

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

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

Modular battery design enables rapid plug-and-play deployment
KSTAR Sync remote monitoring with third-party EMS compatibility



Battery Model	BC-PACK-20.1-20S-157A	
Technical Parameters		
Battery type	LFP (LiFePO4)	
Battery Cell Brand	EVE	
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	4 ~ 13 (Max. 13 Modules in Series)	
Total Battery Capacity	80.36 ~ 261.17 kWh	
Geneneral Parameters		
Dimensions(WxHxD)	554 x 290 x 970 mm	
Weight	155 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

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

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
Number of MPPT / Strings per MPPT	8 / 2			
Max. Current per MPPT	45 A			
Battery Side				
Battery Voltage Range	200 ~ 950 V			
Battery Rated Voltage Range	250 ~ 800 V			
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	137.5 kVA
Rated AC Output Current	116 A	144 A	159 A	181 A
Max.AC Input Current	227 A	227 A	227 A	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			
Genset Input				
Max. Input Current	227 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			
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			