

# 2024 ECO GREEN HESS

01

ABOUT ECO GREEN ENERGY MANUFACTURER

02

SOLUTION AND ADVANTAGE

03

PRODUCT SPECIFICATIONS

## ABOUT THE MANUFACTURER

Eco Green Energy Manufacturer is specialized in the sales and suport of lithium-ion battery packs, battery systems for a wide range of power and stationary applications. Our partner founded by Xupai in 2018, there team has nearly ten years of experience in designing integrated power systems The broad market/application expertise, technology approach and vertical integration enable them to deliver safe, reliable and innovative products to the worldwide market quickly.















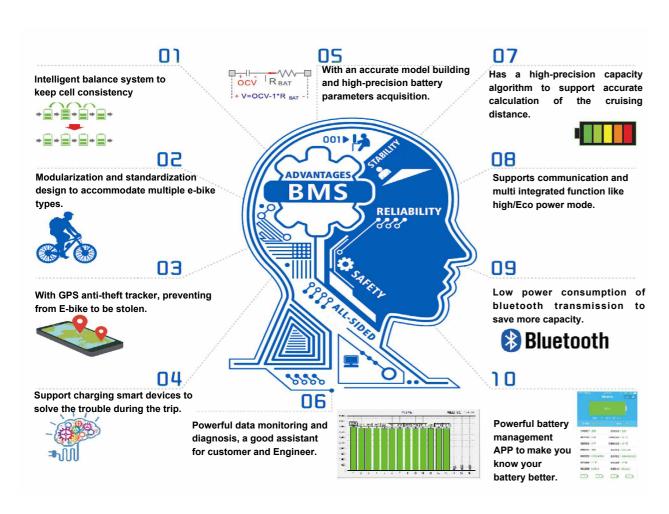




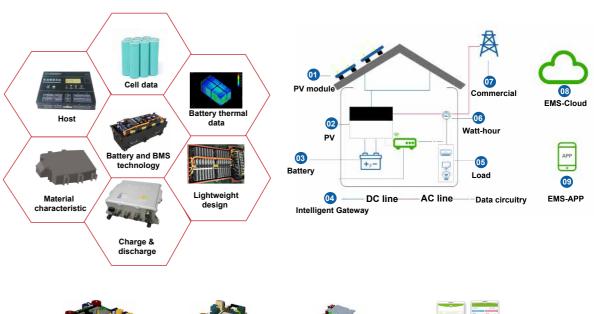




### **BMS R&D**



### **SYSTEM INTEGRATION**





Operation data synchronization power transaction

PCS



Smart gateway realizes household power |oT massive data cloud platform + Al platform collection and energy control

- Protocol analysis;
- Transmission encryption:
- Massive data collection;
- Data cache;
- Data forwarding: Household energy control
- usage & generation, energy storage data •Summary of operation status data:

Inverter

- . Operation auxiliary massive data analysis;
- Energy storage battery safety analysis;
- · Fault and accident warning analysis;
- . Household load analysis and forecast;
- Community power supply and demand market
- APP on Mobile phone
- Household energy storage device operation status data review;
- . Household energy storage revenue analysis;
- Fault & accident warning push; Community power transaction;
- HHistory data query

The Eco Green Home Energy Storage Systems (HSSS) are safe, efficient, eco-friendly. It absorb and save solar energy for resident application. It store solar energy through PV panels at the daytime or store electricity power during the off-peak hours and powers to on/off-grid inverter at night or during on-peak hours. The solutions integrate lithium iron phosphate batteries with excellent BMS which can be expanded capacity on demand.



### Improve financial performance

Monetize assets through new revenue streams, increased asset utilization, improved yield, and reduced operating costs.



### Increase renewable integration

Improve integration and maximize utilization of the energy generated from photovoltaics (PV) and wind turbines.



### Green ecology

Clean energy should be a top global priority. Collaborate with us and let us accelerate the transition towards a greener future together



### Reduce your electricity bills

stores your surplus solar power and low-cost electricity from the grid, supplying your home more cost-effectively.



#### Help get to net zero

We can't control when the sun shines or wind blows, so energy storage is the key to unlocking 100% clean energy.



