

iCube Hybrid Series

C&I 50kW/100kWh Air-Cooling All-in-one



Superb Performance

- Max. 20A PV input current per string, compatible with all PV modules.
- 4 MPPTs and supports 200% oversizing for photovoltaic.
- LFP 280Ah cells, offering 140A fast charging & discharging.



Ultra Safe

- System IP55 rating for dust and water resistance.
- AFCI technology to effectively prevent fire hazards.
- Two-level AC&DC surge protection & Three-level fire protection.



Flexible & Efficient

- Parallel connection of up to 6 PCS for on/off-grid expansion.
- STS ensures 20ms seamless switch to off-grid mode.
- Smart backup with diesel generator.



Cost-effective

- Two-level AC&DC surge protection & Three-level fire protection.
- PV, grid, generator multiple energy sources can be used in synergy.

Product Model	iCube 50/100
Battery Parameters	
Battery Type	Lithium Iron Phosphate
Cell Capacity	3.2V / 280Ah
System Battery Configuration	1P112S
Rated Battery Capacity	100.35 kWh
Rated Battery Voltage	358.4 V
Battery Voltage Range	DC280 ~ 408.8V
Charge/Discharge Ratio	Rated 0.5C
Discharge Depth	95%
Battery Cooling System	Fan Cooling
PV Side Parameters	
Maximum Input Power	100kW
Maximum Input Voltage	1000V
Rated DC Input Voltage	600V
MPPT Operating Voltage Range	150-850V
Maximum Input Power /MPPT	18kW
MPPT Quantity	4
Maximum Input Current	4*40 A
Maximum Short Circuit Current	4*60 A
MPPT Route No. of Strings	4*2
Grid-connected AC Side Parameters (Output)	
Rated Output Power	50 kW
Apparent Power Output	50 kVA
Working Phase Number	3L/N/PE
Rated Grid Voltage	220V/230V
Mains Voltage Range	196-265V
Rated Grid Frequency	50Hz/60Hz
Rated Grid Output Current	75.97A
Maximum Output Current	76.0A
Power Factor	>0.99 (0.8leading-0.8lagging)
Harmonic Rate	<3%
Grid-connected AC Side Parameters (Input)	
Rated Input Voltage	220/230V, 3L/N/PE
Rated Input Frequency	50/60Hz
Maximum Through Current	152A
Backup AC Side Parameters	
Rated Output Power	50kW
Maximum Apparent Power Output	1.6 times of rated power, 2S
Backup Power Switch Time	<20ms
Rated Voltage	220/230V, 3L/N/PE
Rated Frequency	50/60Hz
Rated Output Current	76.0A/72.2A
THDv (@linear load)	<2%
Generator input parameters	
Maximum Input Power	50kW
Rated Input Voltage	220/230, 3L/N/PE
Rated Input Frequency	50/60Hz
System parameters	
Size (W*D*H)	1570*1280*1813mm
Weight	Approx. 1.3t
Class of Protection	IP55
Anticorrosion Grade	C4
Operating Temperature Range	-25°C~50°C
Storage Temperature Range	-20°C~50°C
Operating Humidity Range	≤100%
Battery Temperature Control Mode	Industrial grade temperature control air conditioning
Fire Protection Scheme	Aerosols
Maximum Working Altitude	≤3000m
Converter Cooling Mode	Forced air cooling
Communication Protocol	CAN, RS485, WiFi/LAN (optional)
Communication Interface	Ethernet/RS485/CAN

