




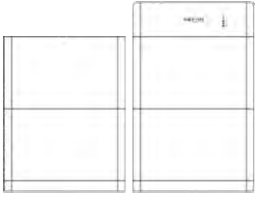


INTELLIGENT ENERGY STORAGE

BTS E5~E20-DS5

5 / 10 / 15 / 20 kWh

- Modular and integrated design for easy transportation and installation
- Flexible battery capacity expansion
- User-friendly one-button battery operation
- Maximal battery energy with pack optimization
- Extremely low battery self-consumption in sleep mode
- Energy storage specially for ME / HYD 5K~20KTL-3PH inverters

Datasheet	BTS E5-DS5	BTS E10-DS5	BTS E15-DS5	BTS E20-DS5
System Parameters				
System				
Battery type	LFP			
Battery distribution unit	BTS 5K-BDU			
Number of battery distribution units	1			
Battery module	BTS 5K			
Number of battery modules	1	2	3	4
Battery total energy (kWh) ¹	5.12	10.24	15.36	20.48
Usable energy (kWh) ²	4.75	9.5	14.25	19
Rated power (kW)	2.5	5	7.5	10
Rated voltage (V)	400			
Voltage range for full load (V)	350-425			
Rated charge/discharge current (A)	7	14	21	28
Degree of protection	IP65			
Ambient temperature range	-10°C ~ 45°C			
Allowable relative humidity range	5~95%			
Max. operating altitude ³	4000 m			
Weight (kg)	59	110	161	212
Dimension (mm)	708*170*680	708*170*1100	708*170*1520	708*170*900 708*170*1100
Installation	Floor stand			
Cooling	Natural			
Display	LED indicators			
Communication	CAN			
Compatible inverters	Please refer to the BTS E5~20-DS5 configuration list			
Battery Module				
Model	BTS 5K			
Battery module energy (kWh) ¹	5.12			
Depth of discharge	90.0%			
Rated power (W)	2500			
Dimension (mm)	708*170*420			
Weight (kg)	50			
Battery Distribution Unit				
Model	BTS 5K-BDU			
Max. charge/discharge current (A)	35			
Dimension (mm)	708*170*200			
Weight (kg)	7.5			
Standard				
Certificates	UN38.3, IEC62619, IEC62040-1, SAA, etc.			

¹ Test conditions: 0.2C charge/discharge at 25°C, 100% DoD.

² Based on the battery cell.

³ If the altitude is >2000 m, derating is required. Please refer to the derating curve.



SOFAR

PowerAll

3 / 3.6 / 4 / 4.6 / 5 / 6 kW

5 / 10 / 15 / 20 / 25 / 30 kWh

SINGLE-PHASE

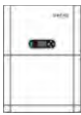


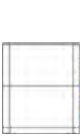

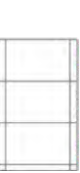
- Modular and integrated AC-coupled energy storage
- Flexible battery capacity expansion
- User-friendly one-button battery operation
- Compatible with high current PV panels

TWO MPPTS

- Maximal battery energy with pack optimization
- Extremely low battery self-consumption in sleep mode
- Switchover time to critical loads less than 10 ms

Datasheet

System Parameters

System schematic						
Rated output power (W)	3000-6000					
Number of batteries (n)	1	2	3	4	5	6
Battery capacity (kWh) ¹	5.12	10.24	15.36	20.48	25.6	30.27
Usable energy (kWh) ²	4.75	9.5	14.25	19	23.75	28.5
Degree of protection	IP65					
Ambient temperature range ³	-10°C ~ 45°C					
Allowable relative humidity range	5-95%					
Max. operating altitude ⁴	4000 m					
Weight (kg)	74.5	125.5	176.5	228.5	279.5	330.5
Dimension (mm)	708*170*890	708*170*1310	708*170*1730	708*170*1310 708*170*900	708*170*1310 708*170*1320	708*170*1730 708*170*1320
Display	LCD					
Communication	RS485 / Bluetooth / Ethernet / WiFi, optional: 4G					
Product ordering model	[ESI 3-6K-S1 Inverter Module] + n * [BTS 5K Battery Module]					

Inverter Module

Module	ESI 3K-S1	ESI 3.68K-S1	ESI 4K-S1	ESI 4.6K-S1	ESI 5K-S1	ESI 6K-S1
Rated battery voltage (V)	400					
Max. charge/discharge current (A)	20					
Recommended max. PV input power (Wp)	4500	5400	6000	6900	7500	9000
Max. input voltage (V)	550					
Rated input voltage (V)	360					
MPPT operating voltage range (V)	85-520					
Number of MPPTs	2					
Max. input current per MPPT (A)	16/16					
Rated grid voltage	L/N/PE, 230 V, 50 Hz / 60 Hz					
Grid voltage range	180 Vac-276 Vac (according to local standard)					
Rated AC power (W)	3000	3680	4000	4600	5000	6000
Max. AC power output to utility grid (VA)	3300	3680	4400	4600	5500	6600
Rated voltage, frequency (off-grid)	220/230 V, 50/60 Hz					
Max. apparent power (off-grid) (VA)	3000	3680	4000	4600	5000	6000
Peak output power, duration (off-grid) (VA) ⁵	4500, 10 s	5520, 10 s	6000, 10 s	6900, 10 s	7500, 10 s	9000, 10 s
Switchover time	<10 ms					
Topology	Transformerless					
Dimension (mm)	708*170*410					
Weight (kg)	22.5					

Efficiency

Max. efficiency	97.7%	97.8%
European efficiency	97.0%	97.1%

Battery Module

Model	BTS 5K
Battery type	LFP
Battery module energy (kWh) ¹	5.12
Depth of discharge	0-90% adjustable
Nominal power (W)	2500
Power control unit	Transformer isolation
Dimension (mm)	708*170*420
Weight (kg)	50

Standards

EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12
Safety standards	IEC 62109-1/2, IEC 62040-1, IEC 62116, IEC 61727, IEC 61683, IEC 60068 (1,2,14,30), UN38.3, IEC62619, SAA
Grid standards	VDE-AR-N 4105, VDE V 0126-1-1, CEI 0-21, G98/G99, TR321, TR322, EN 50438/EN 50549 UTE C15-712-1, NRS 097-2-1, UNE 206 007-1

¹ Test conditions: 0.2C charge/discharge at 25°C, 100% DoD.² Based on the battery cell.³ Please refer to the temperature derating curve.⁴ If the altitude is >2000 m, derating is required. Please refer to the derating curve.⁵ In a system with sufficient PV and battery power.