

BES45S3

ALL-IN-ONE ENERGY SYSTEM

SPECIFICATION



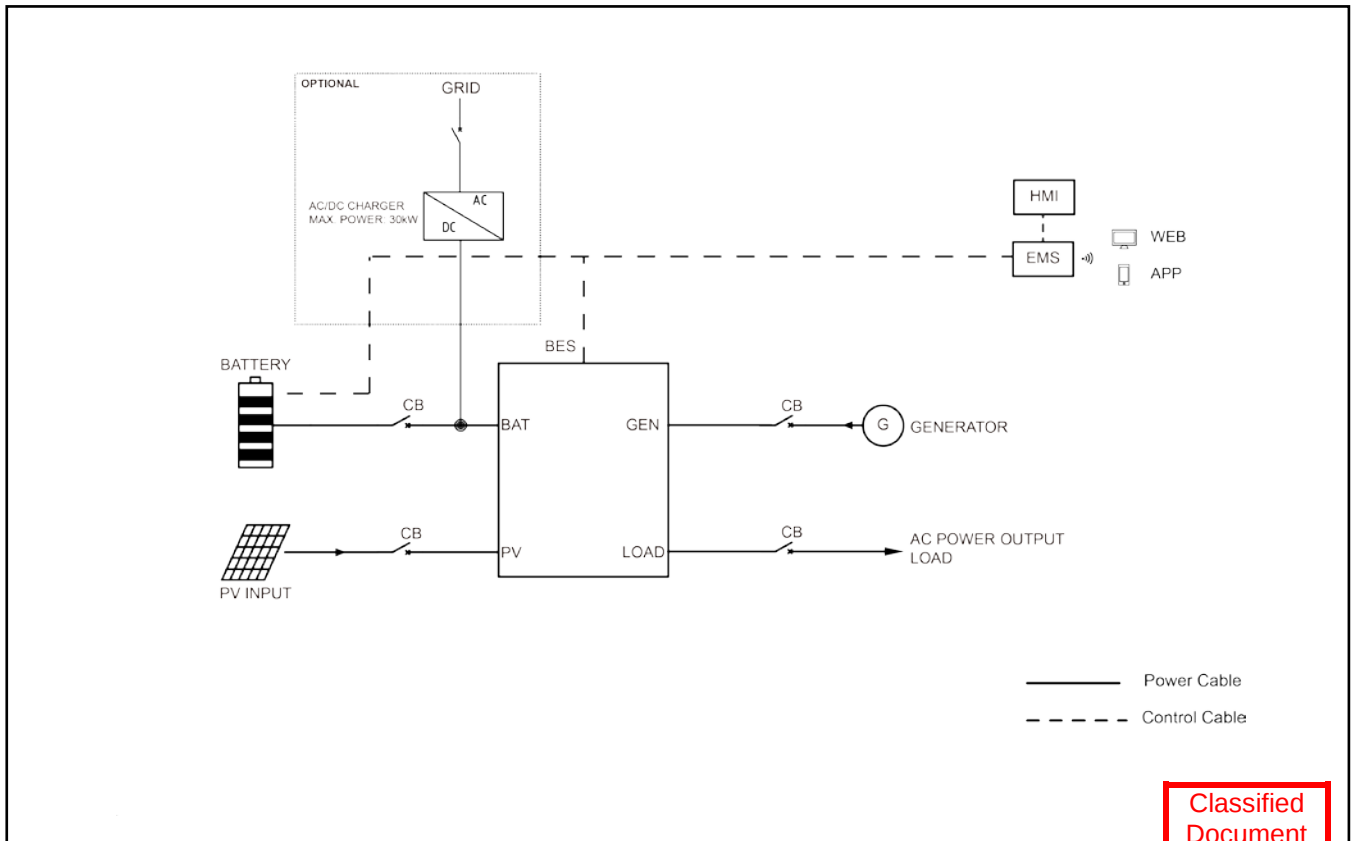
BES45S3 Battery/Solar/Diesel All-in-one Energy System				
Item	Unit	Data		
Voltage	AC V	380	400	415
Max. output power	kVA/kW	54/54	54/54	54/54
Max. current	A	82	78	75
Continuous output power	kVA/kW	45/45	45/45	45/45
Continuous current	A	68	65	63
Overload capability		110% last 10mins, 120% last 1min (SOC>30%, AT<45°C)		
Frequency	Hz	50		
Phase	P	3		
Power factor	PF	1		
Dimensions	mm	2500×1150×2000		
Dry weight	kg	3700		
40' Loading	Qty	4		
Noise level(hybrid mode)	dBA@7m	55		
Noise level(battery mode)	dBA@7m	50		
Protection level		IP54		
Wind resistance rating		8		
Ambient temperature		-20℃-50℃		
Power connection input		AC socket Busbar		
Power connection output		Main load socket Busbar AC socket: 1P, 1×16A, 1×32A; 3P, 1×63A		
Certification standards		 UN38.3  IEC 62619  IEC 62477  IEC / EN 60529  EN 61000-6-1/2/3/4  AS 4777.2  G99 CE Declaration of Conformity Stage V		

The technical data is measured in standard conditions:

- Absolute atmospheric pressure: 100kPa
- Ambient temperature: 25℃
- Relative air humidity: 30%

Note: If the on-site operating environment changes, the parameters on the specification will change accordingly.

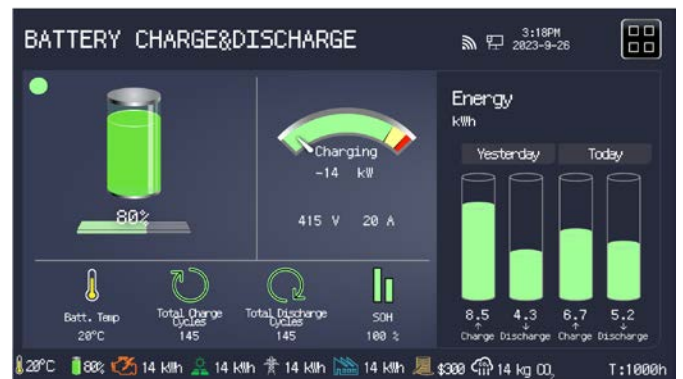
System working principle



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Intelligent Energy Management



DC/AC System		
Rated power	kVA/kW	60/60
Output voltage	AC V	380/400/415
Parallel / On-grid function		Parallel: ☒ ; On-grid: ☒
MPPT rated power	kWp	38.4+38.4
Rated voltage	DC V	200-800

Grid Power Input		
Rated power	kVA/kW	45/45
Phase	P	3

PV System		
Solar panel voltage	DC V	22-60
Solar panel capacity	Wp	720x5

Battery System		
Battery type		LiFePO4
Battery capacity	kWh	68.2
Rated voltage	DC V	332.8
Cooling system		Liquid-cooled
Max charging rate		1C
Max discharging rate		1C
DOD (depth of discharge)		Default 80% (set via SOC)
NOTE: The discharge power decreases as the battery SOC decreases.		

Diesel Generation System		
Engine brand / mode		Yunnei / DEF30TAA3
Alternator brand		Powerlink
Rated power	kVA/kW	45/36
Rated voltage	AC V	415
Phase	P	3
Fuel tank capacity	L	150

Control System		
HMI control panel	inch	13" Touchscreen
Communication protocol		Modbus TCP/IP
Communication interface		WAN/WIFI/SIM
IoT		APP/WEB

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* Data is subject to change without prior notice as new products are always developed.

Please contact POWERLINK or local agent with any doubts or for more information.