

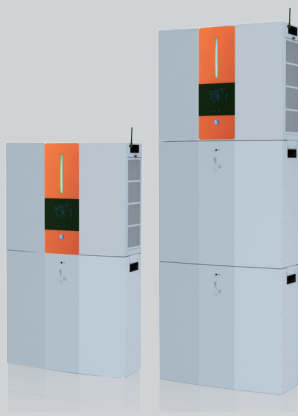
ESS610 Energy Storage System

6.5KW Off-grid inverter with 5KWh Lithium-ion battery

UN 38.3



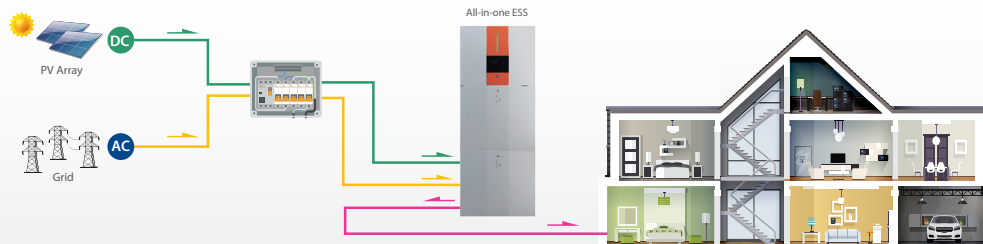
UK
CA



- Integrated 6.5kw off-grid inverter and lithium-ion battery module
- Built-in 2 MPP trackers
- Enhanced AC/solar charger to 120A
- Programmable supply priority for PV, battery or Grid
- User-adjustable battery charging current
- Battery independent design
- Multiple communication for USB, RS232, Modbus, SNMP, GPRS and Wi-Fi
- Monitoring APP (Andriod and iOS) for real-time status display and parameter control
- Compatible to utility and generator
- Lithium Iron Phosphate (LFP) cell
- Scalable Li-Ion battery expansion

