

BluePulse Series

NEW

KAC20DP2 / KAC25DP2 / KAC29.9DP2 / KAC30DP2 / KAC40DP2 / KAC49.9DP2 / KAC50DP2
 BC80DE2A / BC100DE2A / BC120DE2A

Versatile Application

- ▶ Ideal for factories, hotels, and farms with DC / AC-coupled solar-storage
- ▶ No external switching device is required, on/off-grid switching time about 10ms, support direct output backup load

Safe & Reliable

- ▶ 314ah large capacity cell, higher energy density
- ▶ Carbon monoxide detection, Sound and light alarm, Exhaust fan, Explosion vent window, Inlet valve, Fire water injection port

Smart Energy

- ▶ Supports self-consumption, peak shifting, time-of-use, and battery backup
- ▶ Integrated self-developed BMS / EMS for flexibility

High Performance

- ▶ Small size, small footprint
- ▶ Long-lasting battery cycle life

Easy Operation

- ▶ Compact design saves space
- ▶ Cloud control with 24 / 7 monitoring



| Technical Parameters | BC80DE2A | BC100DE2A | BC120DE2A |
|---|---|-------------|-------------|
| Battery Type | LiFe (LiFePO4) | | |
| Battery Module Capacity | 20.09 kWh | | |
| Number of Modules | 4 | 5 | 6 |
| Total Battery Capacity | 80.38 kWh | 100.48 kWh | 120.57 kWh |
| Nominal Voltage | 256 V | 320 V | 384 V |
| Operating Voltage Range | 228 ~ 288 V | 285 ~ 360 V | 342 ~ 432 V |
| Charging / Discharge Rate | 0.5 C | | |
| Standard Charging / Discharging Current | 157 A / 157 A | | |
| DoD | 90% | | |
| General Parameters | | | |
| Dimensions (W x H x D) | 1062 x 2083 x 1371 mm | | |
| Weight | < 1.36 T | < 1.5 T | < 1.64 T |
| Installation Site | Outdoor | | |
| IP Protection | IP54 | | |
| Anti Corrosion Level | C4 | | |
| Operation Humidity | 5% ~ 95% (No Condensing) | | |
| Operation Temperature | -30°C ~ +50°C | | |
| Max. Operation Altitude | ≤ 3000 (>2000m Derating) | | |
| Communication Port | Ethernet; CAN; RS-485 | | |
| Communication Protocol | CAN; MODBUS TCP / IP | | |
| Cooling Method | Air Conditioner | | |
| Warranty | 5 Year Product Warranty; 10 Year Performance Warranty | | |
| Certification | UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4 | | |

Hybrid Inverter Parameters

| Product Specifications | KAC20DP2 | KAC25DP2 | KAC29.9DP2 | KAC30DP2 | KAC40DP2 | KAC49.9DP2 | KAC50DP2 |
|--|--|-------------|-------------|-------------|-------------|-------------|-------------|
| PV Side | | | | | | | |
| MPPT Voltage Range | 250 ~ 950 Vdc (Max. 1000 Vdc) | | | | | | |
| MPPT Rated Voltage | 720 Vdc | | | | | | |
| MPPT Rated Voltage (Full Load) | 300 ~ 800 V | 350 ~ 800 V | 400 ~ 800 V | 400 ~ 800 V | 500 ~ 800 V | 600 ~ 800 V | 620 ~ 800 V |
| Max. PV Power | 40 kWp | 50 kWp | 60 kWp | 60 kWp | 80 kWp | 100 kWp | 100 kWp |
| Number of MPPT / Strings per MPPT | 4 / 2 | | | | | | |
| Max. Current per MPPT | 45 A | | | | | | |
| Battery Side | | | | | | | |
| Battery Voltage Range | 150 ~ 900 Vdc | | | | | | |
| Battery Rated Voltage Range | 180 ~ 800 Vdc | | | | | | |
| Max. DC Current | 40 Adc x 2 | 50 Adc x 2 | 60 Adc x 2 | 60 Adc x 2 | 80 Adc x 2 | 80 Adc x 2 | 80 Adc x 2 |
| Max. DC Power | 22 kW | 27.5 kW | 29.9 kW | 33 kW | 44 kW | 49.9 kW | 55 kW |
| Number of DC Input | 2 | | | | | | |
| AC Side (On Grid) | | | | | | | |
| Nominal AC Output Power | 20 kW | 25 kW | 29.9 kW | 30 kW | 40 kW | 49.9 kW | 50 kW |
| Max. AC Output Power | 22 kVA | 27.5 kVA | 29.9 kVA | 33 kVA | 44 kVA | 49.9 kVA | 55 kVA |
| Max. AC Input Power (Single-phase) | 20 kW | 25 kW | 25 kW | 25 kW | 27.5 kW | 37.5 kW | 37.5 kW |
| Rated AC Output | 29 A | 36 A | 43 A | 43 A | 58.0 A | 72 A | 72 A |
| Max. AC Continuous Input | 64 A | 80 A | 87 A | 96 A | 128 A | 144 A | 160 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 | 20 kW | 25 kW | 29.9 kW | 30 kW | 40 kW | 49.9 kW | 50 kW |
| Max. AC Output Power (Single-phase) | 20 kW | 20 kW | 20 kW | 20 kW | 25 kW | 25 kW | 25 kW |
| Max. Output Current | 87 A | 87 A | 87 A | 87 A | 110 A | 110 A | 110 A |
| Genset Input | | | | | | | |
| Max. Input Current | 87 A | 87 A | 87 A | 87 A | 110 A | 110 A | 110 A |
| Efficiency | | | | | | | |
| Max. Efficiency | 97% | 97% | 97% | 97% | 97.5% | 97.5% | 97.5% |
| 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) | 900 x 730 x 355 mm | | | | | | |
| Weight | 101 kg | | | | | | |
| Topology | Transformerless | | | | | | |
| 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 | | | | | | |