Generating Superior Solutions for Energy and More.

KSTAR
Powering the Future

# KAC125DP2

Three Phase 125 kW Hybrid Inverter



**STS**
Integrated STS Design

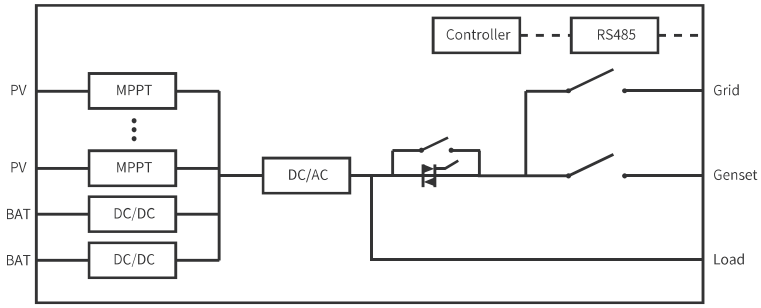
**100%**
Backup Output



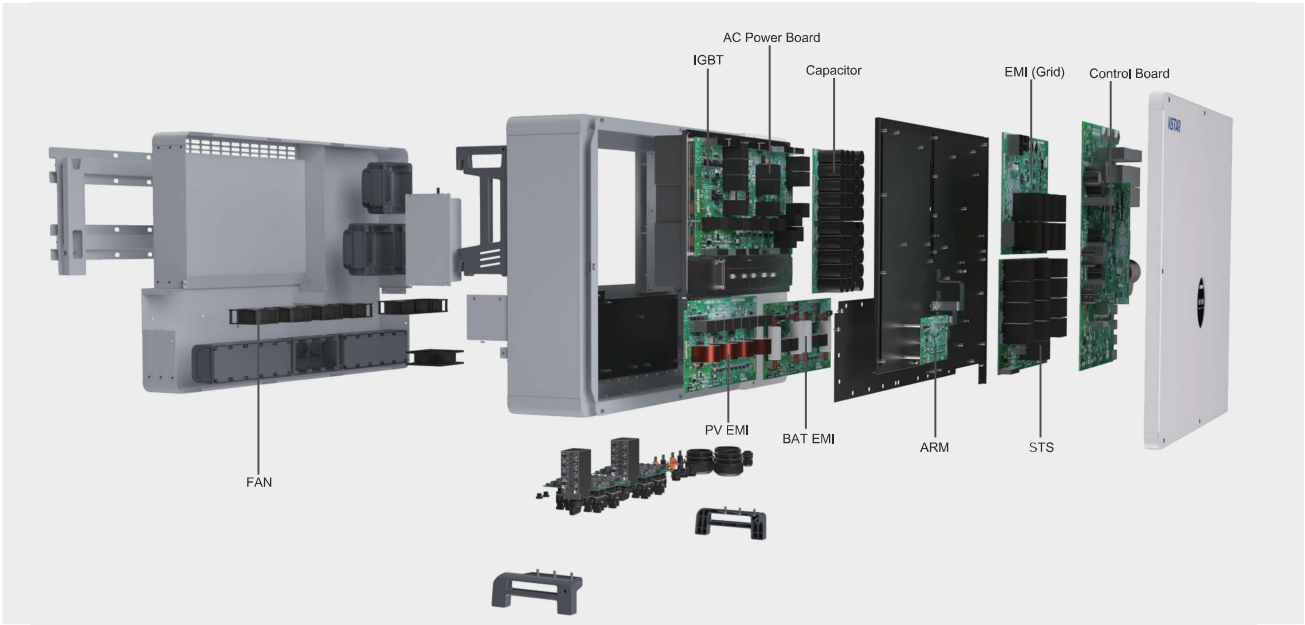

## Features:

- Integrated STS Design with Backup and Genset Access
- Supports 100% Unbalanced Backup Output
- Transformerless Off-grid Design
- High Efficiency Dc Coupling with 200% PVOversizing

## SLD:




## Exploded View:



# Hybrid Inverter Parameters

| PV Side | KAC125DP2 |
|---|---|
| MPPT Voltage Range | 250 ~ 950 Vdc (Max. 1000 Vdc) |
| MPPT Rated Voltage | 720 Vdc |
| MPPT Rated Voltage (Full Load) | 700 ~ 800 V |
| Max. PV Power | 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 ~ 800 Vdc |
| Max. DC Current | 160 A (80 A x 2) |
| Max. DC Power | 125 kW |
| Number of DC Inputs | 2 |
| **AC Side (On Grid)** | |
| Nominal AC Output Power | 125 kW |
| Max. AC Output Power | 125 kVA |
| Rated AC Current | 181 A |
| Max. AC Current | 250 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 (Lagging) ~ 0.8 (Leading) |
| **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 | 125 kW |
| Max. AC Output Power (Single-phase) | 50 kW |
| Max. Output Current | 220 A |
| **Genset Input** | |
| Max. Input Current | 220 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) | 635 x 1100 x 330 mm |
| Weight | > 95 kg |
| Topology | Transformerless |
| IP Protection | IP65 |
| Operation Temperature Range | -25 ~ 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 |


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