

JA UTILITY ENERGY STORAGE SYSTEM

BlueGalaxy 5365 / 4659



AIR-COOLED ESS

5.3MWh, 0.25C

LIQUID-COOLED ESS

4.6MWh, 0.5C

PRODUCT HIGHLIGHTS



SAFE

- Safe and long lifecycle LFP battery
- Integrated local controller, HVAC and FSS to ensure system safety



RELIABLE

- Highly integrated & efficient system
- 300+ test validations



INTEGRATED

- Ultra-high energy density
- Maximized space utilization



EASY

- Easy transportation & on-site installation
- Easy maintenance

TECHNICAL SPECIFICATIONS

SYSTEM TYPE	BLUEGALAXY5365	BLUEGALAXY4659
DC DATA		
Cell type	LFP 403Ah	LFP 350Ah
Pack type	1P416S	1P416S
System configuration	10 × 1P416S	10 × 1P416S
Battery capacity (BOL)	5365kWh	4659kWh
DC usable energy (BOL)@FAT	5099kWh	4382kWh
DC usable energy (BOL)@SAT	4946kWh	4251kWh
Battery voltage range	1081.6 - 1497.6V	1081.6 - 1497.6V
Nominal power	1236kW	2125kW
GENERAL DATA		
Dimensions (W×D×H)	6058 × 2438 × 2896mm	6058 × 2438 × 2896mm
Weight	≤42252kg	≤42252kg
IP rating	IP55	IP55
Ambient operating temperature range	-30°C ~ +55°C	-30°C ~ +55°C
Relative humidity	5% ~ 100%	5% ~ 100%
Max. working altitude	< 2000m	< 2000m
Cooling concept	Air-cooled	Liquid-cooled
Noise	≤ 75dBA	≤ 75dBA
Fire suppression system	With fire alarm system (Aerosol)	With fire alarm system (Aerosol)
Auxiliary power interface	AC480V/60Hz, 3 Phase 4 wire	AC480V/60Hz, 3 Phase 4 wire
Auxiliary system peak power requirement @45°C, PF0.8	38kVA	75kVA
Communication interfaces	Ethernet	Ethernet
Communication protocols	Modbus TCP/IP	Modbus TCP/IP
Compliance	UN38.3; UN3536; UL9540A; UL1973; IEC62619	

*Specification indexes may be subject to changes without prior notice.

JA RESIDENTIAL ENERGY STORAGE SYSTEM

BlueStar All-In-One ESS



Single-phase ESS

5kW/5kWh
(5/10/15/20kWh)

Three-phase ESS

10kW/10kWh
(10/20/30/40kWh)

PRODUCT HIGHLIGHTS

SAFE

- CATL LFP battery
- Safe, reliable, 10-year warranty

SIMPLE

- All-in-one design, multiple battery expansion
- 30 mins quick installation

SMART

- Smart energy management system
- Real-time monitoring via global APP or Web

BATTERY MODEL

BLUESTAR-PACK

PHYSICAL		OPERATION	
Battery Type	LFP (LiFePO4)	Max. Charge/Discharge Current	50A / 80A
Weight	54kg	Rated DC power	4096W
Dimension (W x H x D)	540 x 490 x 240mm	Max. Charge/Discharge Power	2825W / 4096W
IP Protection	IP65	Operating Temperature Range	-10 to 50°C charging; -10 to 50°C discharging
Warranty	5 Year Product Warranty 10 Year Performance Warranty	Humidity	0 ~ 95% (No condensation)
Electrical		BMS	
Energy Capacity	5.12kWh	Power Consumption	< 2W
Usable Capacity	4.6kWh	Communication	CAN & RS-485
Depth of Discharge (DoD)	90%	Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
Nominal Voltage	51.2V	Certificate	
DC Circuit Breaker	125A	Safety(Cell)	Pack: IEC/EN 62619; UN 38.3
Operating Voltage Range	44.8 - 56.5V		Cell: IEC/EN 62619; UN 38.3; UL 1973
Internal Resistance	< 20mΩ		
Cycle Life	10000 cycle		

