

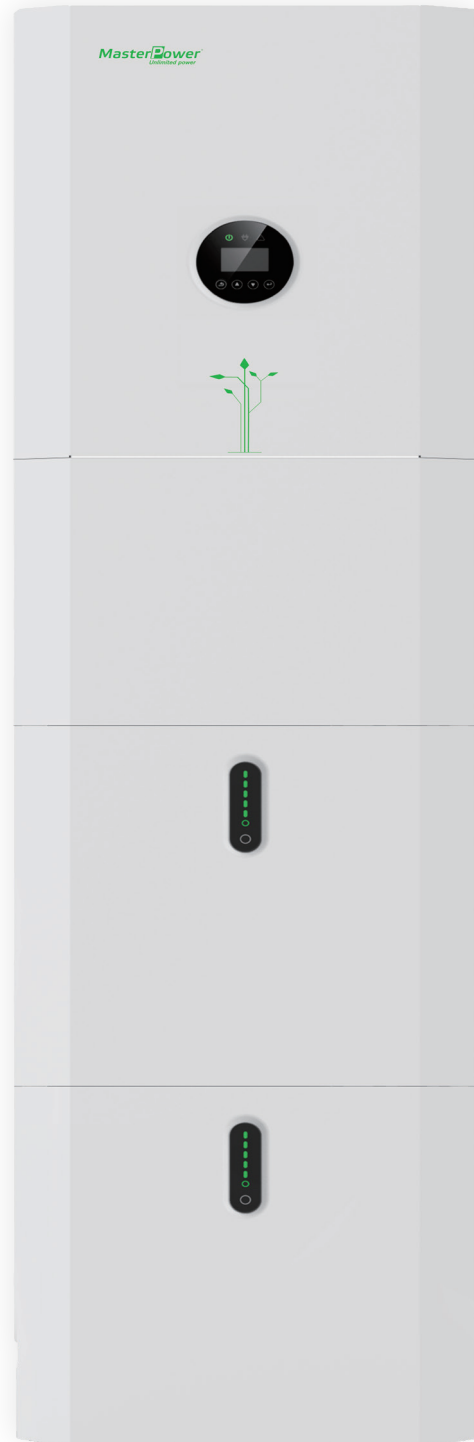
## GreenE Series

### Residential ESS 10K

ALL IN ONE SYSTEM

#### Features

- All-in-one.
- LFP battery, stable and safe.
- Modular design, plug and play.
- Quick installation: 30 min.
- Life of more than 10000 cycles.
- 10 years performance warranty.
- Cloud platform and mobile APP.
- Parallelizable.
- Built-in BMS.
- On&Off Grid system.



### Technical Specifications

<b>PV STRING INPUT</b>		
Maximum Continuous PV Input Power		20 kW
Maximum DC Voltage		1100 V
Nominal Voltage		720 V
MPPT Voltage Range		140 V - 1000 V
MPPT Range (Full Load)		420 V - 850 V
Start Voltage		200 V
MPPT Tracker / Strings		2 / 2
Maximum Input Current per MPPT		15 A
Maximum Short-circuit Current per MPPT		20 A
<b>AC OUTPUT (GRID)</b>		
Nominal AC Output Power		10 kW
Maximum AC Apparent Power		11 kVA
Nominal AC Voltage		400 Vac 3 W + N + PE
AC Grid Frequency Range		50 / 60 Hz
Maximum Output Current		14.5 A
Maximum Input Current		16 A
Power Factor (cosΦ)		0.8 leading - 0.8 lagging
<b>BATTERY INPUT</b>		
Battery Type		LFP (LiFePO <sub>4</sub> )
Nominal Battery Voltage		48 V
Charging Voltage Range		40 - 60 V
Maximum Charging Current		200 A
Maximum Discharging Current		200 A
<b>AC OUTPUT (BACKUP)</b>		
Maximum Output Apparent Power		10 kVA
Rated Output Power		9.2 kW
Rated / Maximum Output Current		14.5 A / 16 A
Nominal Output Voltage		400 V
Nominal Output Frequency		0 / 60 Hz (±2%)
Output THDv (@Linear Load)		< 3% (Linear Load)
<b>PROTECTION</b>		
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
<b>GENERAL SPECIFICATIONS</b>		
Dimensions (W*H*D)		540*980*240 mm
Weight		42 kg
Operating Temperature Range		-25°C ~ 60°C (Derating > 45°C)
Noise (dB)		< 25
Cooling Type		Natural Convection
Maximum Operation Altitude		3000 m (Derating > 2000 m)
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; CEIO-21; G98; G99; C10 / C11

Battery Model	GreenE PACK5.1
<b>PHYSICAL</b>	
Battery type	LFP (LiFePO <sub>4</sub> )
System Weight	54 kg
Dimension (W*H*D)	540*490*240 mm
IP Protection	IP65
Warranty	5 Year Product Warranty, 10 Year Performance Warranty
<b>ELECTRICAL</b>	
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
<b>OPERATION</b>	
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)
<b>BMS</b>	
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
<b>CERTIFICATES</b>	
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.

Product specifications are subject to change without further notice..