

BluePulse Series **NEW**

KAC80DP2 / KAC100DP2 / KAC110DP2 / KAC125DP2
BC140DE2A / BC160DE2A / BC180DE2A / BC200DE2A /
BC220DE2A / BC240DE2A / BC260DE2A

Versatile Applications

- Supports both DC- and AC-coupled solar + storage solutions
- Integrated STS with seamless on/off-grid switching (≤ 10 ms)
- Scalable system: up to 20 PCS units in on-grid mode, and 6 PCS in off-grid mode

Safe & Reliable

- 314Ah high-capacity cells for enhanced energy density
- Comprehensive safety design: CO detection, audible & visual alarms, exhaust fan, explosion vent, air inlet valve, and firefighting water inlet
- Protective coverings ensure full electrical isolation and operational safety

Intelligent & User-Friendly

- Integrated monitoring and O&M via KSTAR Sync
- Fully integrated self-developed BMS, EMS, and PCS for maximum flexibility
- Compatible with third-party EMS and VPP platforms

High Performance

- Up to 200% DC/AC ratio for increased output and charging capability
- Supports direct diesel generator (DG) connection without external ATS
- Long battery lifespan exceeding 8,000 cycles



Outdoor Battery Cabinet Parameters

Technical Parameters	BC140DE2A	BC160DE2A	BC180DE2A	BC200DE2A	BC220DE2A	BC240DE2A	BC260DE2A
Battery Type	LiFe (LiFePO4)						
Battery Module Capacity	20.09 kWh						
Rated Capacity	314 Ah						
Number of Modules	7	8	9	10	11	12	13
Rated Energy	140.67 kWh	160.76 kWh	180.86 kWh	200.96 kWh	221.05 kWh	241.15 kWh	261.24 kWh
Usable Energy	137.86 kWh	157.54 kWh	177.24 kWh	196.94 kWh	216.63 kWh	236.33 kWh	256.02 kWh
Nominal Voltage	448 V	512 V	576 V	640 V	704 V	768 V	832 V
Operating Voltage Range	399 ~ 504 V	456 ~ 576 V	513 ~ 648 V	570 ~ 720 V	627 ~ 792 V	684 ~ 864 V	741 ~ 936 V
Charge / Discharge Rate	0.5 C						
Max.Discharge Current	157 A						
Max.Charge Current	157 A						
DoD	Default 90%, Max. 98%						
General Parameters							
Dimensions (W x H x D)	1324 x 1440 x 2415 mm						
Weight	1861	2001	2141	2281	2421	2561	2701
Installation Site	Outdoor						
IP Protection	IP54						
Protective Class	Class I						
Over Voltage Category	OVC II						
Anti Corrosion Level	C4						
Pollution Degree	PD3 (PD2 inside)						
Operation Humidity	0 ~ 95% (No Condensing)						
Operation Temperature	-30°C ~ +50°C						
Max. Operation Altitude	≤ 3000 (> 2000m Derating)						
Communication Port	Ethernet; CAN						
Communication Protocol	CAN; TCP						
Cooling Method	Air conditioner						
Warranty	10 Years						
Certificates	UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4						

Hybrid Inverter Parameters

Product Specifications	KAC80DP2	KAC100DP2	KAC110DP2	KAC125DP2
PV Side				
MPPT Voltage Range	250 ~ 950 V (Max. 1000 V)			
MPPT Rated Voltage	720 V			
MPPT Rated Voltage (Full Load)	450 ~ 800 V	550 ~ 800 V	600 ~ 800 V	700 ~ 800 V
Max. PV Power	160 kWp	200 kWp	220 kWp	250 kWp
Startup Voltage	230 V			
Number of MPPT / Strings per MPPT	8 / 2			
Max. Input Current per MPPT	45 A			
Max. Short-Circuit Current per MPPT	60 A			
Max input PV Power	160 kW	200 kW	220 kW	250 kW
Battery Side				
Battery Voltage Range	200 ~ 950 V			
Battery Rated Voltage Range	250 ~ 850 V			
Max. DC Current	160 A (80 A x 2)			
Max. DC Power	88 kW	110 kW	110 kW	125 kW
Number of DC Inputs	2			

Hybrid Inverter Parameters

Product Specifications	KAC80DP2	KAC100DP2	KAC110DP2	KAC125DP2
AC Side (On Grid)				
Nominal AC Output Power	80 kW	100 kW	110 kW	125 kW
Max. AC Output Power	88 kVA	110 kVA	121 kVA	125 kVA
Rated AC Output Current	116 A	144 A	159 A	181 A
Max.AC Input Current	240 A	250 A	250 A	250 A
AC Rated Voltage / Voltage Range	230 / 400 Vac; 220 / 380 Vac; 3L+PE+N; -15% ~ +10%			
Nominal Grid Frequency / Frequency Range	50 Hz / 60 Hz (±5 Hz)			
THDi	< 3% (100% Load)			
Adjustable PF Range	0.8 inductive(under-excited) to 0.8 capacitive(over-excited)			
Backup Output				
Nominal AC Voltage	230 / 400 V; 220 / 380 Vac; 3L+PE+N			
THDv	< 3% (Rated Power)			
Nominal Grid Frequency / Frequency Range	50 Hz / 60 Hz			
Nominal AC Output Power	80 kW	100 kW	110 kW	125 kW
Max. AC Output Power (Single-phase)	50 kW			
Max. Output Current	220 A			
Genset Input				
Max. Input Current	220 A			
Efficiency				
Max. Efficiency	98%			
Protection				
Reverse DC Connection Protection	Yes			
Anti-Islanding Protection	Yes			
Over-Temperature Protection	Yes			
Grid Monitoring / Earthing Fault Detection	Yes			
Insulation Monitoring	Yes			
DC / AC Surge Protection	DC Type II; AC Type II			
Protective Class	Class I			
Active Anti-islanding Method	Power Variation			
Overvoltage Category	DC II; AC III			
AFCI	Optional			
General Parameters				
Dimensions (W x H x D)	1120 x 760 x 365 mm			
Weight	135 kg			
Topology	Non-isolated			
IP Protection	IP66			
Operation Temperature Range	-25 ~ 60°C (> 45°C Derating)			
Operation Humidity Range	0 ~ 100% (No Condensing)			
Cooling Method	Intelligent Air Cooling			
Max. Operation Altitude	4000 m (> 3000 m Derating)			
Communication Port	RS-485 / CAN			
Warranty	10 Years			