HYBRID INVERTER MODEL

BLUESTAR-INVERTER-1P-05K-EU

BLUESTAR-INVERTER-3P-10K-EU

PV String Input		
Max. Continuous PV Input Power	6.5kW	20kW
Max. DC Voltage	580V	1100V
MPPT Voltage Range	80 - 560V	140 - 1000V
Start Voltage	150V	200V
Number of MPPT Tracker	2	2
Strings Per MPPT Tracker	1	1
Max. Input Current Per MPPT	15A	15A
Max. Short-circuit Current Per MPPT	18A	20A
AC Output (Grid)		
Nominal AC Output Power	5kW	10kW
Max. AC Apparent Power	7.36kVA (from grid)	11kA (from grid)
Nominal AC Voltage	230Vac	400Vac
AC Grid Frequency Range	50 / 60Hz ± 5Hz	50 / 60Hz ± 5Hz
Max. Output Current	22A	16A
Power Factor (cosΦ)	0.8 leading - 0.8 lagging	0.8 leading - 0.8 lagging
THDi	< 3%	< 3%
Battery Input		
Battery Type	LFP (LiFePO4)	LFP (LiFePO4)
Nominal Battery Voltage	48V	51.2V
Charging Voltage Range	40 - 60V	44 - 58V
Max. Charging Current/Discharging Current	100A	160 / 200A
Battery Capacity	100 - 400Ah	200 / 400 / 600 / 800Ah
AC Output (Backup)		
Max. AC Output Power	5kVA	10kVA
Nominal AC Output Power	4.6kW	9.2kW
Peak Output Apparent Power	6.9kVA	10kVA
Max. Output Current	20A	14.5A
Nominal Output Frequency	50 / 60Hz	50 / 60Hz
Output THDv (@Linear Load)	< 3% (Linear Load)	< 2% (Linear Load)
Efficiency		
Max. PV Efficiency	97.6%	97.6%
Euro. PV Efficiency	97.0%	97.0%
General Specifications		
Dimensions W x H x D	540 x 590 x 240mm	540 x 980 x 240mm
Weight	32kg	49kg
Operating Temperature Range	-25°C ~ +60°C	-25°C ~ +60°C
Cooling Type	Natural Convection	Natural Convection
Max. Operating Altitude	2000m	2000m
IP Class	IP65	IP65
Topology	Battery Isolation	Battery Isolation
Communication	RS-485 / CAN 2.0 / WIFI / 4G	RS-485 / CAN 2.0 / WIFI / 4G
Display	LCD / APP	LCD / APP
Certification & Standard	IEC/EN 62109-1&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 60068; IEC 61683; IEC 62116; IEC 61727; EN 50549-1; AS 4777.2; NRS 097; VDE-AR-N 4105; CEI 0-21; G98/G99; C10/11	IEC/EN 62109-1&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 60068; IEC 61683; IEC 62116; IEC 61727; EN 50549-1; VDE-AR-N 4105; C10/11; VDE0126-1-1; CEI 0-21; NC Rfg; G98; EHS; NTS&UNE 217001

*Specification indexes may be subject to changes without prior notice.

SINGLE PHASE LOW VOLTAGE ENERGY STORAGE INVERTERS

BS-INV-1P-(03-06)K-EU



PRODUCT HIGHLIGHTS

- Multi channel MPPT design, used for roofs with different orientations
- Max.125A/6kW charge/discharge capacity
- Automatic UPS switching
- Supports Peak Shaving Mode
- Pre-made Battery, Meter and CAN cabling to reduce installation time
- Supports parallel connection of single-phase and three-phase networks on both the Grid and Backup Port
- Compatible with multiple brands of lithium battery models
- Increased battery protection and operation features to extend battery life

