

# BlueArk X5

## Commercial & Industrial Energy Storage System



### POWER

29.9/30/50 kW Hybrid Inverter

### CAPACITY

60~100 kWh



### Versatile Energy & Grid-Free Capability

- Multi-energy integration for diverse applications;
- Seamless transition: on/off-grid switching under 20ms, uninterrupted power for critical loads;
- Black start: self-starting in extreme conditions without grid or solar power.



### Smart Operation & Cost Efficiency

- Remote OTA: automatic optimization of features and performance;
- Intelligent monitoring: remote diagnostics, visual status display, alerts and analysis;
- Compatible EMS: unified management across multiple sites, reducing operational costs.



### Integrated Design & Flexible Installation

- LFP 314Ah Cells: more stable system, higher energy density;
- Plug-and-play: All-in-one design, quick deployment with factory pre-integration;
- A single cabinet supports system expansion from 2h to 8h (50kW/400kWh);
- The maximum supported number of cabinets for parallel operation is  $\leq 10$  (500kW/1MWh).



### Enhanced Safety & Multiple Protection

- IP55 rating: C3/C4 corrosion resistance, adapt to extreme environments;
- Cooling system in battery compartment: ensures stability and longevity;
- Fire and aerosol integration: Combustible gas detection with integrated ventilation, Gel fire suppression in battery compartment;
- Intelligent detecting: smart monitoring platform with cell health alerts;
- 5 Year Warranty: Comprehensive lifecycle safety assurance.

### DC Input

Max. PV Array Power@STC	59.8kWp	60kWp	100kWp
Max. DC Voltage		1000V	
MPPT Voltage Range		180V~850V	
Rated DC Voltage		600V	
Max. DC Input Current		200V	
Max. DC Input Current Of a Single String	4*45A	4*45A	6*45A
Max. DC Short Circuit Current	4*55A	4*55A	6*55A
MPPT Channels / Strings per Channel	4-way / 2 strings per way,(total 8 strings)	4-way / 2 strings per way,(total 8 strings)	6-way / 2 strings per way,(total 12 strings)

### Battery Parameters

Battery Type		LiFePO4	
Rated Energy	60/100kWh	60/100kWh	100kWh
Battery Voltage Range	168V~216V/280V~360V	168V~216V/280V~360V	280V~360V
Max. Charging/Discharging Current		150A	

### AC Output [On-grid]

Rated AC Power	29.9kW	30kW	50kW
Max. Apparent Power	29.9kVA	33kVA	55kVA
Rated Output Current@230Vac	43.3A	43.5A	72.5A
Max. AC Output Current to Utility Grid	43.3A	47.9A	79.8A
Rated AC Voltage		3L+N+PE, 380V/400V	
Rated Output Frequency/Range		50Hz, 45Hz~55Hz; 60Hz, 55Hz~60Hz	
Power Factor (cos φ)		-0.8~0.8	
Total Harmonic Distortion		<3%	

### AC Input [On-grid]

Rated AC Voltage		3L+N+PE, 380V/400V	
Rated Input Frequency		50Hz/60Hz	
Max. Input Current	80A	80A	200A

### AC Output [Back Up]

Max. Apparent Power	29.9kVA	33kVA	55kVA
Peak Outpet Apparent Power	29.9kVA	45kVA, 5s	75kVA, 5s
Rated AC Voltage		3L+N+PE, 380V/400V	
Rated Output Frequency/Range		50Hz, 45Hz~55Hz; 60Hz, 55Hz~60Hz	
Total Harmonic Distortion (THDV)@Linear Load		<3%	

### AC Input [Generator]

Max. Input Power		138kW	
Max. Input Current@230V		200A	
Rated AC Voltage		3L+N+PE, 380V/400V	
Rated Output Frequency/Range		50Hz, 45Hz~55Hz; 60Hz, 55Hz~60Hz	

