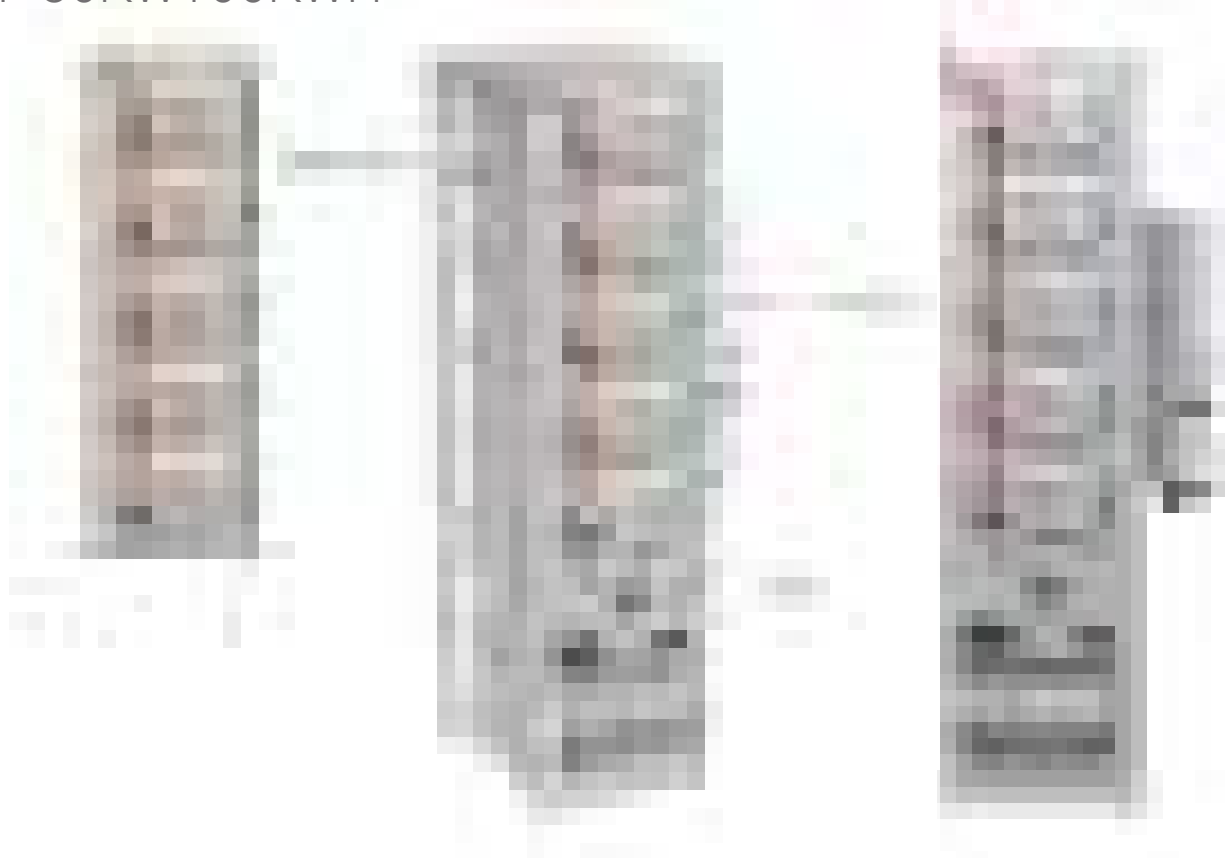


Smart BESS Cabinet

CAI-50KW100KWH



High Efficiency



Diverse Modes



Modular Scalability



Inverter All-silicon
Carbide Structure



Easy Maintenance



Advanced Safety
Protections

- 1.67 Times PV Power, high efficiency 4 MPPTs, 8 Strings with 20A PV input current, efficiency up to 99.9%, system efficiency $\geq 95\%$ with stable energy conversion.
- Cold start, Off-grid, Economic mode. Generator access, Remote maintenance in real time.
- Flexible architecture with expandable components for future upgrades.
- High efficient operation improves energy conversion efficiency and equipment stability.
- Modular battery design for easy replacement, automatic operation with remote diagnostics.
- Multi-layer safeguards, thermal/voltage/current/leakage monitoring, lithium-specific thermal management, fire suppression, and lightning protection.

Technical Data

Model	CAI-50KW100KWH
PV Data	
Max. PV Array Power	100 kW
Max. DC Voltage	1000VDC
MPPT Voltage Range	150~950VDC
Start-up Voltage	125VDC
Max. Input Current / String	8*20ADC
Isc PV (Absolute Maximum) / String	8*30ADC
No.of MPPT Tracker / Strings	4/2+2+2+2
Battery Data	
Cell Type	LiFePO4
Nominal Capacity	314AH
Charge Ratio	0.5C
Energy	100.5kWh
Nominal Voltage	320V
Voltage Range	304~336v
Inverter Input/output(Grid)	
Rated Power AC Side (output)	50kW
Rated Power AC Side (input)	138kW
Rated Voltage	380/400VAC, 50/60Hz
Switch Time	<20mS
Max. Continuous Current (input/output)	200A/ 80A
Max Output Overcurrent Current Protection	108A
AC OUTPUT	
Rated Output Voltage	380/400VAC, 3W+N+PE 50/60Hz
Rated Output Active Power	50kW
Rated Output Apparent Power	50kVA
Rated Output Current	72A
Overload Capacity (off grid)	110% 30S/120% 10S/ 150% 0.2S
Functional Features	
Insulation Monitoring	Yes
Residual Current Monitoring	Yes
Residual Current (RCD) Detection	Yes
Earth Fault Detection	Yes
Ground Fault Current Monitoring	Yes
MPPT Efficiency	99.90%
Euro / Max. Efficiency	97.5%/ 98.5%
Display	LED+APP
Charge Equalization Function	YES
System Data	
Communication Interface	RS485/WiFi/CAN/DRM(Optional:Bluetooth/LAN/Meter)
System Communication Protocol	Standard: Modbus (Optional)
Protection Function	Over-Charge, Over-Discharge, Over-Current, Short-Circuit, Over-Voltage, Under-Voltage, Over-High/Low Temperature
Enclosure Protection Rating	IP20
Operating Temperature	Charging: 0°C~60°C ; Discharging: -20°C~60°C
Storage Temperature	-30°C~60°C
Storage Humidity	≤100% RH
Cycle Life	≥8000 Cycles@80%DOD & 0.5C, 25°C
Life Time	10 Year
Anti-Corrosion Grade	C4
Battery Temperature Control Method	Industrial Grade Air Conditioning
Cooling	Air Cooling
Firefighting Program	Pack Aerosol + Sevoflurane + Water Fire Interface
DIESEL Generator Auto Control System	YES
Lighting Protection	YES
Smoke Detector	Optional
Fire Extinguish System	YES
Fire Sprinkler System	YES
Assembly Style	Rack Style (Inverter side hanging)
Cloud Monitoring Platform	YES
Thermal Management AC	YES
Size	1600*710*1500mm
Weight	Approx.1.0t
Certification	CE-EMC, UN38.3, CEI 0-21, EN50549-1, VDE-AR-N4105, UNE 217002, NTSTYPEA, G99, AS/NZS4777.2