MODELS	BS-INV-1P-03K-EU	BS-INV-1P-3.6K-EU	BS-INV-1P-4.6K-EU	BS-INV-1P-05K-EU	BS-INV-1P-06K-EU
INPUT DC (PV SIDE)					
Recommended max. PV power	4.8 kW	5.7 kW	7 kW	8 kW	9.6 kW
Max. input voltage	600 V				
Rated voltage	330 V				
Start-up voltage	90 V				
MPPT voltage range	90-520 V				
Max. input current	16 A / 16 A				
Max. short circuit current	24 A / 24 A				
MPPT number/Max. input strings number	2/2				
BATTERY					
Battery type	Li-ion				
Battery voltage range	42-58 V				
Max. charge / discharge power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. charge / discharge current	62.5 A	75 A	100 A	105 A	125 A
Communication	CAN				
OUTPUT AC (GRID SIDE)					
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	3 kVA	3.6 k A	4.6 kVA	5 kVA	6 kVA
Rated grid voltage	1/N/PE, 220 V / 230 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	13.6 A / 13 A	16.4 A / 15.7 A	20.9 A / 20 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Max. output current	13.6 A / 13 A	16.4 A / 15.7 A	20.9 A / 20 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Power factor	>0.99 (0.8 leading - 0.8 lagging)				
THDi	<2%				
INPUT AC (GRID SIDE)					
Input voltage range	187-253 V				
Max. input current	20 A	24.6 A	31.4 A	32 A	40 A
Rated input frequency	45-55 Hz / 55-65 Hz				
OUTPUT AC (BACK-UP)					
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	4.2 kVA, 60 sec	5 kVA, 60 sec	6.4 kVA, 60 sec	7 kVA, 60 sec	8 kVA, 60 sec
Back-up switch time	<10 ms				
Rated output voltage	1/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Max. output current	19.1 A	22.7 A	29.1 A	31.8 A	36.4 A
THDv (@linear load)	<2%				
EFFICIENCY					
Max. efficiency	97.0%		97.5%		
EU efficiency			96.2%		
BAT charged by PV Max. efficiency			94.9%		
BAT charged/discharged to AC Max. efficiency	94.33%/93.51%				
GENERAL DATA					
Dimensions (W*H*D)	405*480*205 mm				
Weight	20.3 kg		22.4 kg		
Topology	High Frequency Isolation (Battery)				
Noise (typical)	<35 dB(A)				
Operating ambient temperature range	-25 ~ +60 ° C				
Ingress protection	IP66				
Cooling concept	Natural convection				
Max. operation altitude	4000 m				
Grid connection standard	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15/VFR:2019, RD 1699/RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA				
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4				
FEATURES					
PV connection	MC4 connector				
AC connection	Quick connection plug				
Display	LED + APP				
Communication	CAN, RS485, Optional: Wi-Fi, GPRS, LAN				

*Specification indexes may be subject to changes without prior notice.

THREE PHASE HIGH VOLTAGE ENERGY STORAGE INVERTERS

BS-INV-3P-(05-10)K-EU



PRODUCT HIGHLIGHTS

- Integrated 3 or 4 MPPTs for multiple array orientations
- Industry leading 50A/10kW max charge/discharge rating
- Automatic UPS switching
- Supports Peak Shaving Mode
- Pre-made Battery, Meter and CAN cabling to reduce installation time
- Supports Unbalanced and Half-Wave Loads on both the Grid and Backup Port
- Compatible with multiple brands of lithium battery models
- Increased battery protection and operation features to extend battery life

