

# KAC50DP-BC100DM

50kW/100kWh outdoor All-in-one ESS cabinet

## Highlights:

### Safe&Reliable

- CATL LFP battery cell
- Double fire suppression system design
- 1+1 redundancy design

### Simple&User-friendly

- Pre-installed in factory for easy installation on site
- Integrated BMS/EMS, suitable for various applications
- Effortless operation, cloud control

### Economical&Efficient

- 100% DOD, improving ROI
- Save Capex, expanding as required
- Efficient and energy-saving HVAC design



## Outdoor battery cabinet parameters

Technical parameters	
Battery tyoe	LFP
Battery module capacity	5.12kWh
Number of modules	10*2
Total battery capacity	102.4kWh
Nominal voltage	512V
Operating voltage range	448V~576V
Charge/Discharge rate	Max. 0.5C
DoD	100%
Standards	IEC62619-2017;UN38.3;IEC61000-6-2/4

General parameters	
Dimensions(WxDxH)	1100 x 1080 x2380 mm
Weight	<1.5T
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	4000m ( >3000m derating )
Communication port	Ethernet;CAN
Communication protocol	CAN;MODBUS TCP/IP
Cooling method	Air conditioner

<b>Product specifications</b>		<b>KAC50DP</b>
<b>PV side</b>		
Max. input voltage		1000V
MPPT voltage range		300V~750V
Max. current per MPPT		25A
Number of MPPT		3
Number of inputs per MPPT		2
<b>Battery side</b>		
Max. input voltage		750V
Min. input voltage		350V
DC voltage at nominal operation		500V~750V
Max. DC Current		50A*2
Max. DC input power		55kW
Number of DC inputs		2
<b>AC side(On grid)</b>		
Nominal AC output power		50kW
Max. AC output power		55kVA
Max. AC current		80A
Nominal AC voltage		400V
AC voltage range		360V~440V
Nominal grid frequency/frequency range		50/60Hz±5Hz
THDv		<3%(100% load )
Adjustable PF range		-1(lagging)~1(leading)
<b>AC side(Off grid)</b>		
Nominal AC voltage		400V±3%
THDv		<3%(linear load)
Nominal grid frequency/frequency range		50/60Hz
Nominal AC output power		50kW
Max. AC output power		55kVA
<b>Efficiency</b>		
Max. efficiency		97.5%
<b>Protection</b>		
Reverse connection protection		Yes
DC switch		Yes
AC switch		Yes
Over-temperature protection		Yes
Grid monitoring/ Earthing fault detection		Yes
Insulation monitoring		Yes
Surge protection		DC Type II;AC Type II
<b>General parameters</b>		
Dimensions(WxDxH)		650*715*325mm
Weight		62KG
Topology		Transformerless
IP protection		IP65
Operation temperature range		-25~60°C(>45°C derating )
Operation humidity range(no condensing)		0~100%
Cooling method		Intelligent air cooling
Max. operation altitude		4000m(>3000m derating )
Communication port		RS485/CAN
Standards		IEC 62477 , IEC61000 , CE , GB/T