Generating Superior Solutions for Energy and More.

KSTAR
Powering the Future

# BluePulse Series NEW

KAC(80~125)DP2-BC220DE2A / BC240DE2A / BC260DE2A




## Versatile Application

- Ideal for factories, hotels, and farms with DC / AC-coupled solar-storage
- 10ms-level* on / off grid switching time with integrated STS

## 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

- Max. 20 PCS parallel for on-grid, 10 PCS for on / off-grid situation
- Long-lasting battery cycle life

## Easy Operation

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

| Technical Parameters | BC220DE2A | BC240DE2A | BC260DE2A |
|---|---|---|---|
| Battery Type | LiFe (LiFePO4) | | |
| Battery Module Capacity | 20.09 kWh | | |
| Number of Modules | 11 | 12 | 13 |
| Total Battery Capacity | 221.05 kWh | 241.15 kWh | 261.24 kWh |
| Nominal Voltage | 704 V | 768 V | 832 V |
| Operating Voltage Range | 627 ~ 792 V | 684 ~ 864 V | 741 ~ 936 V |
| Max. Charge / Discharge Rate | 0.5 C * | | |
| Standard Charging / Discharging Current | 157 A / 157 A | | |
| DoD | 95% | | |
| **General Parameters** | | | |
| Dimensions (W x H x D) | 1324 x 2415 x 1440 mm | | |
| Weight | < 2.39 T | < 2.53 T | < 2.66 T |
| Installation Site | Outdoor | | |
| IP Protection | IP54 | | |
| Anti Corrosion Level | C4 | | |
| 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 | Intelligent Air Cooling | | |
| Warranty | 5 Year Product Waarranty; 10 Year Performance Warranty | | |
| Certificates | UL 9540A; UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4 | | |

* The 10ms on / off-grid switching time applies to single-PCS operation with a purely resistive load.
** Max charge / discharge rate is limited to the inverter, in case of use 2 batteries and one inverter, max power remain the same.

columbus **Official representative in Ukraine** +380 93 714 59 95 • info@columbusenergy.com.ua • **columbusenergy.com.ua**

## 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 | IP65 | | | |
| Operation Temperature Range | -30 ~ 60℃ (> 45℃ 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 | | | |