MODELS	BS-INV-3P-05K-EU	BS-INV-3P-06K-EU	BS-INV-3P-08K-EU	BS-INV-3P-10K-EU
INPUT DC (PV SIDE)				
Recommended max. PV power	8 kW	9.6 kW	12.8 kW	16 kW
Max. input voltage	1000 V			
Rated voltage	600 V			
Start-up voltage	160 V			
MPPT voltage range	200-850 V			
Max. input current	16 A / 16 A / 16 A		16 A / 16 A / 16 A / 16 A	
Max. short circuit current	24 A / 24 A / 24 A		24 A / 24 A / 24 A / 24 A	
MPPT number/Max. input strings number	3/3		4/4	
BATTERY				
Battery type	Li-Ion			
Battery voltage range	120-600 V			
Max. charge / discharge power	5 kW	6 kW	8 kW	10 kW
Max. charge / discharge current	25 A		50 A	
Communication	CAN/RS485			
OUTPUT AC (GRID SIDE)				
Rated output power	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	5 kVA	6 kVA	8 kVA	10 kVA
Rated grid voltage	3/N/PE, 380 V / 400 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A
Max. output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A
Power factor	>0.99 (0.8 leading - 0.8 lagging)			
THDi	<3%			
INPUT AC (GRID SIDE)				
Max. input power	7.5 kW	9 kW	12 kW	15 kW
Rated input current	11.4 A	13.8 A	18.2 A	22.8 A
Rated input voltage	3/N/PE, 380 V / 400 V			
Rated input frequency	50 Hz / 60 Hz			
OUTPUT AC (BACK-UP)				
Rated output power	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	8 kVA, 60 sec	9.6 kVA, 60 sec	12.8 kVA, 60 sec	16 kVA, 60 sec
Back-up switch time	<10 ms			
Rated output voltage	3/N/PE, 380 V / 400 V			
Rated frequency	50 Hz / 60 Hz			
Rated output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A
THDv (@linear load)	<2%			
EFFICIENCY				
Max. efficiency	96.5%	97.0%	97.5%	97.9%
EU efficiency	96.8%	97.1%	97.4%	97.5%
BAT charged by PV Max. efficiency	98.4%	98.5%	98.2%	98.3%
BAT charged/discharged to AC Max. efficiency	97.3%	97.3%	97.5%	97.5%
GENERAL DATA				
Dimensions (W*H*D)	600*500*210 mm		600*500*230 mm	
Weight	27.6 kg		30.2 kg	
Topology	Transformerless			
Self-consumption (night)	<25 W			
Operating ambient temperature range	-25 ~ +60 ° C			
Relative humidity	0-95%			
Ingress protection	IP66			
Cooling concept	Natural convection			
Max. operation altitude	4000 m			
Grid connection standard	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15/VFR:2019, RD 1699/RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA			
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3			
FEATURES				
PV connection	MC4 connector			
Battery connection	Quick connection plug			
AC connection	Quick connection plug			
Display	LED + Bluetooth + APP			
Communication	CAN, RS485, Optional: Wi-Fi, Cellular, LAN			

*Specification indexes may be subject to changes without prior notice.

JA-5KLV RESIDENTIAL ENERGY STORAGE BATTERY SPECIFICATION

BlueStar-Pack-L-05H-1



PRODUCT HIGHLIGHTS



SAFE

- Reliable Battery designed with longer cycle life by using LFP battery cells
- All-round Safety Protection, from LFP cell level to battery pack



FLEXIBLE EXPANSION

- Modular design, scalable up to 76.8kWh with 15 units in parallel



SIMPLE AND FAST INSTALLATION

- Wall-mounted or stackable on the floor, less installation time



MONITORING REMOTELY

- Track battery and energy use via APP, anytime, anywhere

TECHNICAL SPECIFICATIONS

GENERAL DATA	BLUESTAR-PACK-L-05H-1
Rated Voltage	51.2V
Voltage Range	44.8~57.6V
Module	1P16S
Rated Capacity	100Ah
Rated Energy	5.12 kWh
Cell Type	LFP 3.2V/100Ah
Charge Mode	CC-CV
Max. Charge Current	100A
Max. Discharge Current	100A
Charge Temperature Range	0-55°C
Discharge Temperature Range	-10-55°C
Communication Port	CAN2.0/RS485/RS232
Battery Protection	Over Charge/Over Discharge /Over Temperature/Over Current/Short Circuit
Size(W*H*T)	556*576*154.5mm
Weight	50kg
Installation	Wall Mounted/Floor Mounted
IP Class	IP20
Parallel Application	Up to 15 Packs (follow the parallel procedure)
Certification	IEC61000/IEC62619/UN38.3
Others	Bluetooth and WiFi

*Specification indexes may be subject to changes without prior notice.

