

Smart ESS Cabinet

CA-PRO-100KWh/200KWh



Industrial and commercial ESS integrate batteries, BMS, EMS, modular battery packs; and include fire protection systems and cooling systems. It is the best choice for small industrial and commercial storage.



MSDS

ADVANTAGES-FEATURES



Block design, multi products parallel connection, power & capacity expandable



Integration of PV and energy storage system, Small footprint, IP54 protection level



Intelligent monitoring, support remote & local USB upgrade



Safe and reliable, cells cycle life ≥ 6000 times, with lightning protection & leakage protection



Two level fire extinguish system and battery safety management system



Triple protection, real-time monitoring, fault diagnosis, real-time alarm;



From cells to modules thermal management by software simulation and bench testing



Technical Data

Model	CA-PRO-100KWh	CA-PRO-200KWh
Battery Data		
Cell Type	LiFePO4	
Nominal Capacity	280AH	
Charge multiplier	0.5C	
Energy	100KWh	200KWh
Nominal Voltage	358.4V± 5%	358.4V± 5%
Arrangement	three vertical columns	
PCS Data		
Rated power AC side	50KW	
Rated voltage AC side	380VAC	
Maximum power AC side	50KVA	
DHI	< 3%	
DC component	<0.5%	
Grid rated frequency	50/60HZ	
Permissible grid voltage range	320V ~ 460V	
Connect a wire	3P+N+PE	
Power factor	0.98 leading to 0.98 lagging	
Functional Features		
Highly integrated analog front-end	YES	
Isolated power supply circuit	YES	
Multiple sleep and wake-up modes	YES	
High accuracy ($\leq 10\text{mV}$ & $\leq 2\%$ @FS)	YES	
Buzzer alarm function	YES	
SOC estimation function	YES	
LED status indication function	YES	
Charge equalization function	YES	
System Data		
System Communication Protocol	Standard: Modbus (Optional)	
Communication Interface	RS485 / CAN / RS232 /RJ45	
Key components	15 packs, 3 low voltage switchgear boxes (or 1 high voltage switch)	
Protection Function	Over-charge, Over-discharge, Over-current, Short-circuit, Over-voltage, Under-voltage, Over-high/low temperature	
Enclosure protection rating	IP54	
Operating Temperature	Charging: -20°C~65°C ; Discharging: -30°C~70°C	
Storage Temperature	-10°C~40°C	
Storage Humidity	$\leq 100\%$ RH	
Cycle Life	≥ 3000 Times @ 80% DoD	
Life Time	10 year	
Anti-corrosion grade	C4	
Discharge Connector	M6 Terminal / M8 Terminal / 2P-Terminal (Optional)	
Charge Connector	M6 Terminal / M8 Terminal / 2P-Terminal (Optional)	
PCS temperature control method	Intelligent temperature control air-cooled	
Battery temperature control method	Industrial Grade Air Conditioning	
Cooling	air cooling	
Firefighting program	Pack aerosol + sevoflurane + water fire interface	
Shell Material	Metal	
Shell Color	Black (Optional)	
Size	1600*710*1500mm	
Weight	Approx. 2.5t	
approve	CE-EMC, UN38.3	
Supported Brands for Connectivity	Pai Neng, Guruwatte, Riyueyuan, Shuozhi, Guruwatte, Victor, Schneider, Pengcheng, Soredale, SMA, Goodway, Tehnovation, Mercer, Jinlang, Shengnengjie, Meigureneng.	