### More usable energy

95% depth of discharge, pack level energy optimization



**SELF POWERD** 

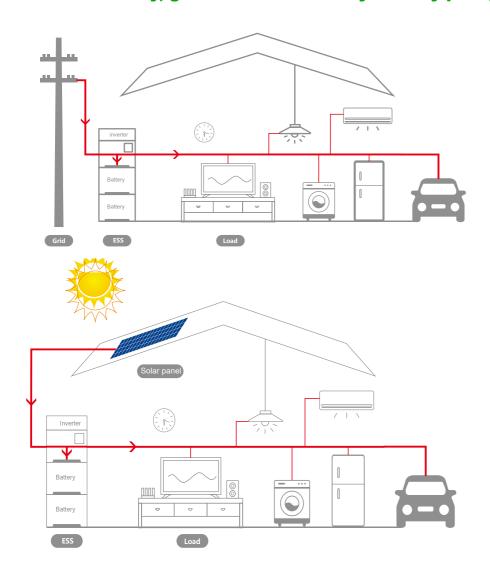


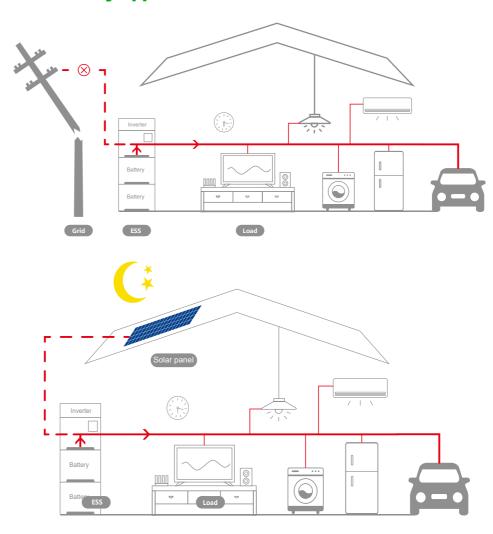
INDUSTRIAL AND NATURAL ISLAND



SEVERE ENVIRONMENT POWER

Eco Green Energy low/high voltage of energy storage systems have been widely used in various application areas, such as lack of electricity, government electricity subsidy policy, off-peak electricity application or self-use.









Long cycle life: 6000cycles or 10+ years calendar life.

Eco-friendly and renewable energy.



- Advanced BMS control.
- Modbus/CANbus is compatible with main brand.
- inverters, 10000 data record covers the whole life.
- Support 4G/Ethernet/WiFi/Bluetooth and remote.

- Compact design, flexible and reliable to install.
- Advanced heat management technology.
- High voltage DC breaker is matched I<sup>2</sup>Rt, quick
- protection. Aerosol fire fighting(optional).



- Wide operation temperature -20~60°C.
- IP65, enclosure is available.
- Battery certificationg: UL1973,IEC62619, CE61000,
- UN38.3. Inverter certification:

### 5 KW All-in-One ECO Energy Storage Systems (with wheels)

The HESS integrated a solar hybrid inverter + MPPT charging controller + 5KWH 51.2V100AH LiFePO4

- battery modules. Can be expanded capacity from 1 to 4 modules for 5KWH,10KWH, 15KWH and 20KWH.
- Output single phase pure sine wave AC power, 230V/120V is available, 50Hz/60Hz (automatically
- detected). Suitable for a global market.
- Diverse working modes, can be used for solar energy storage, on/off-peak hours electricity application,
- government electricity subsidy.









### 5 KW All-in-One ECO Energy Storage System (Floor Mounted)

- The HESS integrated a solar hybrid inverter + MPPT charging controller + 5kWh 51.2V100Ah LiFePO4 battery modules.
- Can be expanded capacity from 1 to 3 modules for 5kWh,10kWh and 15kWh.
- Output: single phase, pure sine, AC, 230V / 120V is available, 50Hz / 60Hz (automatically detected).
- Suitable for a global market.