RESIDENTIAL LOW VOLTAGE BATTERY SYSTEM

BS-PAC-L-(04-24)H-1



PRODUCT HIGHLIGHTS



INTELLIGENT

- Remote diagnosis and OTA, Multi-level BMS, equipped with advanced chip.



RELIABILITY

- Extended battery lifetime & performance.



FLEXIBILITY

- Modular design, the capacity can be expandable anytime.



SAFETY

- LFP battery cells, prioritizes product & personnel safety, multi-dimensional cell testing, higher precision detection.

TECHNICAL SPECIFICATIONS

BATTERY SYSTEM MODEL	BS-PAC-L-04H-1	BS-PAC-L-08H-1	BS-PAC-L-12H-1	BS-PAC-L-16H-1	BS-PAC-L-20H-1	BS-PAC-L-24H-1
Battery Type	LFP (LiFePO4)					
Total Capacity	80Ah					
Module	4kWh, 51.2V					
Number Of Modules	1	2	3	4	5	6
Usable Energy	4kWh	8kWh	12kWh	16kWh	20kWh	24kWh
Max Cont. Output Current	65 A	130 A	195 A	250 A	250 A	250 A
Peak Output Current	90A,5s	180A,5s	270A,5s	360A,5s	360A,5s	360A,5s
Nominal Voltage	51.2 V					
Operating Voltage	40-57.6 V					
Dimensions (H/W/D)	528x650x298 mm	761x650x298 mm	994x650x298 mm	1227x650x298 mm	1460x650x298 mm	1693x650x298 mm
Weight	64 kg	109 kg	154 kg	199 kg	244 kg	289 kg
Operating Temperature	-10°C to +50°C					
Communication	CAN /RS485					
Ingress protection	IP55					
Round-Trip Efficiency	≥95%					
Parallel connection	Max.64 Modules in Parallel (256kWh)				Single Tower Only	
Certification	IEC 62040/ IEC 62619 / UN38.3					
Warranty	10years					

*Specification indexes may be subject to changes without prior notice.

RESIDENTIAL HIGH VOLTAGE BATTERY SYSTEM

BS-PAC-H-(10-27)H-1



PRODUCT HIGHLIGHTS



INTELLIGENT

- Remote diagnosis and OTA, Multi-level BMS, equipped with advanced chip.



RELIABILITY

- Extended battery lifetime & performance.



FLEXIBILITY

- Modular design, the capacity can be expandable anytime.



SAFETY

- LFP battery cells, prioritizes product & personnel safety, multi-dimensional cell testing, higher precision detection.

TECHNICAL SPECIFICATIONS

BATTERY SYSTEM MODEL	BS-PAC-H-10H-1	BS-PAC-H-13H-1	BS-PAC-H-17H-1	BS-PAC-H-20H-1	BS-PAC-H-23H-1	BS-PAC-H-27H-1
Battery Type	LFP (LiFePO4)					
Total Capacity	55Ah					
Module	3.4kWh, 64V					
Number Of Modules	3	4	5	6	7	8
System Energy	10.5kWh	14.0kWh	17.6kWh	21.1kWh	24.6kWh	28.1kWh
Usable Energy	10.2 kWh	13.6 kWh	17.0 kWh	20.4 kWh	23.8 kWh	27.2 kWh
Max Output Current	30A					
Peak Output Current	50A(5S)					
Nominal Voltage	192 V	256 V	320 V	384 V	448V	512 V
Operating Voltage	162~219 V	216~292 V	270~365 V	324~438 V	378~511V	432~584 V
Dimensions (H/W/D)	800x650x260 mm	975x650x260 mm	1150x650x260 mm	1325x650x260 mm	1500x650x260 mm	1675x650x260 mm
Weight	138.5 kg	178 kg	217.5 kg	257 kg	296.5 kg	336 kg
Operating Temperature	-10°C to +55°C					
Communication	CAN/RS485					
Ingress protection	IP65					
Round-Trip Efficiency	≥95%					
Parallel connection	Up to 6 towers in parallel					
Certification	VDE2510-50 / IEC62619 / CE / UN38.3					
Warranty	10years					

*Specification indexes may be subject to changes without prior notice.