

Palmer Giga

All-in-one BESS



Comprehensive Protection

Powered by BrillAnalytics BMS system provides all-around protection for the battery.



Integrated Design

Unified primary and secondary interfaces for quick configuration and use.



Safety and Stability

High-end cells with up to 8000 charge cycles and over 10-year lifespan.



Easy Maintenance

Easy access to modules, PCS, EMS & BMS.
Non 'walk-in' container design.



Thermal Management System

Design of professional thermal management system, effectively improving the service life of the battery cell.



Powerful Function

Supports peak shaving, frequency regulation, peak shifting, demand response, and micro-grid applications.



Safety Assurance

Automated fire warning, gas, and water fire extinguishing systems.



High Altitude Operation

Maximum operating altitude up to 5000m, with mature high-altitude application cases.



Cabin Protection

Video surveillance, access control, water leak detection, and environmental monitoring for enhanced security.

Product model		Palmer Giga BESS
Cell capacity		314 Ah
Combination mode		6*1P416S (2.508MWh) / 12*1P416S (5.016MWh)
Rated energy		2.089MWh/2.508MWh with PCS All-in-one, or 5.016MWh DC Block (external PCS)
Nominal voltage		1331V
Operating voltage		1075.2V~1382.4V
Charge and discharge rate		0.5C
Container size		20 feet
Weight		≤42T
Operating temperature		-40°C~55°C
Operating altitude		≤5000m
Temperature control mode		liquid cooling
Fire fighting system		Automatic fire early warning + gas fire extinguishing system + water fire fighting system
Protection degree		IP54 / IP55
Communication protocol		ModbusRTU/ModbusTCP/IEC 104/IEC 61850
Standard		GB/T36276

ESS-PCS-1725/1575/1375

Power Conversion System



High Security

AC/DC electrical isolation design.



Multiple Communication Protocols

Support IEC61850, IEC104, Modbus, CAN and other communication protocols .



Efficiency

Three-level, maximum efficiency > 99%.



High Altitude Operation

Adaptable to work at an altitude of up to 5000m.



Quick Response

Fast dynamic response, millisecond charge-discharge conversion time.



Intelligent Air Cooling

Suitable for ambient temperature of -30 °C ~ 60 °C, no derating at 45 °C.



Easy to Expand

Support multi-machine parallel operation.



Rich Communication Interfaces

With Ethernet, RS485, CAN and other communication interfaces .

Product model	ESS-PCS-1725	ESS-PCS-1575	ESS-PCS-1375
Power Level			
Rated power	1725kW	1575kW	1375kW
Maximum capacity	1870kVA	1732kVA	1512kVA
DC Side Parameters			
Maximum DC voltage	1500V		
Maximum DC current	1936A		
Battery voltage range	1000~1500V	915~1500V	800~1500V
Parameters of Grid-connected AC Side			
Rated grid voltage	690V,3W+PE	630V,3W+PE	550V,3W+PE
Grid voltage range	-15%~10%		
Maximum AC current	1588A		
Rated grid frequency	50Hz		
THDi (Power rating)	< 3%		
Adjustable range of power factor	-1~1		
Off-grid AC Side Parameter			
Off-grid rated voltage	690V,3W+PE	630V,3W+PE	550V,3W+PE
Rated frequency	50Hz		
Total distortion rate of voltage waveform	< 3% (linear load)		
System Parameters			
Isolation mode	No transformer		
Maximum efficiency	99%		
Protection degree	IP20		
Cooling method	Intelligent air cooling		
Communication interface	RS485/CAN/Ethernet		
Communication protocol	Modbus-RTU/Modbus-TCP/IEC61850/IEC104		
Service life	20Years		
Noise	< 80dB		
Dimensions (W * H * D)	1400*2000*800mm		
Weight	1491kg		
Environmental Conditions			
Operating temperature	-30 ~ + 60 °C (over 45 °C derating)		
Relative humidity	≤ 95% (no condensation)		
Operating altitude	≤ 4000m (more than 2000m capacity reduction)		