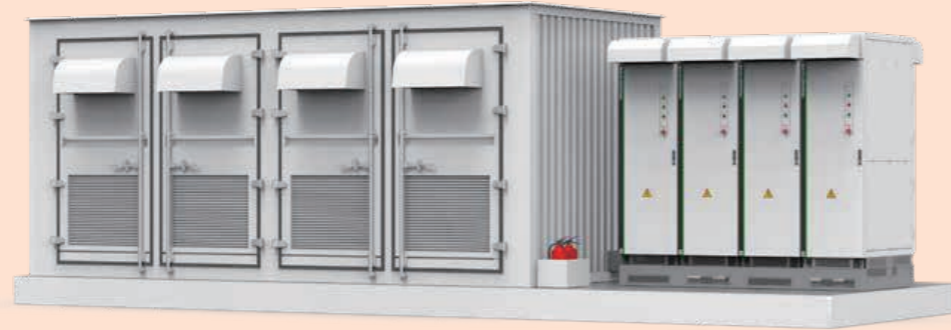


Integrated PCS + Step-Up Transformer Substation

6.25MW



PRODUCT APPEARANCE



FUNCTIONAL CHARACTERISTICS

High-Efficiency Conversion

- Integrated PCS + transformer design reduces footprint and installation time.
- Intelligent air-cooling ensures no derating at 50° C ambient temperature.

Safety & Reliability

- Transformer IP65, other components IP54 protection.
- Multi-layer hardware and software protection for higher system safety.

Grid-Friendly Performance

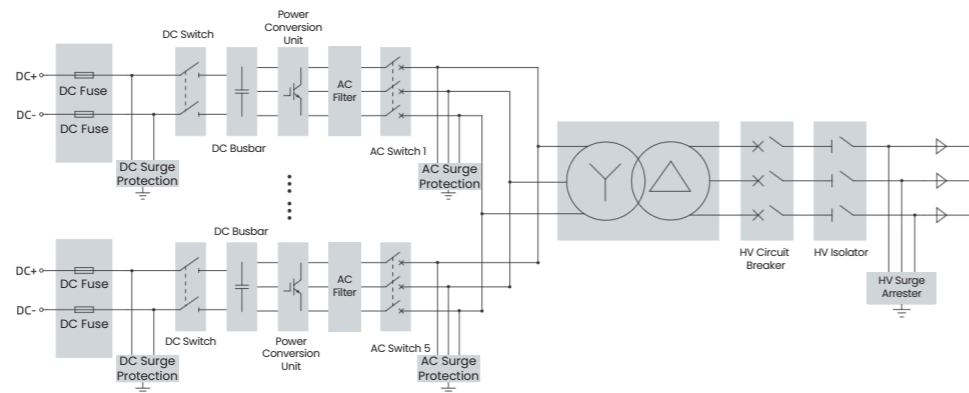
- Supports grid-forming operation and black start.
- Complies with LVRT/HVRT and weak-grid support for enhanced grid adaptability.

Versatile for Multiple Scenarios

- Supports VSG, VF, and PQ operation modes.
- Suitable for harsh environments: high altitude, high salinity, high/low temperature, etc.



CIRCUIT DIAGRAM



TECHNICAL SPECIFICATIONS

Product Model	PCC6250KT-C4
Input (DC)	
Rated Power	1565kW
Max. DC Bus Voltage	1673A
Max. DC Current	1000V ~ 1500V
DC Voltage Operating Range	1565kW
Number of DC Inputs	1673A
Output (AC)	
Rated Output Power	1722kW
Max. Output Power	0 ~ 1643kVar
Rated AC Voltage	690Vac
Reactive Power Range	621 ~ 759Vac
Grid Parameters	
Rated Grid Voltage	10kV/35kV
Rated Grid Frequency	50Hz
Grid Frequency Range	45Hz-55Hz
THDi	<3 (Rated power)
Power Factor Adjustment Range	-1-1
System Parameters	
Transformer Type	Dry-type
Operating Temperature Range	-30°C~+60°C (Derating above 50°C)
Maximum Operating Altitude	5000m
Cooling	Forced Air Cooling
Protection Rating	Converter IP65, Others IP54
Battery Communication Interface	RS485/CAN
EMS Communication Interface	Ethernet / Optical Fiber
Communication	Modbus RTU/Modbus TCP/IEC 104/IEC61850
Compliance Standards	GB/T 34120-2023/GB/T34133-2023
Grid Support	LVRT/HVRT / Primary Frequency Regulation / Inertia Response, etc.
General Data	
Dimensions (W × D × H)	8000*3050*3200mm (Subject to actual delivery)
Weight	25t (Subject to actual delivery)

• Design and specifications are subject to change without notice.