### **5 KWh Household ECO Energy Storage System**

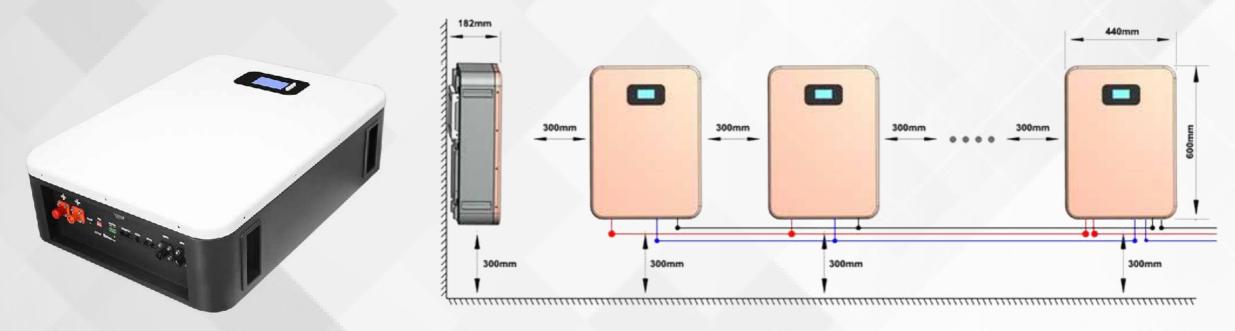
- The HESS built-in a solar inverter + MPPT charging contriloer + AC charger + LiFePO4
- battery pack Output: single phase, pure sine, AC. 230V/120V is available, 50Hz/60Hz.
- Rated output can be from 1.5KW to 5KW (Customized).
- On floor or wall-mounting is optional.
- Suitable for underdeveloped countries and market.





### **5 KWh Wall-Mounted ECO Storage Battery System**

- 5 KWh 51.2V 100Ah LiFePO4 battery modules. Maximum output is 5 KW.
- Can be expanded capacity up to 15pcs in parallel. RS485 / CANbus, compatible with main brand inverters.
- Easy to install.



### **5 KWh Rack Mounted ECO Energy Storage battery**

- 5 KWh 51.2V100AH LiFePO4 battery modules, compact design. Maximum output is 5 Kw.
- RS485/CANbus, compatible with main brand inverters. Maximum 15 pcs in parallel system.
- Easy to install.
- Suitable for indoor/outdoor solar energy storage.

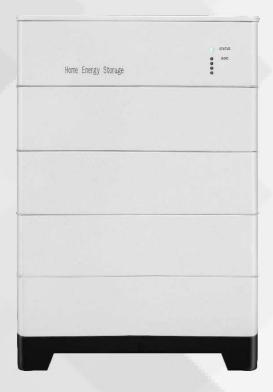






### 10 KWh or 20 KWh ECO High Voltage Battery System

- 4pcs 51.2V50AH or 51.2V100AH LiFePO4 battery modules +1pcs HV DC controller to be 10kWh or 20kWh
- systems. Maximum output is 10KW or 20KW.
- 10KWH is suitable for 10KW and 20KWH for 20KW single phase or 3 phases on/off hybrid inverter.
- RS485/CANbus, compatible with main brand inverters.
- Easy to install.



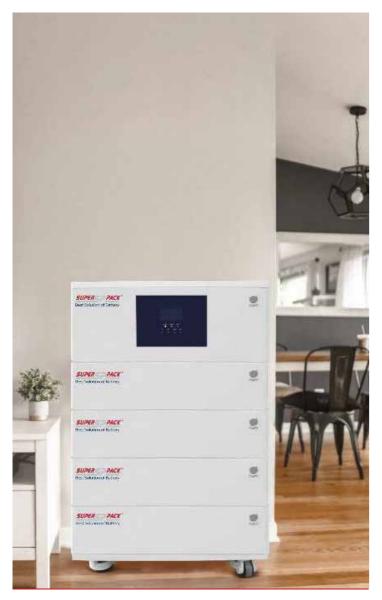


### **512V ECO High Voltage Battery System**

- 512V, 25kWh, 10 pcs battery modules in series + 1pcs HV controller. 51.2V50AH LiFePO4
- battery modules, compact design.
- RS485/CANbus, compatible with main brand inverters.
- Easy to install.
- Suitable for 3 phases on/off grid solar energy storage.







