

Product Datasheet

Outdoor Cabinet Energy Storage System

Description

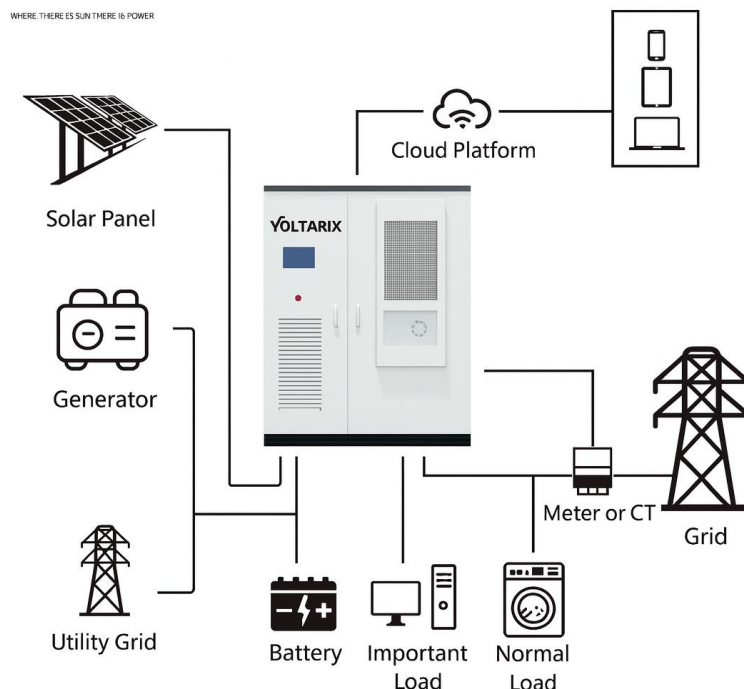
The Outdoor Cabinet Energy Storage System by GSO is a compact, intelligent, and flexible ESS solution tailored for small commercial and industrial (C&I) applications. Designed for outdoor installation, it integrates all essential subsystems — including battery packs, PCS (power conversion system), EMS (energy management system), fire suppression, and thermal management — in one reliable cabinet.

With a configurable capacity range of 100 kWh to 200 kWh, this system ensures efficient energy utilization, peak shaving, backup power, and renewable integration for small-scale facilities.



Key Features

1. **All-in-one design:** Combines battery, PCS, EMS, fire protection, and cooling system in one cabinet.
2. **Flexible capacity:** Supports 100–200 kWh configurations.
3. **Multi-source input:** Works seamlessly with solar PV, generator, and utility grid.
4. **Smart monitoring:** Cloud-based management platform for real-time control and performance analytics.
5. **Reliable power supply:** Prioritizes critical (important) and normal loads for uninterrupted operation.
6. **Outdoor ready:** Weatherproof and temperature-controlled design for diverse environments.



Specification

Parameter	Voltarix 50-100P	Voltarix 100-200P
Rated Power	50 kW	100 kW
Maximum Output Power	55 kW	110 kW
Rated AC Voltage	AC 400V	AC 400V
AC Voltage Range	AC 380V (-20% ~ +15%)	AC 380V (-20% ~ +15%)
Rated AC Frequency	50 / 60 ± 2.5 Hz	50 / 60 ± 2.5 Hz
Power Factor	-0.99 ~ +0.99	-0.99 ~ +0.99
THDI	≤ 3% (Full load)	≤ 3% (Full load)
Charging/Discharging Conversion Time	< 100 ms	< 100 ms
Isolation Method	None isolation	None isolation
Connect Method	Three phase four wire	Three phase four wire
Battery parameter		
Battery Configuration	1P225S	1P210S
Battery Cell Type	LFP 150Ah	LFP 300Ah
Nominal Voltage	720V	672V
Operating Voltage	652.5~798.75V	609~745.5V
Battery Capacity	108 kWh	201 kWh
System efficiency		
PCS Max Efficiency	≥ 98%	≥ 98%
System Max Efficiency	> 90%	> 90%
Discharge Rate	≤ 0.5C	≤ 0.5C
Protection		
AC Input Protection	Yes	Yes
AC Output Protection	Yes	Yes
Over Voltage Protection	Yes	Yes
Fire Protection	Aerosol / Perfluoro	Aerosol / Perfluoro
General Parameter		
Dimension (D×W×H)	1200×1100×2200 mm	1200×1600×2200 mm
Weight	1.8 ton	2.1 ton
Incoming Line Method	Side connection (bottom optional)	Side connection (bottom optional)
Operating Temperature Range	-20 ~ 50 °C (Derating >45°C)	-20 ~ 50 °C (Derating >45°C)
Humidity	≤95%, non-condensing	≤95%, non-condensing
Altitude	≤3000 m (Derating >2000 m)	≤3000 m (Derating >2000 m)
IP Grade	IP54 (key equipment IP65)	IP54 (key equipment IP65)
Cooling Method	Industrial air conditioner / forced ventilation	Industrial air conditioner / forced ventilation
Communication		
Communication Interface	RS-485 / Ethernet	RS-485 / Ethernet
Communication Rules	RTU / MODBUS-TCP	RTU / MODBUS-TCP