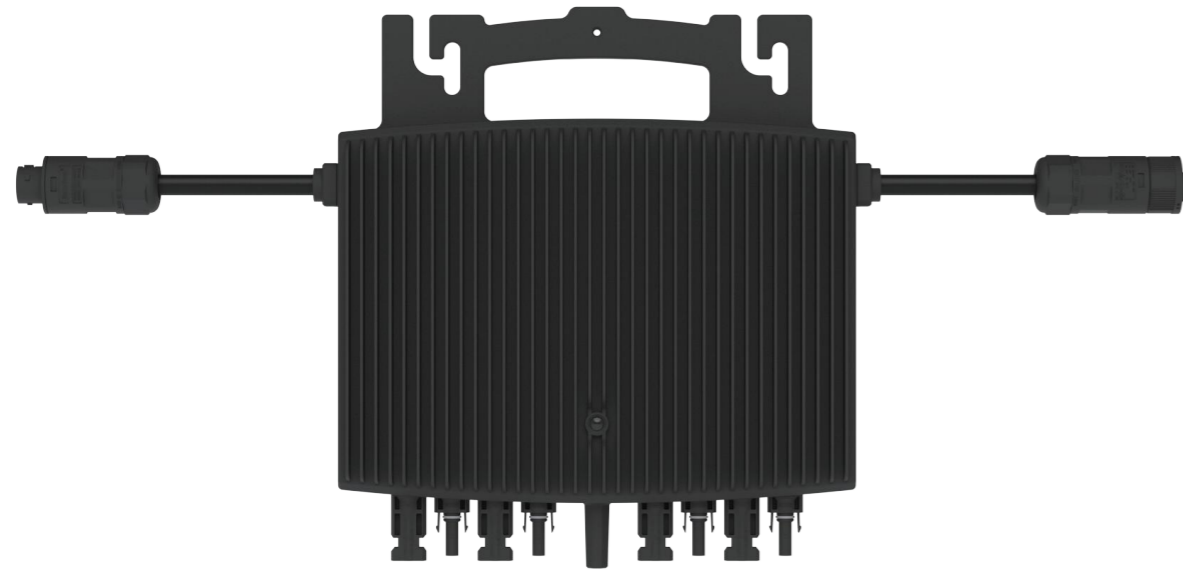


Reliable

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

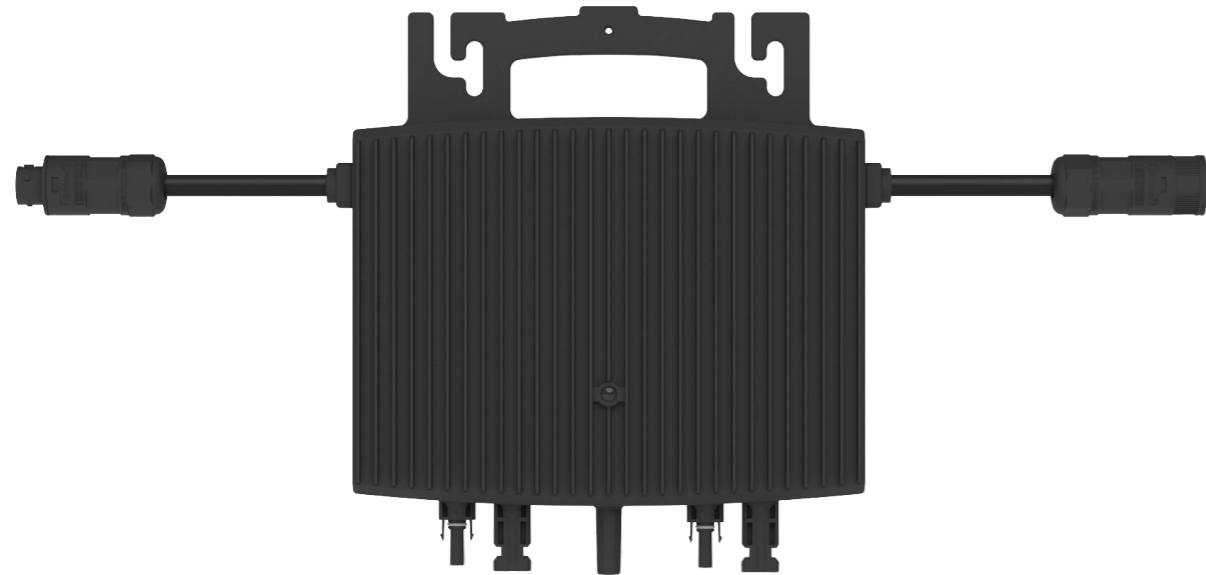
	HERF-1200	HERF-1600	HERF-1800
Input Data (DC)			
Recommended module power (W)	240-420+	300-540+	370-670+
Peak power MPPT voltage range (V)	16-48	16-48	16-48
Start-up voltage (V)		22	
Operating voltage range (V)		16-60	
Maximum input voltage (V)		60	
Maximum input current (A)	4x13	4x13.5	4x14
No. of MPPTs		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 (°C)		-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 (°C)		-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	

