

Specifications:

Product Specifications	KAC20DP2-BC107DE2	KAC25DP2-BC107DE2	KAC29DP2-BC107DE2	KAC30DP2-BC107DE2	KAC40DP2-BC107DE2	KAC49DP2-BC107DE2	KAC50DP2-BC107DE2
Battery Parameter							
Battery Capacity	107.52 kWh						
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	550 ~ 800 V	550 ~ 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						
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	27.5 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 Current	28.9 A	36 A	43 A	43 A	58 A	72 A	72 A
Max. AC Current	87 A	110 A	110 A	110 A	120 A	163 A	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)						
Backup Output							
Nominal AC Voltage	230 / 400 V; 220 / 380 Vac; 3L+PE+N						
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	25 kW	25 kW	25 kW	25 kW	25 kW	25 kW
Max. Output Current	87 A	110 A	110 A	110 A	110 A	110 A	110 A
Genset Input							
Max. Input Current	87 A	110 A	110 A	110 A	110 A	110 A	110 A
Efficiency							
Max. Efficiency	97.5%						
Protection							
AFCI	Optional						
General Parameters							
Dimensions (W x H x D)	Inverter: 635 x 950 x 315 mm Battery Cabinet: 1050 x 2085 x 1371 mm						
Weight	Inverter: ~80 kg Battery Cabinet: < 1500 kg						
IP Protection	Inverter: IP65 Battery Cabinet: IP54						
Certification*							
Inverter	IEC EN 62109-1/2; IEC EN 62477-1; EN IEC 61000-6/3; EN IEC 62920; IEC 61727; IEC 62116; IEC 60068-2; IEC 61683; EN50549-1/2/10; RfG/NC RfG/PTPIREE; CEI-021/CEI-016; C10/11						
Battery Cabinet	UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4; UL9540A						



BluePulse Series
KAC50DP2-BC107DE2









Three Phase 107kWh Cabinet



BluePulse Series

KAC50DP2-BC107DE2

Three Phase 50kW Hybrid Inverter
107kWh Cabinet

-  Powered by CATL
10 Years Performance Warranty
-  280ah large capacity cell,
higher energy density
-  Backup / Genset Input
Integrated
-  Integrated self-developed
BMS / EMS for flexibility
-  Fire Safety with Alarms, Valves,
Smoke / CO sensors,
UL 9540A Certified
-  Small size, small footprint
Long-lasting battery cycle life
-  Off-grid Expandable up to 6
ParallelOn-grid Expandable
up to 20 Parallel
-  Compact design saves space
Cloud control with 24/7 monitoring



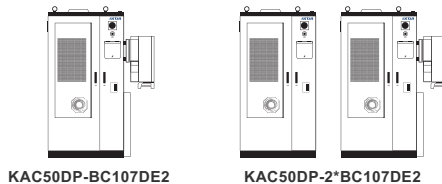
Functions:

KSTAR BluePulse PV+ESS All-in-One system serves as a multiple energy source gateway.

- It efficiently controls and distributes power from various sources, including mains electricity, solar photovoltaics, and diesel generators. The system supports multiple grid-connected modes such as self-consumption, time-of-use, and peak shaving, tailored to diverse customer needs.
- In off-grid scenarios, it operates in complementary modes like PV-Battery or PV-Battery-Diesel Generator.
- In the event of a mains power outage, it seamlessly switches to backup mode in less than < 10ms, ensuring a continuous power supply for users.

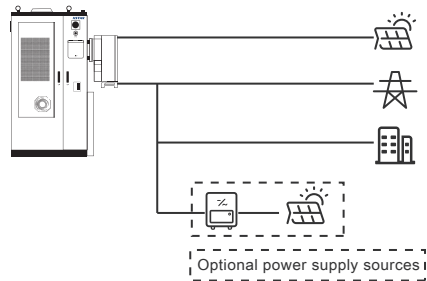
System Configuration:

KSTAR BluePulse PV+ESS All-in-One system features a KAC50DP2 series hybrid inverter and a BC107DE2 series battery cabinet, with the option to add an extra battery cabinet for expansion.