Item	ECO SP-ESS-5K-5K-A1	ECO SP-ESS-5K-10K-A1	ECO SP-ESS-5K-15K-A1	ECO SP-ESS-5K-20K-A
BATTERY				
Battery Module	1	2	3	4
Battery Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh
Battery Capacity	100Ah	200Ah	300Ah	400Ah
Weight	78Kg	127Kg	176Kg	225Kg
Dimension Lx DxH	560×480×420mm	560×480×570mm	560×480×720mm	560×480×870mm
Battery Type		LiF	FePO4	
Battery Rated Voltage		5	1.2V	
Battery Working Voltage Range		44.8	~ 57.6V	
Maximum Charging Current		1	00A	
Maximum Discharging Current		1	00A	
Designed Life-span		6000 cycle	s at 80%DOD	
Parallel Quantity	Maximum 4 modules			
Designed Life-span	10 years			
PV CHARGE				
PV Charging Current Range	MPPT			
Solar Charge Type	5KW			
Maximum Output Power	0~80A			
PV Operating Voltage Range	120~500V			
MPPT Voltage Range	120~450V			
AC CHARGE				
Maximum Charge Power	3150W			
AC Charging Current Range	0~60A (230V INVERTER); 0~40A (120V INVERTER)			
Rated Input Voltage	220/230Vac (230V INVERTER); 110/120Vac (120V INVERTER)			
Input Voltage Range	170~280Vac (230V INVERTER); 90~140Vac (120V INVERTER)			
AC OUTPUT				
Rated Output Power	5KW			
Rated Input Voltage	30A (230V INVERTER); 42A(120V INVERTER)			
Input Voltage Range	220V/230V (230V INVERTER); 110V/120V(120V INVERTER); 50Hz/60Hz (Automatically)			
Overload Current	35A (230V INVERTER); 45A(120V INVERTER)			



Item	ECO SP-ESS-5K-5K-A2	ECO SP-ESS-5K-10K-A2	ECO SP-ESS-5K-15K-A2
BATTERY			
Battery Module	1	2	3
Battery Energy	5.12kWh	10.24kWh	15.36kWh
Battery Capacity	100Ah	200Ah	300Ah
Weight	83Kg	135Kg	187Kg
Dimension Lx DxH	600×165×920mm	600×165×1340mm	600×165×1760mm
Battery Type		LiFePO4	
Battery Rated Voltage		51.2V	
Battery Working Voltage Range		44.8 ~ 57.6V	
Maximum Charging Current		100A	
Maximum Discharging Current		100A	
Designed Life-span	6000 cycles at 80%DOD		
Parallel Quantity	3		
Designed Life-span	10 years		
PV CHARGE			
Solar Charge Type	MPPT		
Maximum Output Power	5KW		
PV Charging Current Range	0~80A		
PV Operating Voltage Range	120~500V		
MPPT Voltage Range	120~450V		
AC CHARGE			
Maximum Charge Power	3150W		
AC Charging Current Range	0~60A (230V INVERTER); 0~40A (120V INVERTER)		
Rated Input Voltage	220/230Vac (230V INVERTER); 110/120Vac 120V INVERTER)		
Input Voltage Range	170~280Vac (230V INVERTER); 90~140Vac(120V INVERTER)		
AC OUTPUT			
Rated Output Power	5KW		
Rated Input Voltage	30A (230V INVERTER); 42A(120V INVERTER)		
Input Voltage Range	220V/230V (230V INVERTER); 110V/120V(120V INVERTER); 50Hz/60Hz (Automatically); 50Hz/60Hz (Automatically)		
Overload Current	35A (230V INVERTER); 45A(120V INVERTER)		



Item	ECO SP-ESS-1.5K-5KWH-E1	
BATTERY		
Battery Module	LiFePO4	
Battery Energy	5.5kWh	
Nominal Voltage	25.6V	
Nominal Capacity	230Ah	
Standard Charging Current	20A	
Maximum Charging Current	66A	
Standard Discharge	40A	
Maximum Discharge Current	100A	
Maximum Output Power	2.5KW	
Charging Cut-off Voltage	≤30.4V (3.8V/cell)	
Discharge Cut-off Voltage	≥ 20.0V (2.5V/cell)	
Cycle Life	1200cycles	
Weight	85Kg	
PV CHARGE		
Solar Charge Type	MPPT	
Maximum Output Power	1100W	
PV Charging Current Range	0~40A	
PV Operating Voltage Range	30~100V	
AC CHARGE		
Maximum Charge Power	600W	
AC Charging Current Range	20A	
Rated Input Voltage	110/120Vac	
Input Voltage Range	29.2V	
INVERTER		
Rated Output Power	1500W	
Output Voltage /Frequency	110Vac/60Hz	
Peak Output Power	3000W	
DC Input Voltage Range	19.0~30.0V	