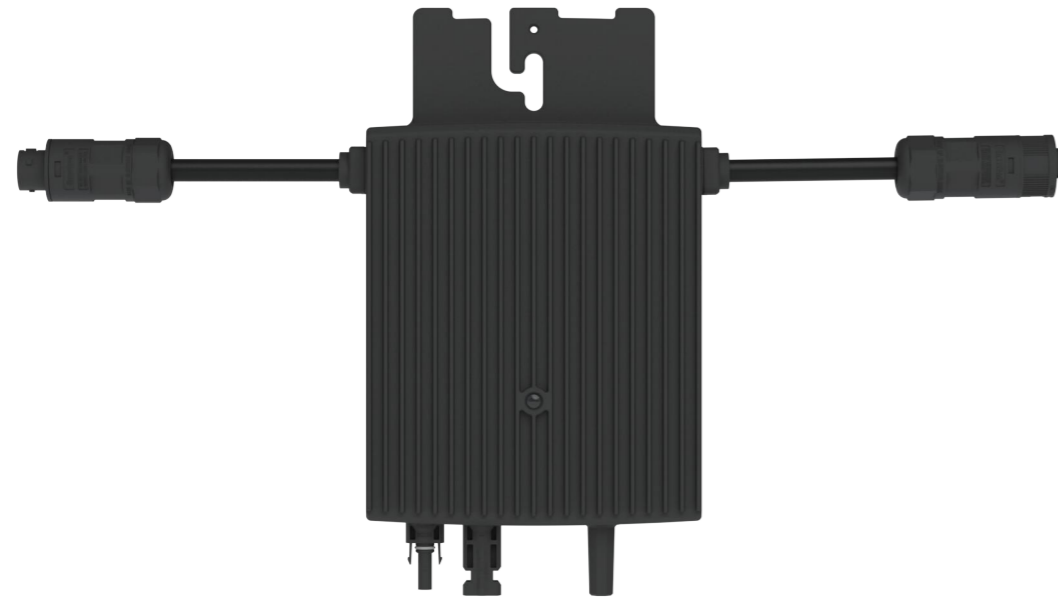
1 Products marked with asterisks () use 10AWG cables, others use 12AWG cables.

*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

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 (°C)		-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	

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 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 Plug 1 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

