

BlueCore Series

NEW
KAC(80~125)DP2-BIS80-260E

High Efficiency & Smart Energy

Direct PV input with 8 MPPTs and up to 2x PV oversizing
Up to 98% conversion efficiency with EMS and VPP integration

Flexible & Scalable Solution

Modular battery expansion from 80.36 kWh to 261.17 kWh
Up to 20 units parallel on-grid and 10 units off-grid for
MW-scale applications

* The 10ms on / off-grid switching time applies to single-PCS operation with a purely resistive load.

Reliable Safety & Backup

Tier-1 LiFePO4 cells with intelligent fan cooling
10ms-level* on / off grid switching time with integrated STS

Easy Installation & Smart O&M

Plug-and-play design with pre-connected cables
KSTAR Sync remote monitoring with third-party EMS compatibility



Battery Model	BC-PACK-20.1-20S-157A	
Technical Parameters		
Battery type	LFP (LiFePO4)	
Norminal Capacity	20.09 kWh	
Norminal Voltage	64 V	
Operating Voltage Range	57 ~ 72 V	
Charging / Discharging Rate	0.5 C	
Standard Charging / Discharging Current	157 A / 157 A	
Depth of Discharge	95%	
Module Connection	3 ~ 13 (Max. 13 Modules in Series)	
Total Battery Capacity	60.27 ~ 261.17 kWh	
Geneneral Parameters		
Dimensions(WxHxD)	554 x 290 x 970 mm	
Weight	< 180 kg	
Installation Site	Indoor	
IP Protection	IP21	
Anti Corrosion Level	C2	
Operation Humidity	0 ~ 95% (No Condensing)	
Operation Temperature	Charging: 0 ~ 50°C; Discharging: -20 ~ 50°C	
Max. Operation Altitude	≤ 3000 (>2000m Derating)	
Communication Prot	Etherne / CAN / RS-485	
Communication Protocol	CAN / TCP	
Cooling Method	Intelligent Fan Cooling	
Warranty	5 Year Product Warranty, 10 Year Performance Warranty	
HV Box Model	BC-SG-360	BC-SG-936
Technical Parameters		
Dimensions(WxHxD)	554 x 290 x 970 mm	
Weight	80 kg	
Max. Charge / Discharge Current	157 A	
Current Measurement Range	-157 ~ 157 A	
Operation Humidity	0 ~ 95% (No Condensing)	
Operation Temperature	-25 ~ 55°C	
IP Protection	IP21	
Installation Site	Indoor	
Cooling Method	Natural cooling	
Display	LCD	
Communication Interfaces	CAN; RS-485; Ethernet	
Battery Module Connection	3 ~ 5	6 ~ 13
Rated Voltage Range	171 ~ 360 V	342 ~ 936 V

Hybrid Inverter Parameters

Product Specifications	KAC80DP2		KAC100DP2		KAC110DP2		KAC125DP2	
PV Side								
MPPT Voltage Range	250 ~ 950 Vdc (Max. 1000 Vdc)							
MPPT Rated Voltage	720 Vdc							
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	
Number of MPPT / Strings per MPPT	8 / 2							
Max. Current per MPPT	45 A							
Battery Side								
Battery Voltage Range	200 ~ 950 Vdc							
Battery Rated Voltage Range	250 ~ 850 Vdc							
Max. DC Current	160 A (80 A x 2)							
Max. DC Power	88 kW		110 kW		121 kW		125 kW	
Number of DC Inputs	2							
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	
Rate AC Output Current	116 A		144 A		159 A		181 A	
Max. AC Input Current	227 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	227 A							
Overload Capacity	105%: 10min; 150%: 10s; 200%: 0.2s							
Genset Input								
Max. Input Current	227 A							
Efficiency								
Max. Efficiency	98%							
Euro Efficiency	96.8%							
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							
AFCI	Optional							
General Parameters								
Dimensions (W x H x D)	1120 x 760 x 365 mm							
Weight	135 kg							
Topology	Transformerless							
IP Protection	IP66							
Operation Temperature Range	-30 ~ 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							