

GreenE Series

Residential ESS (3.68-5)K

ALL IN ONE SYSTEM



Battery solution

SAFETY

- LFP Battery, stable and safe.
- Module, pack, system, triple protection.
- IP65, outdoor installation.

SIMPLE

- Modular design, single person can carry and install it.
- Plug and play, 30 min quick installation
- Space saving: 0.15 sq. m foot print.

INTERCONNECTION

- Global cloud platform & Mobile APP, anytime and any where.
- Open API, support power internet applications.

HYBRIDS

GreenE ESS (3.6-5)K

MasterPower
Unlimited power

Battery Model

GreenE PACK5.1

PHYSICAL	
Battery type	LFP (LiFePO ₄)
System Weight	54 kg
Dimension (W*H*D)	540*490*240 mm
IP Protection	IP65
Warranty	5 Year Product Warranty, 10 Year Performance Warranty
ELECTRICAL	
Energy Capacity	5,12 kWh
Usable Capacity	4,6 kWh
Depth of Discharge (DoD)	90%
Nominal Voltage	51.2 V
DC Circuit Breaker	125 A
Operating Voltage Range	44.8 - 56.5 V
Internal Resistance	< 20 mΩ
Cycle Life	10000 cycle
OPERATION	
Maximum Charge / Discharge Current	50 A / 80 A
Rated DC power	4096 W
Maximum Charge / Discharge Power	2825 W / 4096 W
Operating Temperature Range	0 to 50°C charging; -10 to 50°C discharging
Humidity	0 ~ 95% (No condensation)
BMS	
Modules Connection	Maximum 5
Capacity	100 - 400 Ah
Power Consumption	< 2 W
Communication	CAN & RS485
Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
CERTIFICATES	
Safety (Cell)	Pack: IEC / EN 62619; UN38.3 Cell: IEC / EN 62619; UN38.3; UL1973
Safety Certification	IEC 62040-1: 2017; IEC 62619: 2017; IEC 63056: 2020; UN38.3

*Maximum 5 battery pack in parallel.

Hybrid Inverter Model

GreenE 3680

GreenE 5000

PV STRING INPUT	GreenE 3680	GreenE 5000
Maximum Continuous PV Input Power	4.78 kW	6.5 kW
Maximum DC Voltage	580 V	580 V
Nominal Voltage	400 V	400 V
MPPT Voltage Range	80 V - 560 V	80 V - 560 V
Start Voltage	130 V	130 V
Number of MPP Tracker	2	2
Strings per MPP Tracker	1	1
Maximum Input Current per MPPT	15 A	15 A
Maximum Short-circuit Current per MPPT	18 A	18 A
AC OUTPUT (GRID)	GreenE 3680	GreenE 5000
Nominal AC Output Power	3680 W	5000 W
Maximum AC Apparent Power	7360 VA (from grid)	7360 VA (from grid)
Maximum AC Output Power	3680 W	5000 W
Nominal AC Voltage	230 Vac	230 Vac
AC Grid Frequency Range	50 / 60 Hz ± 5 Hz	50 / 60 Hz ± 5 Hz
Maximum Output Current	16 A	22 A
Maximum Input Current	32 A	32 A
Power Factor (cosΦ)	0.8 leading - 0.8 lagging	0.8 leading - 0.8 lagging
THDi	< 3%	< 3%

HYBRIDS

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Hybrid Inverter Model	GreenE 3680	GreenE 5000
BATTERY INPUT		
Battery Type	LFP (LiFePO ₄)	
Nominal Battery Voltage	48 V	
Maximum Charging Voltage Range	40-60 V	
Maximum Charging Current	50 A	100 A
Maximum Discharging Current	80 A	100 A
Battery Capacity	100 - 400 Ah	
Charging Strategy for Li-Ion Battery	Depend on the BMS	
AC OUTPUT (BACKUP)		
Maximum Output Apparent Power	4000 VA	5000 VA
Peak Output Apparent Power	6900 VA 10 s	
Maximum Output Current	16 A	20 A
Nominal Output Voltage	230 V ± 0.2%	
Nominal Output Frequency	50 / 60 Hz ± 0.2%	
Output THDv (@Linear Load)	< 3% (Linear Load)	
EFFICIENCY		
Maximum PV Efficiency	97.6%	
European PV Efficiency	97.0%	
PROTECTION		
DC Switch	Bipolar DC Switch (125 A / Pole)	
Anti-islanding Protection	Yes	
Output Over Current	Yes	
DC Reverse Polarity Protection	Yes	
String Fault Detection	Yes	
AC / DC Surge Protection	DC Type II; AC Type III	
Insulation Detection	Yes	
AC Short Circuit Protection	Yes	
GENERAL SPECIFICATIONS		
Dimensions (W*H*D)	540*590*240 mm	
Weight	32 kg	
Operating Temperature Range	-25°C ~ 60°C	
Noise (dB)	< 25	
Cooling Type	Natural Convection	
Maximum Operation Altitude	2000 m	
Maximum Operation Humidity	0 ~ 95% (No Condensation)	
IP Class	IP65	
Topology	Battery Isolation	
Communication	RS485 / CAN2.0 / WIFI / 4G	
Display	LCD / APP	
CERTIFICATES		
Safety Certification	IEC 62109-1: 2010; EN 62109-1: 2010; IEC 62109-2: 2011; EN 62109-2: 2011	
Environment Certification	IEC 60068-2-1: 2007; IEC 60068-2-2: 2007; IEC 60068-2-14: 2009; IEC 60068-2-30: 2005	
Efficiency Certification	IEC 61683: 1999	
Spanish On Grid Certification	UNE217001; UNE217002; UNE206007; NTS V2.1 Type A	
EMC (Latest Version)	EN / IEC 61000-6-1: 2019; EN / IEC 61000-6-3: 2021; EN / IEC 61000-6-2: 2019; EN / IEC 61000-6-4: 2019; EN / IEC 61000-3-11: 2019; EN 61000-3-12: 2011	
Other Certification	IEC60529; IEC62116; IEC61727; EN50549-1; AS 4777.2; NRS 097; VDE-AR-N-4105; CEI0-21; G98; G99; C10 / C11	

Product specifications are subject to change without further notice.