### Protection

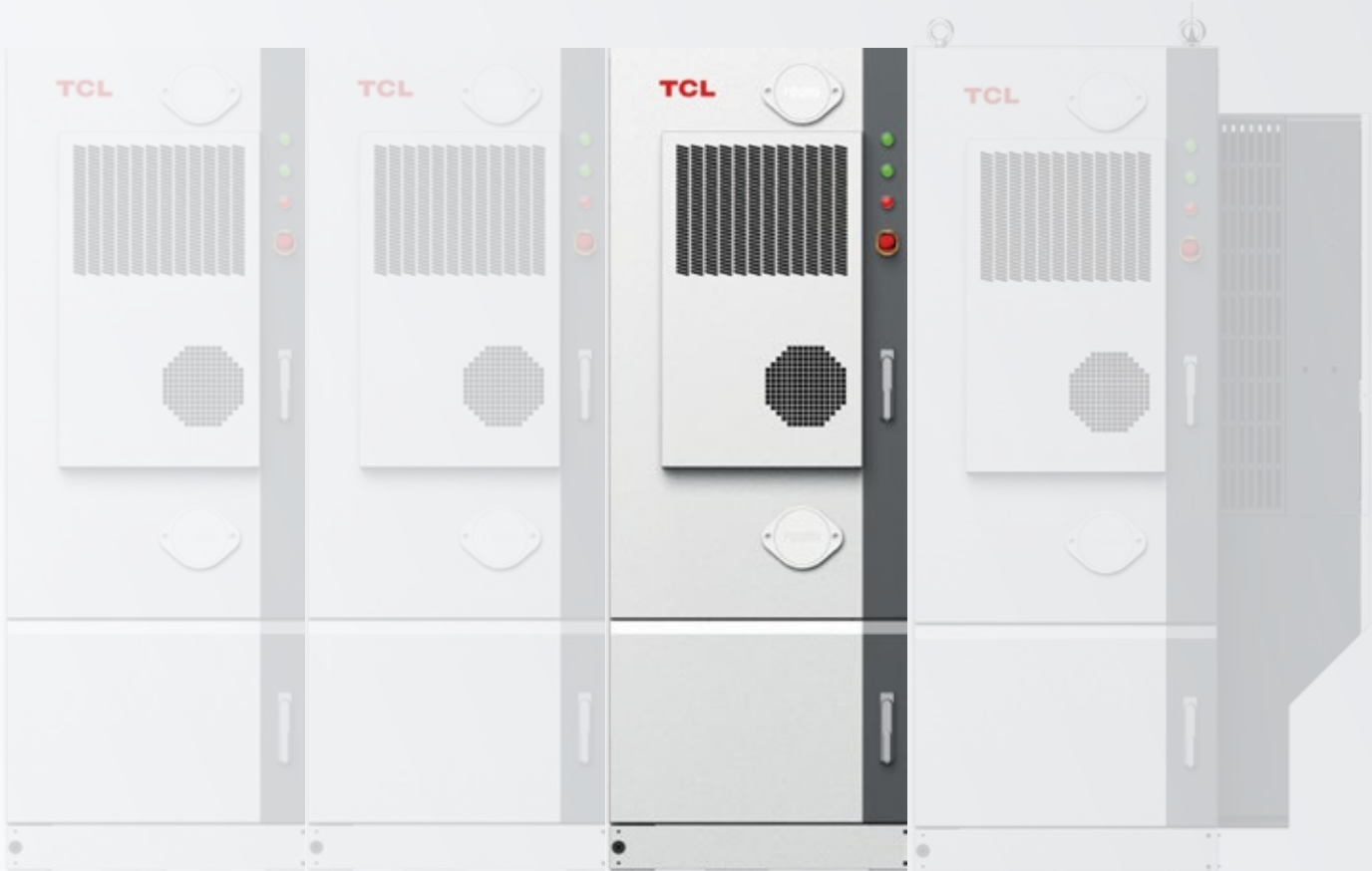
PV String Current Monitoring	Integrated
PV Insulation Resistance Detection	Integrated
Residual Current Monitoring	Integrated
AC Short Circuit Protection	Integrated
AC Overvoltage Protection	Integrated
DC Switch	Integrated
DC Surge Protection	Type II
AC Surge Protection	Type II
AFCI	Integrated
RSD	Optional

### General Parameters

Communication	Ethernet/WIFI/4G (Optional)
Topology	Transformer-less
Operating Temperature Range	-30°C~50°C (45°C~ 50°C with derating)
Cooling Method	HVAC(Battery)/Smart fan cooling (Inverter)
Ambient Humidity	0~95% Non-condensing
Altitude	≤3000m
Ingress Protection	Battery: IP55; Inverter: IP66
Dimensions (H*W*D)	1900*1020*1340mm
Weight	1200kg
Warranty	5 Years

# BC100

Optional



## Parameters

Model	DC Expansion Cabinet
Battery	LiFePO4-314Ah
Capacity	100kWh
Maximum Charge/Discharge Current	150A
Voltage Range	280V~360V
Battery Configuration	1P20S*5
Firefighti System	Smoke & temperature sensors + aerosol
Dimensions (H*W*D)	1900*682*1340mm
Weight	1100kg