System Diagram

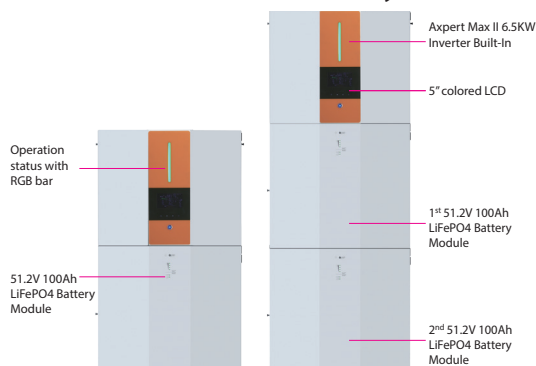
Only one ESS



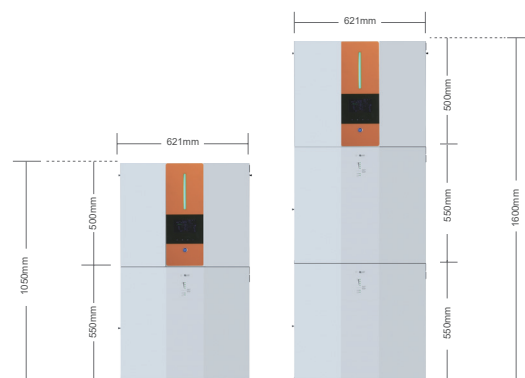
Two ESS systems parallel operation



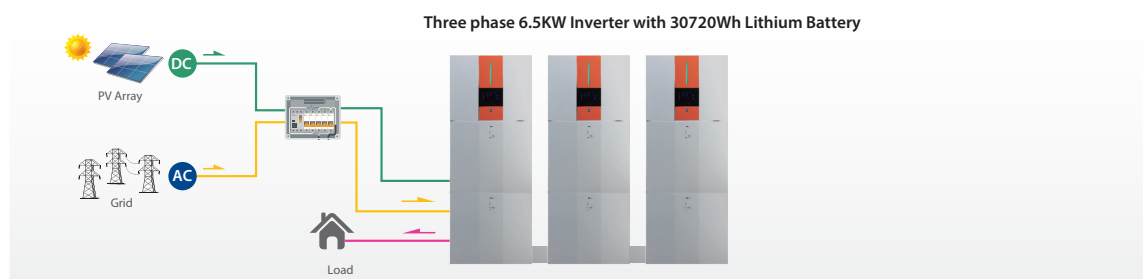
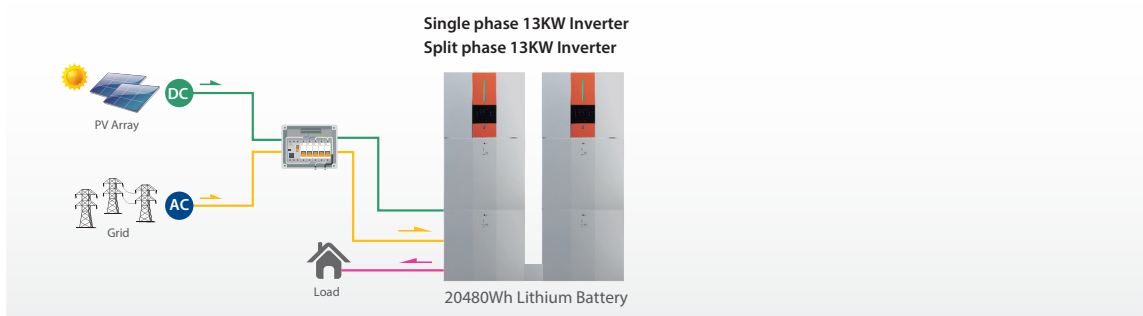
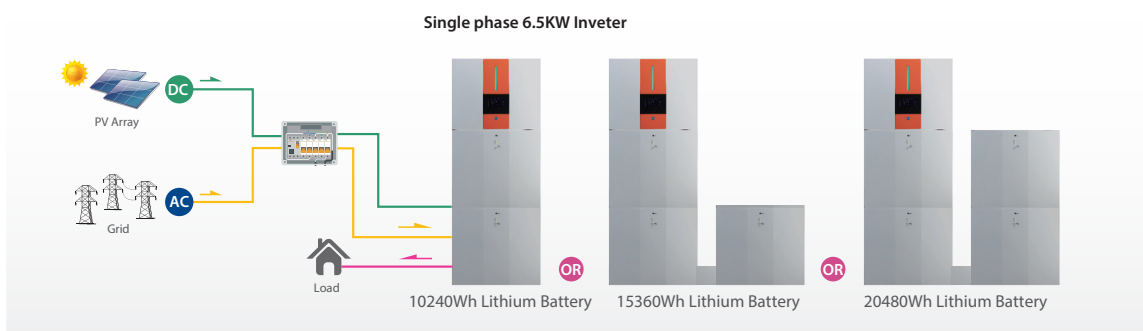
ESS610, 6.5kw off-grid inverter with 5KWh scalable lithium-ion battery module



DIMENSION



Configuration



Accessory



Maximum 10 pcs of battery modules



ESS Energy Storage System Specification

INVERTER MODEL		ESS 6.5KW
Maximum PV Input Power		8000W
Rated Output Power		6500W
Maximum Charging Power		6500W
PV INPUT (DC)		
MPPT Range @ Operating Voltage		90 ~ 230 VDC
Maximum PV Array Open Circuit Voltage		250 VDC
Maximum Solar Charge Current		120A
Number of MPP Trackers / Maximum Input Current		2 / 2 x 18 A
AC INPUT		
Acceptable Input Voltage Range		90-140 VAC (For Computers) 80-140 VAC (For Home Appliances)
Maximum AC Input Current		60A
BATTERY MODE OUTPUT		
Nominal Output Voltage		120 VAC
Maximum Conversion Efficiency (DC/AC)		93%
BATTERY CHARGER		
Nominal DC Voltage		48 VDC
Maximum Charging Current		120 A
PHYSICAL		
Dimension, D x W x H (mm)		214 x 621 x 500
Net Weight (kgs)		25
STANDARD		
Compliance Safety		UL 1741, CSA C22.2 No.107.1-16 ,FCC PART 15B

BATTERY MODULE		ESS II-4810
CAPACITY		5120Wh
PARAMETERS		
Nominal Voltage		51.2VDC
Full Charge Voltage (FC)		56V
Full Discharge Voltage (FD)		42V
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
PHYSICAL		
Battery Module Dimension, D X W X H (mm)		210 x 621 x 551
Net Weight (kgs)		55
System Dimension, D X W X H (mm)		500 x 660 x 1250
Net Weight (kgs)		130
STANDARD		
Compliance Safety		IEC 62619, EN 61000-6-3, EN 61000-6-1, UKCA, UN38.3

Product specifications are subject to change without further notice.