

Energy Storage System

5.5KW Solar inverter with 5KWH Lithium-ion battery



Features

- Pure sine wave output
- 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

ESS510

Benefits



All-in-one solution
Compose of inverter and battery in one unit.

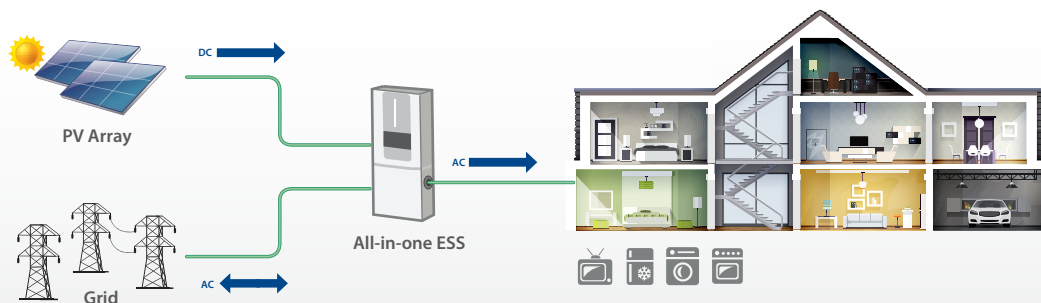


Compact size and Lightweight
Built-in lithium-ion battery with less space and weight.

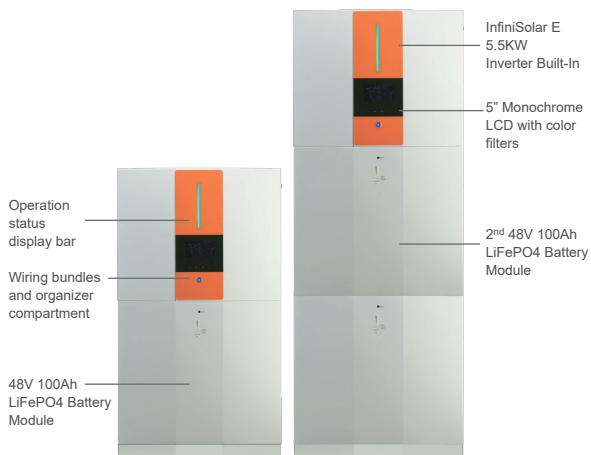


Modular design for easy scalable
Battery module can be easily stacked and added for energy expansion.

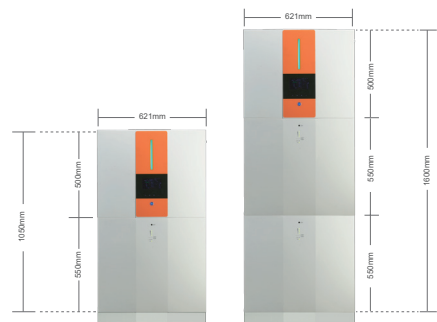
System Diagram



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



DIMENSION



Maximum 10 pcs of battery modules



Voltronic Power

Advancing Power

Specifications



MODEL	ESS 5.5KW
Maximum PV Input Power	6500W
Rated Output Power	5500W
Maximum Charging Power	2880 W
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 (AC)	
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
BATTERY MODULE	ESS LIO-I 4810
CAPACITY	4800Wh
PARAMETERS	
Nominal Voltage	48 VDC
Full Charge Voltage (FC)	52.5V
Full Discharge Voltage (FD)	34.5V
Typical Capacity	100Ah
Max Continuous Discharging Current	120A
Max Discharging Current	192A at 1min
Protection	BMS, Breaker
Charge Voltage	52.5V
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

*These figures may vary depending on different AC voltage and contry regulation.

Product specifications are subject to change without further notice

VOLTRONIC POWER TECHNOLOGY CORP.

Taiwan: No. 406, Xinhua 1st Road, Neihu District, Taipei, Taiwan TEL: 886-2-27918296 FAX: 886-2-87918216
 China: 1-5F, Building 5, RunDongSheng Industrial Park, No.467, Section Xixiang, National Highway 107, Xixiang,
 Bao An District, Shenzhen, China TEL: 86-755-86016601 FAX: 86-755-86016603

www.voltronicpower.com