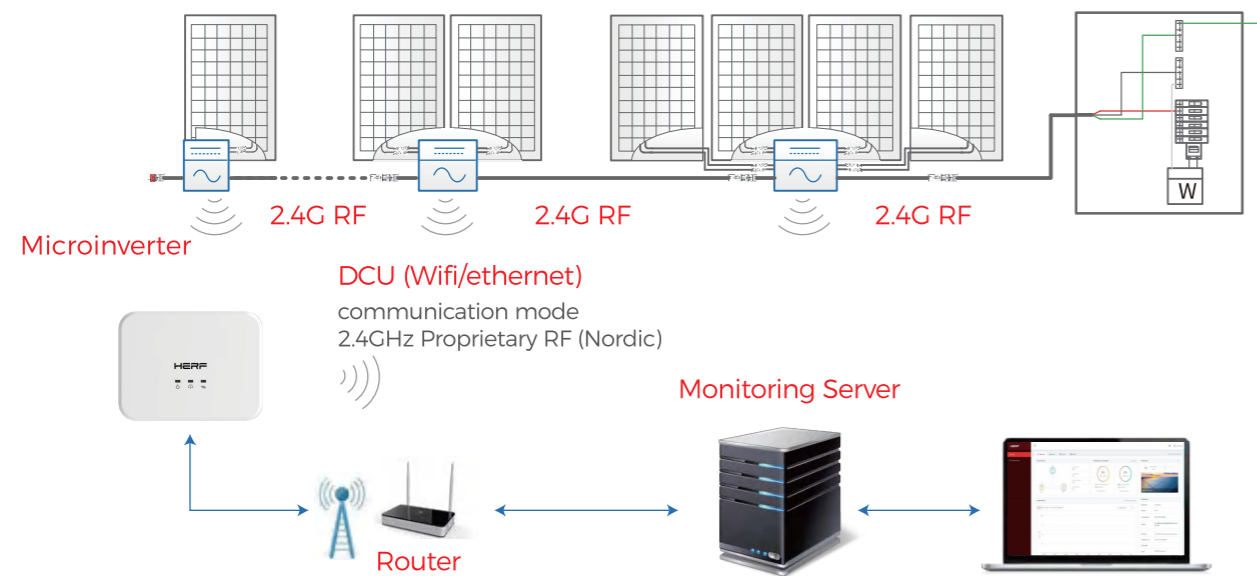


Model	DCU
Communication to Microinverter¹	
Type	Wireless_2.4G
Maximum distance (open space)	200m
Max. number of connected microinverter	25
Communication to Cloud	
Signal	Wi-Fi (802.11b/g/n) ² /Ethernet
Sample rate	Per 15 minutes
Communication to Meter	
Signal	RS485
Maximum distance (RS485 cable)	500m
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 (°C)	-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.

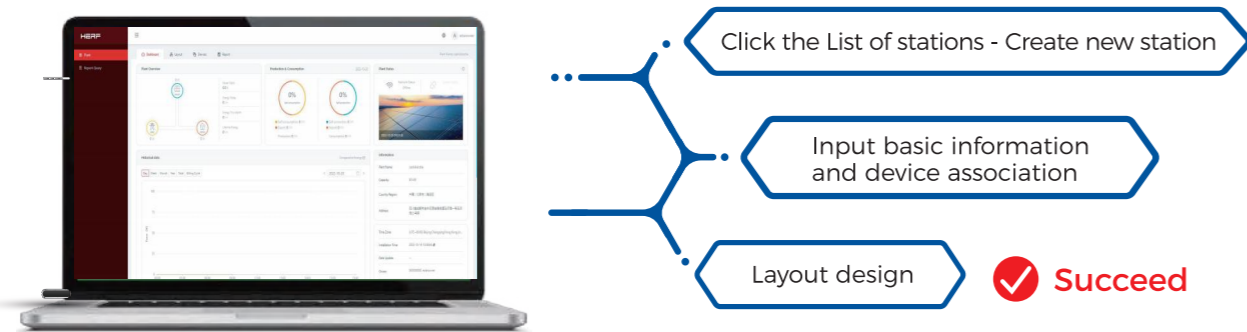
² If the DCU installation location is inside the metal box or under the metal / concrete roof, extended antenna will be suggested.

3rd Generation Monitoring Platform



How to set up a monitoring system?

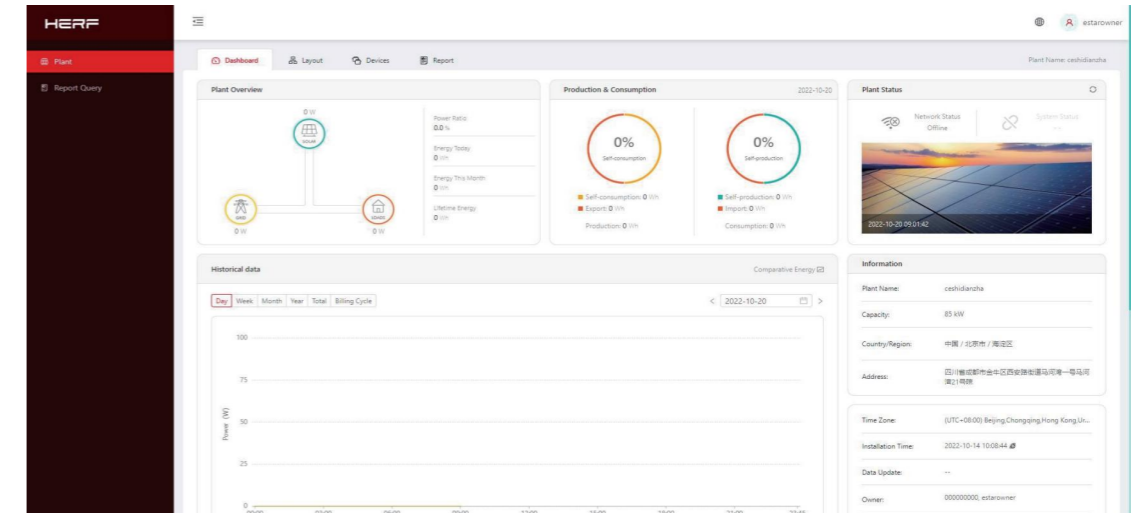
Download and access the monitoring application easily with the use of your Smartphone/Pad; each PV monitoring station will be setup in **3 easy steps**