Item	ECO SP-ESS-5K-5K-E2		
BATTERY			
Battery Module	LiFePO4		
Battery Energy	5.12kWh		
Battery Voltage	51.2V		
Nominal Capacity	100Ah		
Operating Voltage Range	44.8~58.4V		
Dimensions (L x W x H)	500*165*650mm		
Weight	60Kg		
Maximum Charging Current	50A		
<b>Maximum Continuous Discharge Current</b>	100A		
Maximum Output Power	5KW		
Cycle Life	6000 cycles at DOD80%		
Parallel Quantity	Single use		
Designed Life-span	10 years		
PV CHARGE			
Solar Charge Type	MPPT		
Maximum Output Power	5KW		
PV Charging Current Range	0~80A		
PV Operating Voltage Range	120~500V		
MPPT Voltage Range	120~450V		
AC CHARGE			
Maximum Charge Power	3150W		
AC Charging Current Range	0~60A		
Rated Input Voltage	220/230Vac		
Input Voltage Range	170~280Vac		
AC OUTPUT			
Rated Output Power	5KW		
Maximum Output Current	30A		
Frequency	50Hz		
Overload Current	35A		



ltem	ECO SP-ESS-5KWH-B1		
BATTERY			
Battery Module	LiFePO4		
Battery Energy	5.12kWh		
Battery Voltage	51.2V		
Nominal Capacity	100Ah		
Operating Voltage Range	44.8~57.6V		
Maximum Output Power	5KW		
Maximum Charging Current	100A		
Maximum Continuous Discharge Current	100A		
Cycle Life	6000 cycles at 80%DOD		
Dimensions (L x W x H)	440x182x600mm		
Weight	54 Kg		
Parallel Quantity	Maximum 15pcs		
Designed Life-span	10 years		
Installation	Floor Mounting		
Communication	RS485/CANbus/Ethernet/WiFi		
Matching with Inverters	MEGAREVO/GOODWE/GRWT/SAM/SUNGROW		
Certification	UL1973, IEC62619, CE61000, UN38.3		
Charging Temperature Range	0~50°C		
Discharge Temperature Range	-20~60°C		
Enclosure Protection	IP54		
Humidity	≤85%		
Altitude	≤2000m		
Application	In door		
Inverter Choosing	On/Off Grid Single / 3 phases inverter		
Heat Management	Air cooling		



Item	ECO SPF48V100-SM		
BATTERY			
Battery Module	LiFePO4		
Battery Energy	5.12kWh		
Battery Voltage	51.2V		
Nominal Capacity	100Ah		
Operating Voltage Range	44.8~57.6V		
Maximum Output Power	5KW		
Maximum Charging Current	100A		
<b>Maximum Continuous Discharge Current</b>	100A		
Cycle Life	6000 cycles at 80% DOD		
Dimensions (L x W x H)	482x370x175mm		
Weight	42Kg		
Parallel Quantity	Maximum 15pcs		
Designed Life-span	10 years		
Installation	Standard 19" power cabinet or rack		
Communication	RS485/CANbus/Ethernet/WiFi		
Matching with Inverters	MEGAREVO/GOODWE/GRWT/SAM/SUNGROW		
Certification	UL1973, IEC62619, CE61000, UN38.3		
Charging Temperature Range	0~50°C		
Discharge Temperature Range	-20~60°C		
<b>Enclosure Protection</b>	IP20		
Humidity	≤85%		
Altitude	≤2000m		
Application	In door / Out door		
Inverter Choosing	On/Off Grid Single / 3 phases inverter		
Heat Management	Air Cooling		

