

Dream Maker

PCS-3-10KW-40A-1 / PCS-3-12KW-40A-1
PCS-3-15KW-40A-1 / PCS-3-20KW-40A-1



Commercial | Three-Phase | HV Battery | 2 MPPTs

98.4%
Max. Efficiency

30A
PV Input Current

10ms
UPS-level Switching

110%
Unbalanced Load



Talented

98.4% max. efficiency
Within 10ms UPS-level switching
135-750V super wide battery voltage range
Max. 40A charge/discharge current



Reliable

IP65 protection
Integrated diecasting technology for body design
Advanced heat dissipation design
Great performance ensured by Dream Maker platform



Powerful

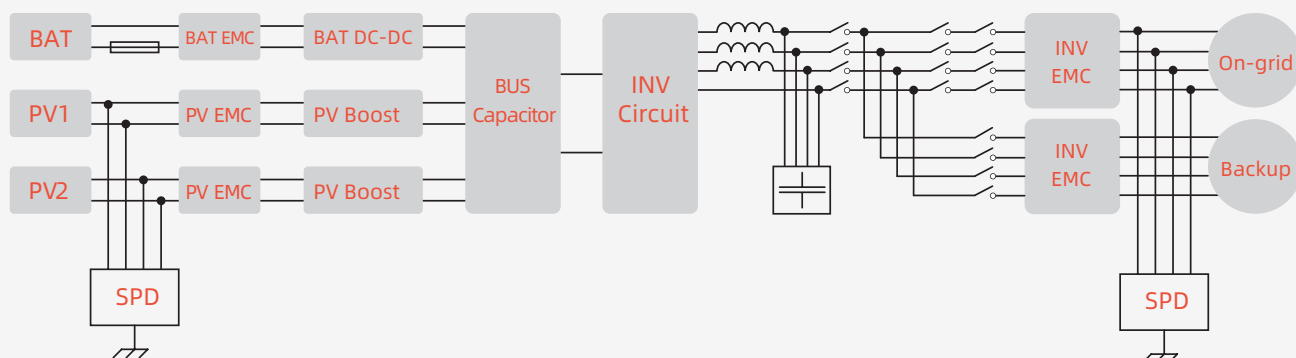
Up to 110% unbalanced load
Up to 125% AC output overloading
Max. 200% back-up output overloading @60s
Parallel operation capacity with max. 10 units



Friendly

Convenient installation and O&M
Easy data check via both OLED display and App
Easy WIFI configuration via App
Low operating noise

⚡ Circuit Diagram



TECHNICAL PAREMETERS

Type Designation

PCS-3-10KW-40A-1

PCS-3-12KW-40A-1

PCS-3-15KW-40A-1

PCS-3-20KW-40A-1

PV Input

Max. Input Power (kW)	15kW	18kW	22.5kW	30kW
Start-up Voltage (V)	135V	135V	135V	135V
Max. DC Input Voltage (V)*	1000V	1000V	1000V	1000V
Rated DC Input Voltage (V)	620V	620V	620V	620V
MPPT Voltage Range (V)	200-950V	200-950V	200-950V	200-950V
No. of MPP Trackers	2	2	2	2
No. of DC Inputs per MPPT	2/2	2/2	2/2	2/2
Max. Input Current (A)	30A/30A	30A/30A	30A/30A	30A/30A
Max. Short-circuit Current (A)	40A/40A	40A/40A	40A/40A	40A/40A

Battery Side

Battery Type	Lithium Battery (with BMS)			
Battery Voltage Range (V)	135-750V			
Max. Charge/Discharge Current (A)	40A/40A			

Grid Side

Rated Output Power (kW)	10kW	12kW	15kW	12kW
Max. Output Apparent Power (kVA)	11 ¹⁾ kVA	13.2kVA	16.5 ³⁾ kVA	22kVA
Max. Input Apparent Power (kVA)**	20kVA	24kVA	30kVA	30kVA
Max. Charging Power of Battery (kW)	10kW	12kW	15kW	20kW
Rated AC Voltage (V) 3L/N/PE;	3L/N/PE; 220/380V; 230/400V; 240/415V			
Rated AC Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Max. Output Current (A)	16.5 ²⁾ A	20A	25 ⁴⁾ A	33.5A
Power Factor	0.8 leading...0.8 lagging			
Max. Total Harmonic Distortion	< 3%@Rated output power			
DCI	< 0.5%ln	< 0.5%ln	< 0.5%ln	< 0.5%ln

Back-up Side

Rated Output Power (kW)	10kW	12kW	15kW	20kW
Max. Output Apparent Power (kVA)	11kVA	13.2kVA	16.5kVA	22kVA
Max. Output Current (A)	16.5A	20A	25A	33.5A
UPS Switching Time	< 10ms	< 10ms	< 10ms	< 10ms
Rated Output Voltage (V)	3L/N/PE; 220/380V; 230/400V; 240/415V			
Rated Output Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Voltage Harmonic Distortion	< 3% @linear load			

Efficiency

Max. Efficiency	98.4%	98.4%	98.4%	98.4%
European Efficiency	97.5%	97.5%	97.5%	97.5%

Compliance	IEC/EN 62109, IEC/EN 61000, EN50549-1, TOR Generator Type A, VDE-AR-N-4105			
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Protection

DC Reverse Polarity Protection	Integrated
Battery Input Reverse Connection Protection	Integrated
Insulation Resistance Protection	Integrated
Surge Protection	Integrated
Over-temperature Protection	Integrated
Residual Current Protection	Integrated
Islanding Protection	Integrated
AC Over-voltage Protection	Integrated
Overload Protection	Integrated
AC Short-circuit Protection	Integrated

General Data

Over Voltage Category	PV: II ; Main: III
Dimensions (W×H×D mm)	534×418×210
Weight (KG)	28.0 (10 & 12KW) / 31.0 (15 & 20KW)
Protection Degree	IP65
Standby Self-consumption (W)	<15
Topology	Transformerless
Operating Temperature Range (°C)	-30~60
Relative Humidity (%)	0~100
Operating Altitude (m)	3000 (>3000m derating)
Cooling	Natural Convection
Noise Level (dB)	<25
Display	OLED & LED
Communication	CAN, RS485, WiFi/LAN (Optional)

* PV Max. Input voltage is 950V without battery, or 850V with battery, otherwise inverter will be waiting;

** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery
1)G98:10.5kVA; 2)G98:16.00A; 3)A5 4777.2:15.0kVA; 4)A5 4777.2: 21.7A

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