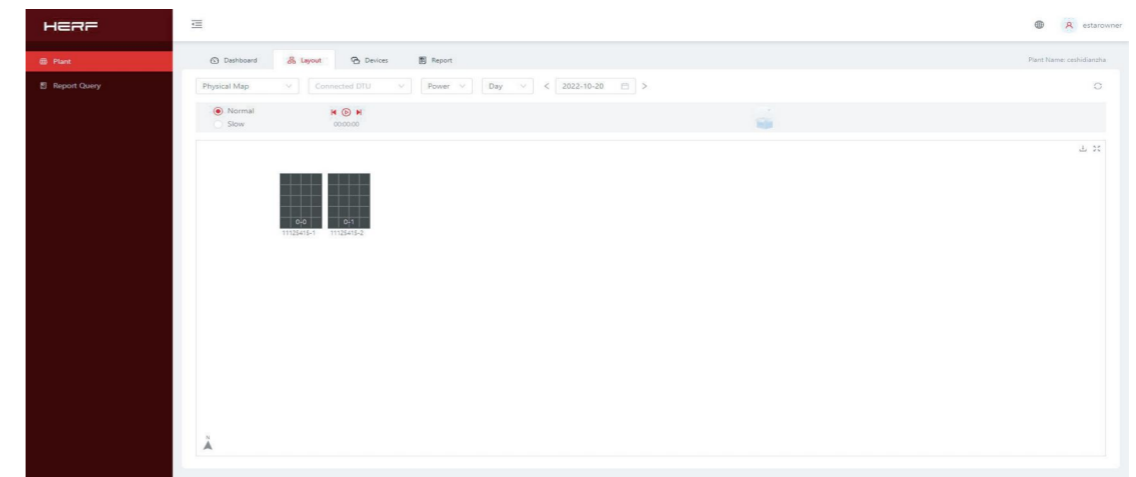
 **Privacy protection of personal information**
Compliant with GDPR (the General Data Protection Regulation) of EU


Key features of new smart monitoring system

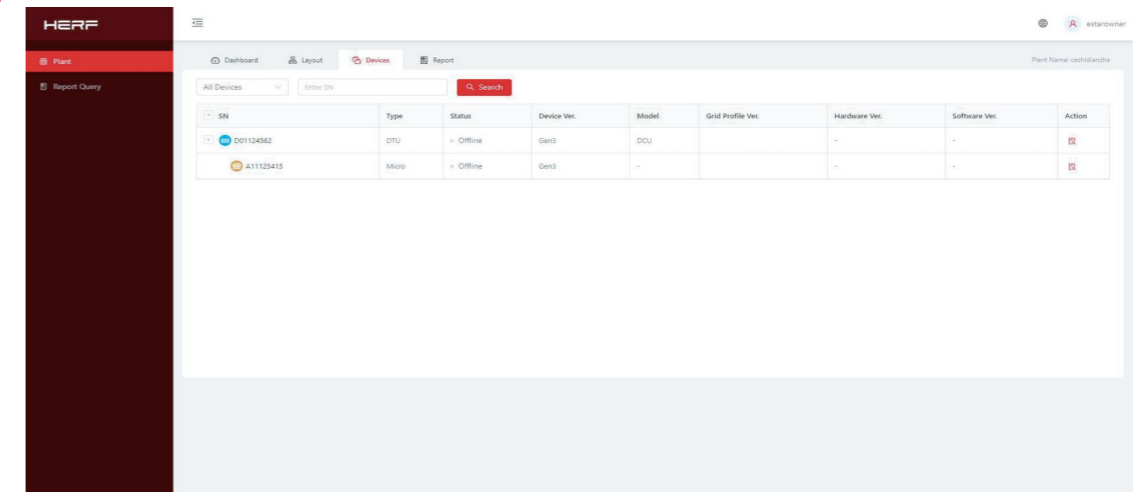
 Module-level remote monitoring for microinverter's operating status in real time.



 Availability for downloading module-level operating & failure report.



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



| Global Applications

🌐 Asia



Residential Project in Indonesia 6kW



Residential Project in Malaysia 3kW



Residential Project in Philippines 3kW



Residential Project in Indonesia 6kW



Residential Project in Philippines 3kW

🌐 Africa



Industrial Project in South Africa 158kW

| Global Applications

🌐 Europe



Residential Project in Sweden 10kW



Commercial Project in Estonia 63.6kW



Residential Project in Poland 3kW



Residential Project in Sweden 10kW

🌐 North America



Residential Project in USA 10kW



Residential Project in Mexico 5kW

🌐 South America



Gas Station Project in Brazil 26kW



Residential Project in Argentina 5kW