

KAC50DP2

Three Phase 50 kW Hybrid Inverter

STS

Integrated STS Design

100%

Backup Output



Features:



Integrated STS Design with Backup and Genset Access



Supports 100% Unbalanced Backup Output



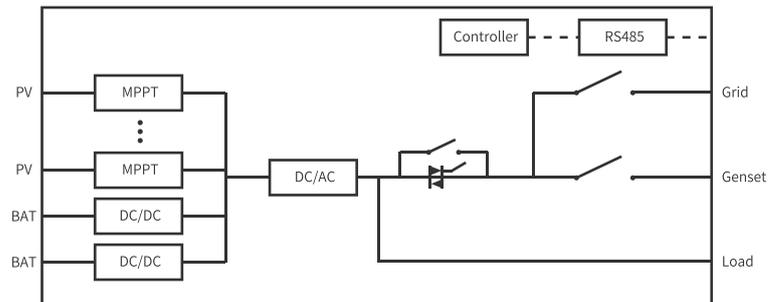
Transformerless Off-grid Design



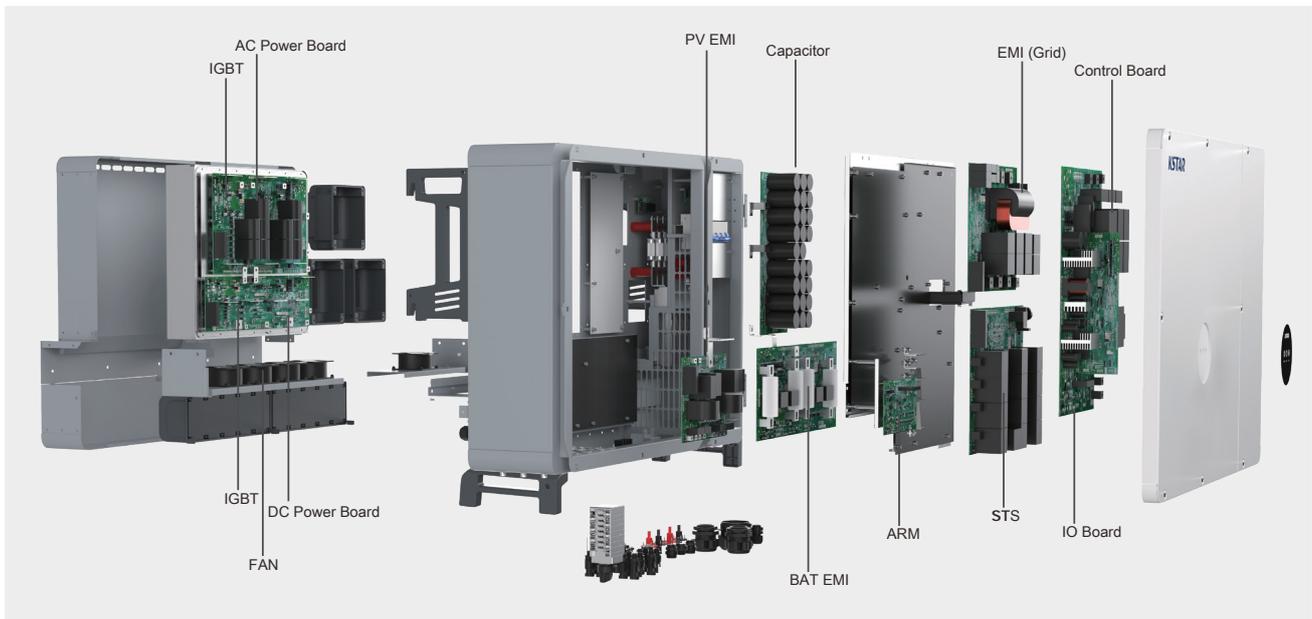
High Efficiency DC Coupling with 200% PV Oversizing



SLD:



Exploded View:



Hybrid Inverter Parameters

PV Side	KAC50DP2
MPPT Voltage Range	250 ~ 950 Vdc (Max. 1000 Vdc)
MPPT Rated Voltage	720 Vdc
MPPT Rated Voltage (Full Load)	550 ~ 800 V
Max. PV Power	100 kWp
Number of MPPT / Strings per MPPT	4 / 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	80 Adc x 2
Max. DC Power	55 kW
Number of DC Inputs	2
AC Side (On Grid)	
Nominal AC Output Power	50 kW
Max. AC Output Power	55 kVA
Max. AC Input Power (Single-phase)	37.5 kW
Rated AC Current	72.5 A
Max. AC Current	163 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	50 kW
Max. AC Output Power (Single-phase)	25 kW
Max. Output Current	110 A
Genset Input	
Max. Input Current	110 A
Efficiency	
Max. Efficiency	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)	635 x 950 x 315 mm
Weight	> 80 kg
Topology	Transformerless
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