

DT SPARK 1

Single Phase / 3.68-6 kW
Hybrid Residential ESS



USE CASES



Household Energy Storage

Seamlessly integrate our storage solutions into your home to ensure uninterrupted power supply and maximize the use of renewable energy sources.



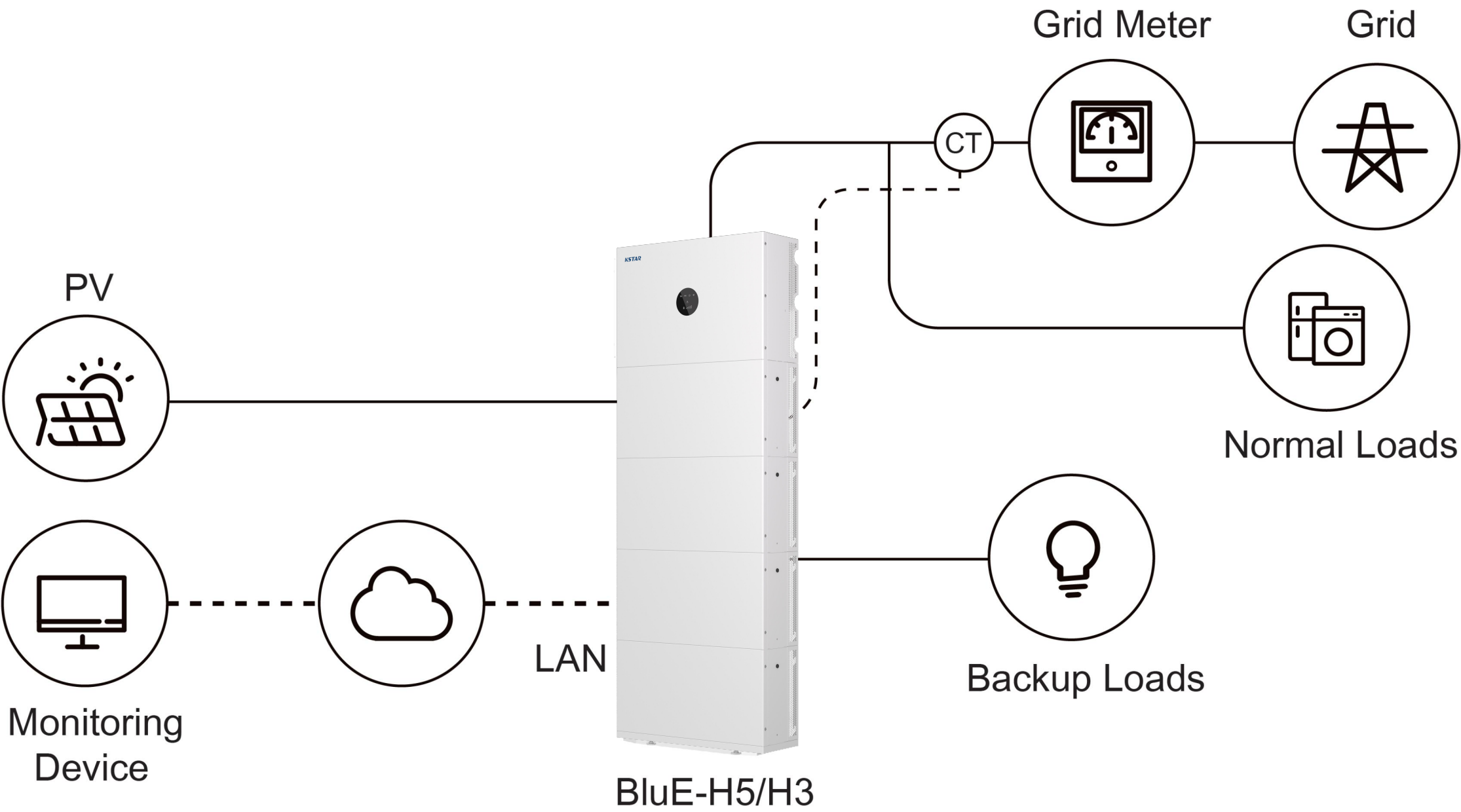
Carports

Efficiently charge your electric vehicles and store excess energy with our carport solutions, providing convenience and sustainability for your daily commute.



Off-Grid Living

Achieve total energy independence with our off-grid solutions, designed to provide reliable power in remote locations, ensuring a continuous energy supply.