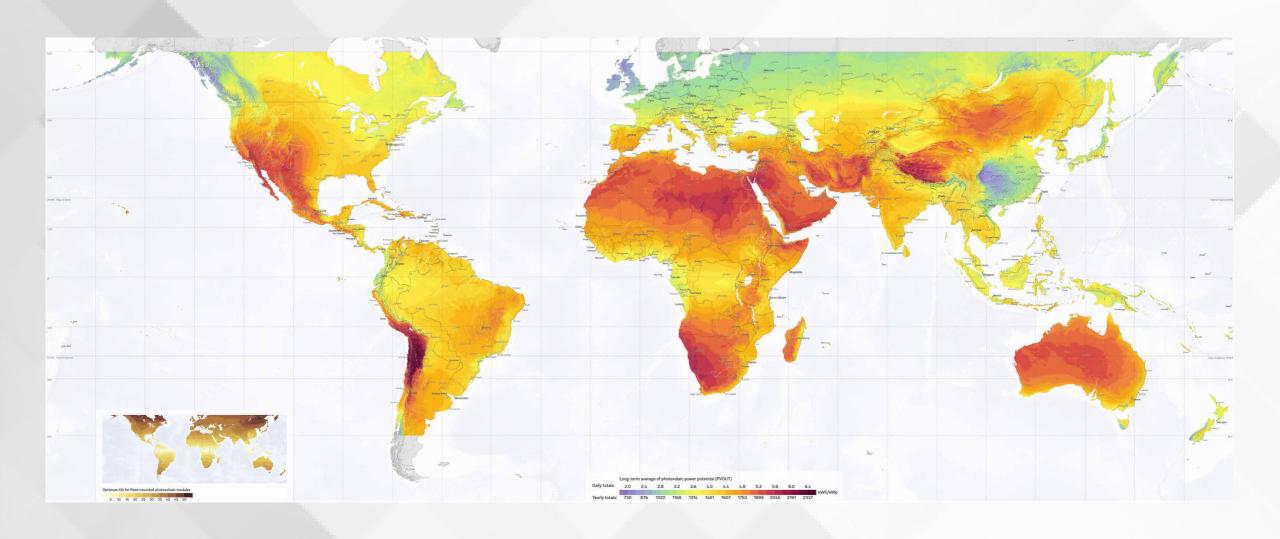


Item	ECO SPF204V50-HV	ECO SPF204V100-HV	
BATTERY			
Battery Module	4pcs	4pcs	
Battery Energy	10.24kWh	20.48kWh	
Nominal Voltage	204.8V	204.8V	
Nominal Capacity	50Ah	100Ah	
Maximum Charging Current	50A	100A	
Maximum Continuous Discharge Current	50A	100A	
Maximum Output Power	10KW	20KW	
HV Controller	1pcs	1pcs	
Weight	108Kg	216KGS	
Dimension Lx DxH	560 x 270 x 850mm	560 x 540 x 850mm	
Operating Voltage Range	179.2 ~230.4V		
Cycle Life	6000 cycles at 80% DOD		
Designed Life-span	10 years		
Installation	Floor-mounting (Horizonal and stacking)		
Communication	RS485/CANbus/Ethernet/WiFi		
Charging Temperature Range	0~50°C		
Discharge Temperature Range	-20~60°C		
Enclosure Protection	IP54		
Humidity	≤85%		
Altitude	≤2000m		
Application	In door		
Inverter Choosing	On/Off Grid 3 phases inverter		
Heat Management	Air cooling		



ltem	ECO SPF512V50-HV	ECO SPF512V150-HV	
BATTERY			
Battery Module	ECO SPF48V52Ah-3U (10pcs in series)	ECO PF48V150Ah (10pcs in series)	
Cell Chemistry	26.6kWh	76.8kWh	
Cell type	512V	512V	
Nominal Capacity	52Ah	150Ah	
Maximum Charging Current	50A	25A	
Maximum Continuous Discharge Current	50A	25A	
Maximum Output Power	26KW	76KW	
HV Controller	1pc	1pc	
Module Dimensions (L x W x H)	482 x 451 x 132mm	614 x 500x 186mm	
Module Weight	28.5 Kg (10pcs) + 9.7Kg (1pc HV DC controller)	60Kg(10pcs)+10Kg (1pc HV DC controller)	
Operating Voltage Range	448 ~576V		
Cycle Life	6000 cycles at 80% DOD		
Designed Life-span	10 years		
Installation	Standard 19" power cabinet	Stacking mounted power cabinet	
Communication	RS485/CANbus/Ethernet/WiFi	CANbus/Ethernet/WiFi	
Charging Temperature Range	0~50°C		
Discharge Temperature Range	-20~60°C		
Enclosure Protection	IP20		
Humidity	≤85%		
Altitude	≤2000m		
Application	In door / Out door		
Inverter Choosing	On/Off Grid 3 phases inverter		
Heat Management	Air cooling		

## **ECO GREEN ENERGY BUILDING A SOLAR-POWERED WORLD**





The Future is Now

