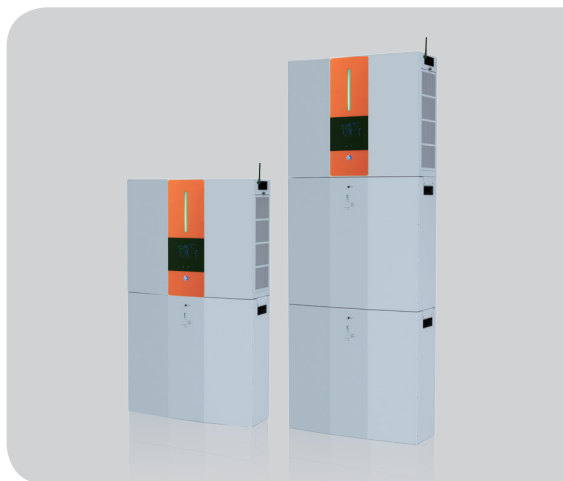


ESS510 Energy Storage System

5.5KW hybrid solar inverter with 5KWh Lithium-ion battery

CE UK
UN 38.3 CA
NRS 097-2-1
G99

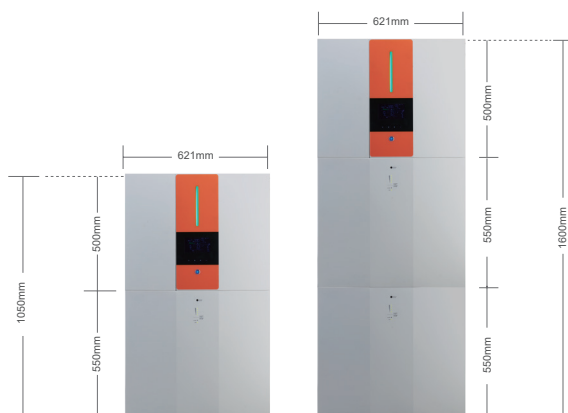
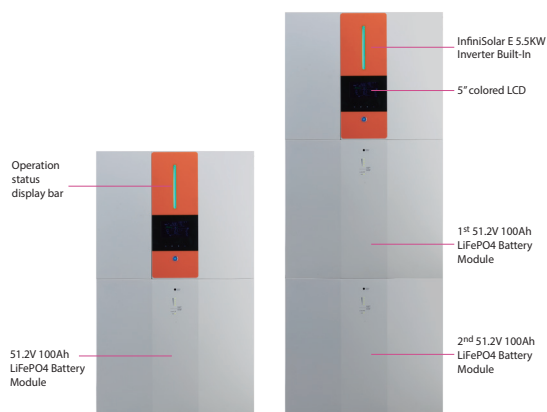


- Integrated 5.5kw hybrid solar inverter and lithium-ion battery module
- Self-consumption and Feed-back to the Grid
- Programmable supply priority for PV, battery or Grid
- User-adjustable battery charging current
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Built-in timer for various mode of on/off operation
- Multiple communication for USB, RS232, Modbus, SNMP, GPRS and Wi-Fi
- Monitoring software for real-time status display and control
- Enhance AC/Solar charger to 100A
- Scalable Li-Ion battery expansion
- Li-Ion battery life cycle: 8000 cycles at 25 °C
- High surge discharging current up to 3C
- IP 20

