

PCS Series

100/125kW | Three Phase | String PCS

GoodWe's 100/125kW PCS is a high-performance power conversion system designed for both on-grid and off-grid applications. With advanced control technology, it offers fast and precise response to system scheduling, along with outstanding grid and load adaptability. Compact yet powerful, it supports intelligent grid interaction and seamless compatibility with various battery systems-making it a reliable choice for optimized energy management and modern energy storage solutions.



Harsh Environment Adaptability

- 110% continuous overloading capability at 40°C
- No power derating at up to 50°C
- Terminal temperature detection & residual current protection



Powerful Performance

- 100% unbalanced output
- LVRT/HVRT, weak grid support
- Seamless communication with BMS and EMS



Superb Safety & Reliability

- IP66 protection and optional C5 protection¹
- Class B EMC compliance for safer integration



User-Friendly Design & Flexibility

- Horizontal or vertical installation for easy cabinet integration
- Plug-in terminals for quick, flexible installation

Technical Data		GW100K-PCS-N-G10	GW125K-PCS-N-G10	GW100K-PCS-N-G11	GW125K-PCS-N-G11
Battery Input Data					
Battery Type		Li-Ion			
Nominal Operating Voltage		832			
Nominal Operating Voltage Range (V) ¹		680 ~ 936			
Operating Voltage Range (V)		670 ~ 1000			
Max. DC Voltage (V)		1000			
Number of Battery Input		1			
Max. Continuous Charging Current (A)	158.8	198.5	158.8	198.5	
Max. Continuous Discharging Current (A)	158.8	198.5	158.8	198.5	
Max. Continuous Charging Power (kW)	110.0	137.5	110.0	137.5	
Max. Continuous Discharging Power (kW)	110.0	137.5	110.0	137.5	
AC Output Data (On-grid)					
Nominal Output Power (kW)	100	125	100	125	
Max. Output Power (kW)	110.0@400V AC 104.5@380V AC	137.5@400V AC 130.6@380V AC	110.0@400V AC 104.5@380V AC	137.5@400V AC 130.6@380V AC	
Nominal Output Voltage (V)	400 / 380, 3L / N / PE				
Output Voltage Range (V)	340 ~ 440 / 323 ~ 418				
Nominal AC Grid Frequency (Hz)	50 / 60				
AC Grid Frequency Range (Hz)	47.5 ~ 52.5 / 57.5 ~ 62.5				
Max. Output Apparent Power to Grid (kVA)	110.0@400V AC 104.5@380V AC	137.5@400V AC 130.6@380V AC	110.0@400V AC 104.5@380V AC	137.5@400V AC 130.6@380V AC	
Max. Input Apparent Power from Grid (kVA)	110.0@400V AC 104.5@380V AC	137.5@400V AC 130.6@380V AC	110.0@400V AC 104.5@380V AC	137.5@400V AC 130.6@380V AC	
Max. AC Current Output to Utility Grid (A)	158.8	198.5	158.8	198.5	
Max. AC Current from Utility Grid (A)	158.8	198.5	158.8	198.5	
Power Factor	-0.8 ~ 0.8 (Adjustable from 1leading~1lagging)				
Max. Total Harmonic Distortion	<3%				
AC Output Data (Off-grid)					
Nominal Apparent Power (kVA)	100	125	100	125	
Max. Output Apparent Power (kVA)	110.0@400V AC 104.5@380V AC	137.5@400V AC 130.6@380V AC	110.0@400V AC 104.5@380V AC	137.5@400V AC 130.6@380V AC	
Max. Output Current (A)	158.8	198.5	158.8	198.5	
Nominal Output Voltage (V)	400 / 380, 3L / N / PE				
Nominal Output Frequency (Hz)	50 / 60				
Output THDv (@Linear Load)	<3%				
Efficiency					
Max. Efficiency	98.6%				
European Efficiency	98.4%				
Protection					
Residual Current Monitoring	Integrated				
Battery Reverse Polarity Protection	Integrated				
Anti-islanding Protection	Integrated				
AC Overcurrent Protection	Integrated				
AC Short Circuit Protection	Integrated				
AC Overvoltage Protection	Integrated				
DC Switch ²	Integrated				
DC Surge Protection	Type II				
AC Surge Protection	Type II				
General Data					
Operating Temperature Range (°C) ³	-25 ~ +60				
Derating temperature (°C) ⁴	50				
Relative Humidity	0 ~ 100%				
Max. Operating Altitude (m)	4000				
Cooling Method	Smart Fan Cooling				
User Interface	LED				
Communication	RS485, CAN, Ethernet				
Communication Protocols	Modbus RTU, Modbus TCP				
Weight (kg)	<80				
Dimension (W x H x D mm)	600 x 266 x 900				
Noise Emission (dB)	<68				
Topology	Non-isolated				
Ingress Protection Rating	IP66				
Environmental Category	4K4H				
Pollution Degree	III				
Overvoltage Category	DC II / AC III				
Protective Class	I				
The Decisive Voltage Class (DVC)	Battery: C AC: C Com: A				
Type of Electrical Supply System	TN-S, TN-C, TN-C-S, TT, IT				
Country of Manufacture	China				
Integrated PDU	Integrated	Integrated	-	-	

*1: For the three-phase 400V AC output. The full-load voltage range of the DC is from 705V to 936V.

*2: DC switch: DC Contactor.

*3: The auxiliary power supply can start up at -25°C.

*4: 1.1 times overload derating temperature: 40°C.

*: Please visit GoodWe website for the latest certificates.