Commercial & Industrial Energy Storage

ZT-ESS-F100kW/215kWh

Product Function

- A 200kWh LFP(LiFePO4) Battery Energy Storage System(BESS) with a display screen and a two-layer Battery Management System(BESS).

- Optional fast automatic switching functionality for both on-grid and off-grid operation is available for the 100 kW energy storage inverter.

- Photovoltaic access is provided with options for 50 kWp or 60 kWp.

- The outdoor cabinet, with an IP54 protection rating, includes features such as power distribution, fire prevention, a liquid cooling system, and more.

- The Energy Management System(EMS) includes a cloud platform and a local dispatch manager to facilitate data collection.

DC System Parameter	
Battery Type	LFP(LiFePO4)3.2/280Ah
Battery PAck Configuration	1P48S/43kWh
Battery System Configuration	1P240S
Nominal Battery Voltage Range	672-864V
Battery System	(Usable capacity) 200 kWh (Rated capacity) 215 kWh
Temperature Detection	Cell+ (Copper rod)
AC Grid Parameter	
Rated Output Power	100kW
Over load Capacity	1.1 time (long-term) 1.2 time (1 min)
Rated Voltage (V)	AC400
Rated Output Current (A)	145
Grid Voltage Range	380V (-20%~15%)
Grid Frequency	50Hz/60Hz±2.5Hz
Isolation Mode	Non-Isolated
Power Factor	-0.99~0.99
(THDi) AC	<3%
Access Method	3-Phase, 4-Wire
Full Power Charge/Discharge Switching Time	<100ms
AC Off-Gtid Parameters	
Rated Output Voltage	AC400V
Rated AC Voltage Range	AC400V±3%
AC Backup Frequency	50Hz/60Hz
Unbalanced Load Capacity	100%
(THDu)	<3%
System Specification	
Max. Inverter Efficiency	98%
System Efficiency	>88%
Charge/Discharge Current Multiplier	<0.5C
Protection	
AC Input Protection	Load switches and fusible circuit breakers
DC Output Protection	Interrupter
Fire Protection System	Perfluorohexanone and water
General Specification	
Dimension[W*D*H]	1300*1350*1925
Weight(kg)	2400
Inlet Method	AC bottom input cable
Operating Temperature	-20℃~50℃(If >45℃, reduce the rated power)
Opetating Humidity	<95%
Max. Working Altitude	3 kM(If higher than 3000 meters, reduce the power rating)
Protection Level	IP54
Cooling Mode	Liquid cooling
Communication	
BMS Communication Interface	RS485/Ethernet
BMS Communication Protocol	IEC61850/MODBUS-RTU/MODBUS-TCPz