Battery Model

Model		BP48100P1-G2 / BP48100PF1-G2	
GENERAL PARAMETERS			
Battery Type		LFP	
Cell Brand		EVE / CATL	
Energy Capacity		5.12 kWh	
Usable Capacity		4.6 kWh	
Max.Depth of Discharge		100%	
Nominal Voltage		51.2 V	
Operating Voltage Range		44.8 ~ 57.6 V	
Battery Pack Round-Trip Efficiency		> 94%	
Weight		51 kg	
Dimensions (W x H x D)		725 x 418 x 165 mm	
IP Protection		IP65	
Warranty		5 Year Product Warranty, 10 Year Performance	
OPERATION			
Max. Continuous Charging Current		50 A (single battery pack)	
Max. Continuous Charging Power		2825 W	
Max. Continuous Discharging Current		80 A (single battery pack)	
Max. Continuous Discharging Power		4096 W	
Operating Temperature Range		-10 to 50°C (Charging); -10 to 50°C (Discharging)	
Cooling Type		Natural Cooling	
Humidity		0 ~ 90%	
BMS			
Modules Connection		Max. 4	
Capacity		100 / 200 / 300 / 400 Ah	
Communication		CAN	
Monitoring Parameters		System voltage,current,battery voltage, Battery temperature,PCBA temperature measurement	
CERTIFICATE			
Safety and Transportation		Pack: IEC/EN 62619; UN38.3; Cell:IEC/EN 62619; UN38.3; UL1973	

Hybrid Inverter Model

Model	E3.68KS-D22	E5KS-D22	E6KS-D22
PV INPUT			
Recommended Max.PV Array	7.2 kW	10 kW	10 kW
Max PV Voltage		500 V	
Nominal Voltage		360 V	
MPPT Voltage Range		120 ~ 480 V	
MPPT Voltage Range with Full Load	200 ~ 425 V	250 ~ 425 V	250 ~ 425 V
Start Voltage		120 V	
Number of MPPT Tracker		2	
String per MPPT Tracker		1	
Max. Input Current per MPPT		20 A	
Max. Short-Circuit Current per MPPT		25 A	
AC OUTPUT & INPUT (GRID)			
Max. AC Continuous Output Power	3680 W	5000 W	6000 W
Max. AC Apparent Output Power	3680 VA	5000 VA	6000 VA
Max. Continuous Input Power	7360 W	9200 W	9200 W
Nominal AC Voltage		230 Vac	
Norminal Frequency		50 Hz / 60 Hz (±5 Hz)	
Norminal Output Current	16 A	21.7 A	26.1 A
Max. Output Current	16.7 A	22.7 A	27.3 A
Max. Input Current	32 A	40 A	40 A
Power Factor (cosΦ)		-0.8 (Lagging) ~ 0.8 (Leading)	
THDi		< 3%	

Hybrid Inverter Model

Model	E3.68KS-D22	E5KS-D22	E6KS-D22
AC OUTPUT (BACKUP)			
Nominal AC Output Power	3680 W	5000 W	6000 W
Max. AC Output Power	3680 VA	5000 VA	6000 VA
Max. Output Current	16 A	21.7 A	26.1 A
Norminal Output Voltage		230 Vac	
Nominal Output Frequency		50 Hz / 60 Hz	
Output THDv (@Linear Load)		< 3% (Linear Load)	
BATTERY INPUT			
Battery Type		LFP (LiFePO4)	
Nominal Battery Voltage		48 V	
Charging Voltage Range		42 ~ 58 V	
Max. Charging / Discharging Current	80 A / 80 A	120 A / 120 A	125 A / 125 A
Rated Charging / Discharging Power	3600 W / 3900 W	5000 W / 5400 W	6000 W / 6400 W
Battery Capacity		100 ~ 400 Ah	
EFFICIENCY			
Max. PV Efficiency		97.0 %	
Euro. Efficiency		96.3 %	
PROTECTION			
DC Switch		Integrated	
Anti-islanding Protection		Integrated	
Residual Current Monitoring		Integrated	
PV Reverse Polarity Protection		Integrated	
AC Short Circuit Protection		Integrated	
AC Overvoltage Protection		Integrated	
DC / AC Surge Protection		DC Type II; AC Type III	
Remote Shutdown		Integrated	
AFCI		Optional	
GENERAL SPECIFICATION			
Dimensions (W x H x D)		725 × 390 × 230 mm	
Weight	24.8 kg	25.5 kg	25.5 kg
Operating Temperature Range		25°C to + 60°C (> 45°C DE-rating)	
Cooling Type		Natural Convention	
Max. Operation Altitude		≤ 4000 m	
Operation Humidity		0 ~ 95% (No Condensation)	
IP Class		IP66	
Topology		High Frequency Isolation	
Communication		RS-485 / CAN2.0 / WIFI	
Display		LED / APP / WEB	
Certification & Standard	IEC/EN62109-1&2; IEC/EN 61000-6-1; IEC/EN 61000-6-2; EN 61000-6-3; IEC/EN 61000-6-4; IEC/EN 61000-3-11; EN 61000-3-12; IEC 60529; IEC 61727; IEC 62116; IEC 60068; IEC 61683; EN 50549-1; EN 50549-10; VDE-AR-N 4105; G98/G99; NC RfG:2018; C10/C11; CEI-021		

GOT QUESTIONS?
GET IN TOUCH WITH US

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