

# BluePulse Series

**NEW**

KAC20DP2 / KAC25DP2 / KAC29.9DP2 / KAC30DP2 / KAC40DP2 / KAC49.9DP2 / KAC50DP2

## 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

- ▶ 280ah 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

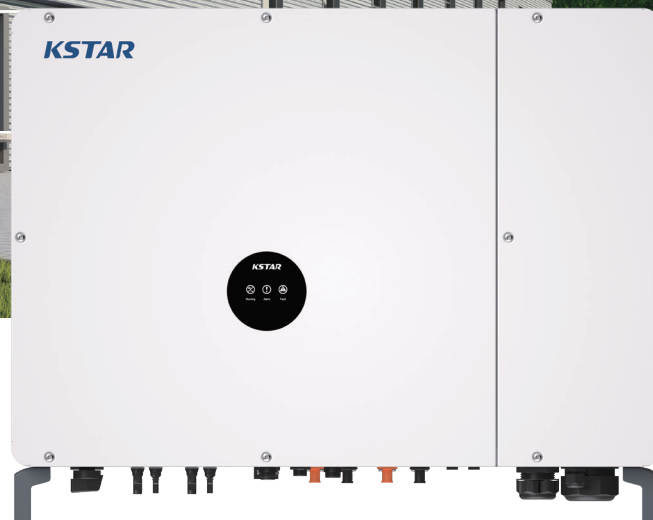
- ▶ Supports self-consumption, peak shifting, time-of-use, and battery backup
- ▶ Integrated self-developed BMS / EMS for flexibility

## High Performance

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

## Easy Operation

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



## Hybrid Inverter Parameters

| Product Specifications                 | KAC20DP2                      | KAC25DP2    | KAC29.9DP2  | KAC30DP2    | KAC40DP2    | KAC49.9DP2  | KAC50DP2    |
|--|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>PV Side</b>                         |                               |             |             |             |             |             |             |
| 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     |
| Startup Voltage                        | 180 V                         |             |             |             |             |             |             |
| Number of MPPT / Strings per MPPT      | 4 / 2                         |             |             |             |             |             |             |
| Max. Continuous Input Current per MPPT | 45 A                          |             |             |             |             |             |             |
| Max. Short-Circuit Current per MPPT    | 60 A                          |             |             |             |             |             |             |
| <b>Battery Side</b>                    |                               |             |             |             |             |             |             |
| Battery Type                           | LFP (LiFePO4)                 |             |             |             |             |             |             |
| 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 Inputs                    | 2                             |             |             |             |             |             |             |

## Hybrid Inverter Parameters

| Product Specifications                     | KAC20DP2   | KAC25DP2 | KAC29.9DP2 | KAC30DP2 | KAC40DP2 | KAC49.9DP2 | KAC50DP2 |
|--|--|----------|------------|----------|----------|------------|----------|
| <b>AC Side (On Grid)</b>                   |  |          |            |          |          |            |          |
| 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  |
| Rate AC Output Current                     | 29 A   | 36 A     | 43 A       | 43 A     | 58 A     | 72 A       | 72 A     |
| Max. AC Input Current                      | 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) |          |            |          |          |            |          |
| <b>Backup Output</b>                       |  |          |            |          |          |            |          |
| 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    |
| <b>Genset Input</b>                        |  |          |            |          |          |            |          |
| Max. Input Current                         | 87 A   | 87 A     | 87 A       | 87 A     | 110 A    | 110 A      | 110 A    |
| <b>Efficiency</b>                          |  |          |            |          |          |            |          |
| Max. Efficiency                            | 97%  |          |            | 97.5%    |          |            |          |
| <b>Protection</b>                          |  |          |            |          |          |            |          |
| Reverse DC Connection Protection           | Yes  |          |            |          |          |            |          |
| Anti-Islanding Protection                  | Yes  |          |            |          |          |            |          |
| Over-Temperature Protection                | Yes  |          |            |          |          |            |          |
| Grid Monitoring / Earthing Fault Detection | Yes  |          |            |          |          |            |          |
| Insulation Monitoring                      | Yes  |          |            |          |          |            |          |
| Overvoltage Category                       | DC II; AC III  |          |            |          |          |            |          |
| Protective Class                           | I  |          |            |          |          |            |          |
| Active Anti-islanding Method               | Power Variation  |          |            |          |          |            |          |
| DC / AC Surge Protection                   | DC Type II; AC Type II                                       |          |            |          |          |            |          |
| AFCI                                       | Optional   |          |            |          |          |            |          |
| <b>General Parameters</b>                  |  |          |            |          |          |            |          |
| Dimensions (W x H x D)                     | 900 x 730 x 355 mm   |          |            |          |          |            |          |
| Weight                                     | 101 kg   |          |            |          |          |            |          |
| Topology                                   | Non-isolated   |          |            |          |          |            |          |
| IP Protection                              | IP65   |          |            |          |          |            |          |
| 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   |          |            |          |          |            |          |
| Country of Manufacture                     | China  |          |            |          |          |            |          |
| Warranty                                   | 10 Years   |          |            |          |          |            |          |