SOLAR ENERGY STORAGE SYSTEM

ESS510, 5.5kw hybrid inverter with 5KWh lithium-ion scalable battery module

DIMENSION



Accessory

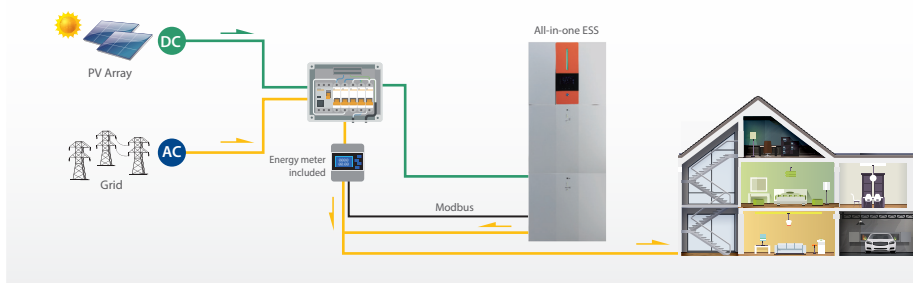


Maximum 10 pcs of battery modules

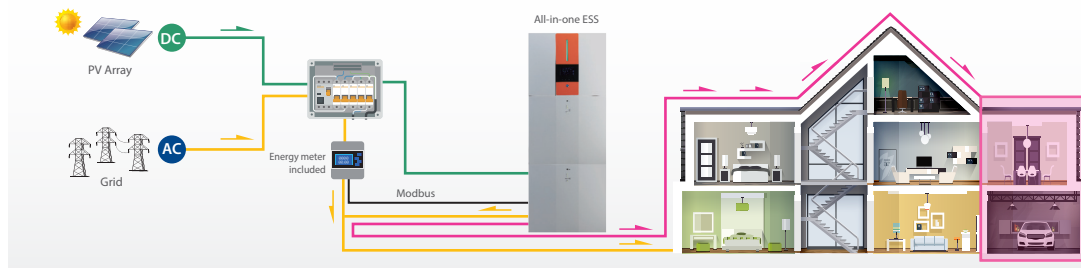


System Diagram

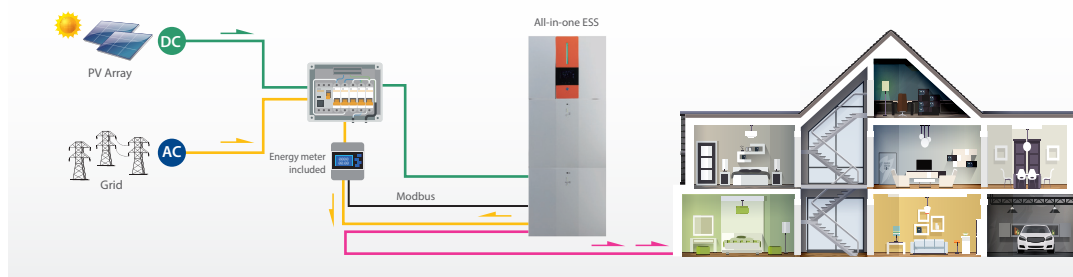
Add ESS into existing home utility system



Supply independent power to specific area, no power shutdown even Grid is not available



Supply independent power to whole house



Separate two ESS systems to supply whole house



ESS Energy Storage System Specification

INVERTER MODEL		ESS 5.5KW
Maximum PV Input Power		6500W
Rated Output Power		5500W
Maximum Charging Power		2880W
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage		360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage		116 VDC / 150 VDC
MPP Voltage Range		120 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current		2 / 2 x 13 A
GRID OUTPUT		
Nominal Output Voltage		208/220/230/240 VAC
Output Voltage Range		184 - 264.5 VAC*
Max. Output Current		23.9A*
Maximum Conversion Efficiency (DC/AC)		96%
European Efficiency @ Vnominal		95%
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage		120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range		170 -280 VAC
Maximum AC Input Current		40 A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage		208/220/230/240 VAC
Efficiency (DC to AC)		93%
BATTERY CHARGER		
Nominal DC Voltage		48 VDC
Maximum Charging Current		100 A
PHYSICAL		
Dimension, D x W x H (mm)		214 x 621 x 500
Net Weight (kgs)		25
STANDARD		
Compliance Safety	IEC/EN 62109-1/-2, IEC 62040-1, EN 61000-6-4, EN IEC 61000-6-2, EN IEC 61000-3-11, EN 61000-3-12, IEC 61727, IEC 62116, G99, NRS 097-2-1, EN 50549-1	

BATTERY MODULE		ESS II-4810
CAPACITY		5000Wh
PARAMETERS		
Nominal Voltage		51.2VDC
Full Charge Voltage (FC)		56V
Full Discharge Voltage (FD)		42V
Typical Capacity		100Ah
Max Continuous Discharging Current		150A
Max Discharging Current		192A at 1min
Protection		BMS, breaker
Charge Voltage		56V
Charge Current		20A (0.2C)
Maximum Charge Current		50A (0.5C)
Standard Charge Method		0.2C CC (Constant current) charge to FC, CV (Constant voltage FC) charge till charge current decline to <0.05C
Inner Resistance		<20m ohm
Dimension, D X W X H (mm)		214 x 621 x 550
Net Weight (kgs)		55
STANDARD		
Compliance Safety	IEC 62619, EN 61000-6-3, EN 61000-6-1, UKCA, UN38.3	

*These figures may vary depending on different AC voltage and contry regulation.
Product specifications are subject to change without further notice.