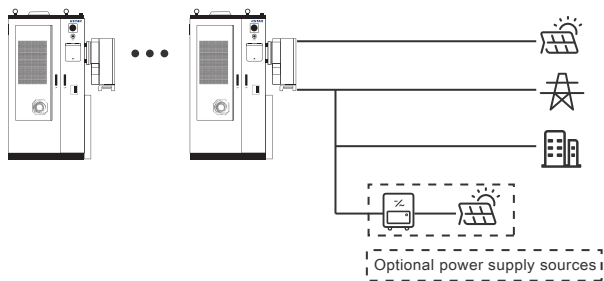


Applications:

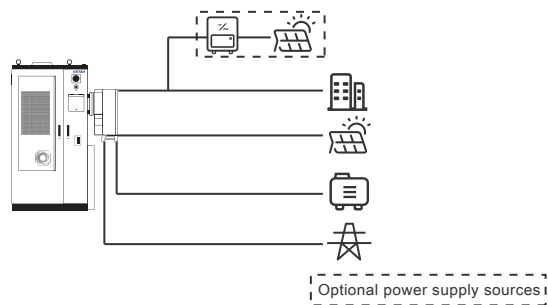
On-Grid Solution



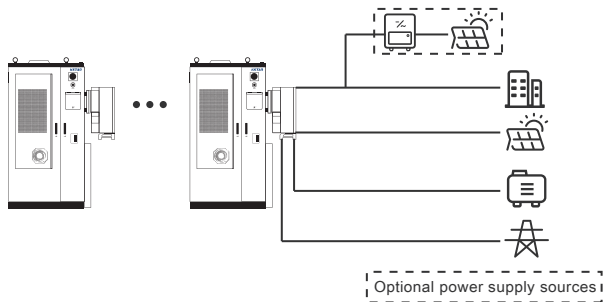
Up to 20 Unit System in Parallel



On/off Grid Solution & Off Grid Solution



Up to 6 Unit System in Parallel



- ▶ On Grid
 - Export Limit
 - Import Limit
- ▶ Off Grid
- ▶ On/Off Grid Switching



- ▶ >150% of the system capacity



- ▶ Support Both DC coupling and AC coupling PV-ESS Solution



- ▶ Factory Load is supported
- ▶ Motor load shall be not more than 1/3 of the system capacity





- ▶ Support PV-ESS-EV Charger smart control


BluePulse Series


KAC50DP2-BC107DE2


Three Phase 50kW Hybrid Inverter
107kWh Cabinet


- 


Powered by CATL
10 Years Performance Warranty
- 


280ah large capacity cell,
higher energy density
- 

Backup / Genset Input
Integrated
- 

Integrated self-developed
BMS / EMS for flexibility
- 

Fire Saftey with Alarms, Valves,
Smoke / CO sensors,
UL 9540A Certified
- 

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

Off-grid Expandable up to 6
ParallelOn-grid Expandable
up to 20 Parallel
- 

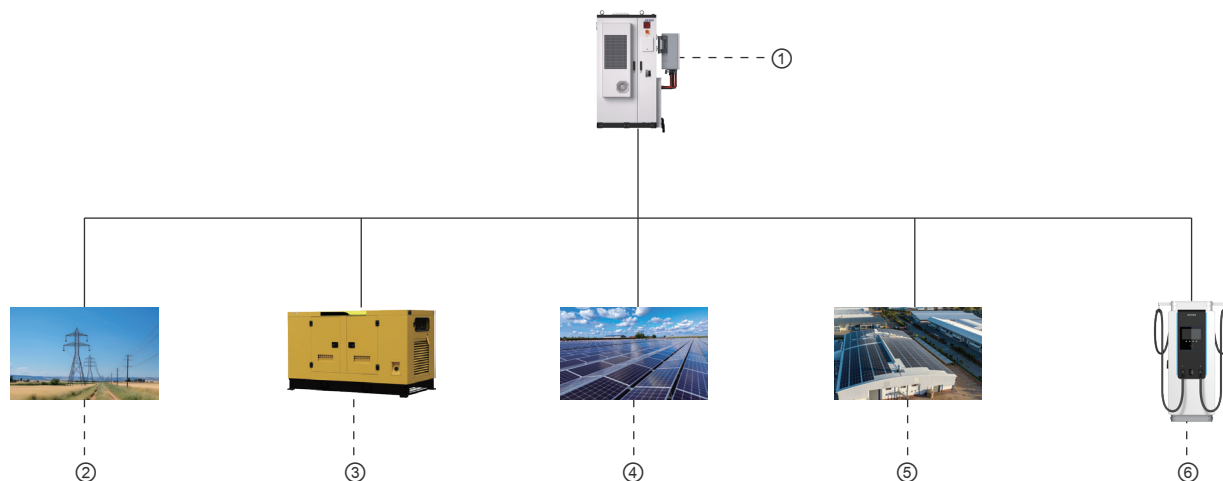
Compact design saves space
Cloud control with 24/7 monitoring



