

18kW/14.6kWh Communication base station PV-GEN-ESS All-in-One Cabinet



*The product images on this page are for illustration purposes only.
The actual delivery will be based on the requirements of the specific project.

DC parameters	
Cell type	LFP 3.2V/102Ah
Combination configuration	3P15S
Rated energy	14.6 kWh
Voltage range	37.5V - 54.75V
Number of cycles	> 4000 cycles @ 80% EOL, 25°C; > 2000 cycles @ 80% EOL, 45°C;
Communication interface	RS485, Ethernet
Compliant with standards	IEC62619, IEC60356, EMC (IEC61000), LVD (EN62477), UN38.3
Embedded power frame parameters	
Dimensions (height x depth x width)	400mm*365mm*483mm
Maintenance method	Pre-maintenance
Rated grid voltage	400V, Three-phase five wire
AC Maximum input current	63A
Photovoltaic input voltage	50~150VDC
Photovoltaic input maximum current	50A
Rated output voltage	-48VDC
Rated output current	300A
Rated output power	18kW
Number of Rectifier modules (standard)	6 PCS
Number of Photovoltaic modules (Optional)	3 PCS
Protect	Overvoltage protection, undervoltage protection, short circuit protection, surge protection, battery charging and floating charge management, battery low voltage power protection, battery high and low temperature alarm, alarm record
Communication mode	RS485, CAN
Rectifier Module parameters (Optional)	
Input voltage	90V AC~300V AC
Rated input current	≤19A
Frequency	50Hz/60Hz
Output voltage range	42~58VDC
Output current	53.5VDC
Output power	3kW (176AC~300VAC)
Efficiency	≥96%
Hot-swappable functionality	Y
Photovoltaic Module parameters (Optional)	
Input voltage	50~150VDC
Rated input voltage	125VDC
Maximum input current	50A
Output voltage range	42~58VDC
Output current	55.6A @54VDC
Output power	3kW
Efficiency	≥97% (50%Load) , ≥96.5% (80%Load)
Hot-swappable functionality	Y
System parameter	
Dimensions (height x depth x width)	1470mm*735mm*600mm
Weight	≈310kg
Protection level	IP54
Anti corrosion grade	C4/C5
Cooling method	Forced air cooling
Working temperature range	-30°C ~50°C (>45°C derating)
Working humidity range	0 ~ 95% (No condensation)
Maximum working altitude	3000m (>2000m derating)
Firefighting methods	PACK grade aerosol + smoke sensation
External Communication Protocol	Modbus RTU, Modbus TCP



High security

- The battery cells have passed rigorous industry testing and obtained certifications such as UL, TUV, and GB
- Adopting regional graded fire protection design, ensuring safety and security
- BMS collects data from multiple points, provides real-time feedback, and collaborates with Embedded power and EMS for emergency response to ensure system safety
- IP54 protection level, easy to install outdoors



Deployment advantages

- The whole machine is lightweight design, no crane or forklift, and can be manually transported into place
- Integrated integrated structure, no need for complex wiring on site, fast station construction, suitable for emergency and remote rapid deployment



Scenario adaptation

- Pure off-grid independent power supply system, completely get rid of mains power dependence, mountainous areas, deserts, islands and other non-grid areas can stably build stations
- Photovoltaic + energy storage + diesel power generation multi-energy complementarity to solve the problem of difficult power supply and high power supply cost of traditional base stations



Easy operation and maintenance

- System modular design and pre installation design, easy installation and maintenance
- It can collect and monitor the status information of each component of energy storage in real time, and manage carbon emissions
- It supports automatic start and stop of diesel engines, eliminating the need for manual on-site operation

*The final technical parameters may be adjusted according to certification standards
*If there are any changes in product size and parameters, the latest information shall prevail without further notice