ESS100F

ESS100F offers a single-unit energy capacity of 50KW 100 kWh with an integrated cabinet and air-cooling design. It is suitable for large residential and small to medium commercial and industrial scenarios, supporting peak shaving, PV self-consumption, scheduled dispatch, and backup power applications.

Features And Advantages

All-in-one design

Integrated EMS, PCS, MPPT and BMS; Supporting PV access, on-grid to off-grid switching, covering the whole scenario of photovoltaic, storage and diesel generator.

Ultimate security

Aerosol fire suppression systems for battery packs and systems ; Intelligent BMS active balancing provides complete protection.

Flexible Expansion

Support expansion a maximum capacity of 1.2MWh; Reserved DC expansion interface and support AC expansion.

Smart control

Self-developed EMS energy management system and Cloud platform, support remote monitoring and O&M.

Specification

Model	ESS100F
Battery	
Battery Type	LiFePO4
Battery Capacity	280Ah
Rated Current	140A
Max.Current	160A
PACK Configuration	1P16S*7
Voltage Range	313.6~403.2Vdc
Nominal Energy	100kWh
AC (On-grid)	
Rated Power	50kW
AC Maximum Current	80A
AC Rated Voltage	400Vac
Wiring Method	3/N, 220v/380v; 3/N, 230v/400v
Frequency	50Hz/60Hz
Power Factor	1(Leading)~1(Lagging)
THDi	<3% (Rated power)
AC (Off-grid)	
Rated Power	50kVA
AC Maximum Current	80A
AC Rated Voltage	400Vac
Wiring Method	3/N, 220v/380v; 3/N, 230v/400v
Frequency	50Hz/60Hz
Unbalanced Load	110% Long Time
THDv	<3% (Liner load)
PV (Optional)	
Max. Input Power	50kW
Max. Input Current	110A
Short-circuit Current	160A
Max. Voltage	620Vdc
Input Voltage Range	200~620Vdc
Start-up Voltage	250Vdc
MPPT Path	1
System	
Weight	1800kg
Dimension (W/D/H)	1108*1082*2200mm
Air Conditioner Power	2kW (Cooling), 1kW (Heating)
Operating Temperature	-20~50℃ (Derating above 45℃)
Operating Humidity	0~95%RH (Non-condensing)
Ingress protection	IP55
Anti-corrosion Grade	C3
Cooling Method	Air cooling
Noise	≤70dB
Elevation	3000m(Derating above 2000m)
DisplayFire	Touch screen
Protection	Aerosol fire extinguishing system, water intrusion detection, temperature sensor, smoke sensor, explosion-proof valve
Communication	Ethernet/4G/RS485/Wifi