Functions:

KSTAR BluePulse PV+ESS All-in-One system serves as a multiple energy source gateway.

- It efficiently controls and distributes power from various sources, including mains electricity, solar photovoltaics, and diesel generators. The system supports multiple grid-connected modes such as self-consumption, time-of-use, and peak shaving, tailored to diverse customer needs.
- In off-grid scenarios, it operates in complementary modes like PV-Battery or PV-Battery-Diesel Generator.
- In the event of a mains power outage, it seamlessly switches to backup mode in less than < 10ms, ensuring a continuous power supply for users.



- ① ▶ AC capacity ranges from 20KW~50KW
▶ Battery capacity ranges from 70KWH~214KWH

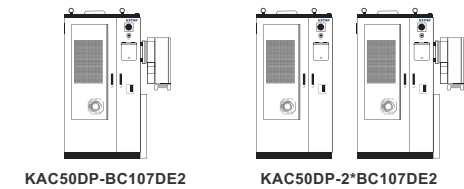
② ▶ On Grid
• Export Limit
• Import Limit
▶ Off Grid
▶ On/Off Grid Switching
- ③ ▶ >150% of the system capacity

④ ▶ Support Both DC coupling and AC coupling PV-ESS Solution
- ⑤ ▶ Factory Load is supported
▶ Motor load shall be not more than 1/3 of the system capacity

⑥ ▶ Support PV-ESS-EV Charger smart control

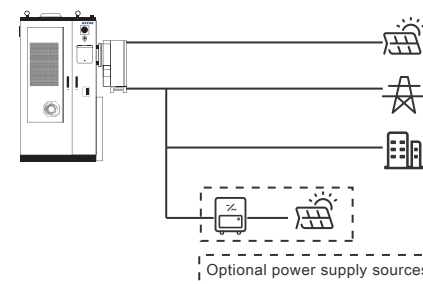
System Configuration:

KSTAR BluePulse PV+ESS All-in-One system features a **KAC50DP2** series hybrid inverter and a **BC107DE2** series battery cabinet, with the option to add an extra battery cabinet for expansion.

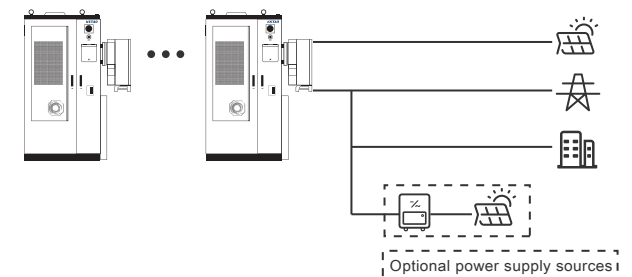


Applications:

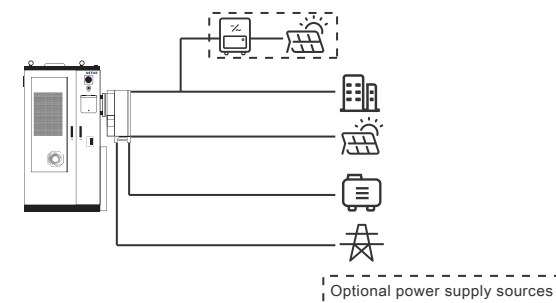
On-Grid Solution



Up to 20 Unit System in Parallel



On/off Grid Solution & Off Grid Solution



Up to 6 Unit System in Parallel

