



ES130-261

HYBRID PHOTOVOLTAIC-STORAGE-DIESEL MICROGRID SYSTEM



High Compatibility

Can simultaneously connect to photovoltaic, power grid, and diesel generator; 2X power oversizing; Three phase imbalance regulation



Safe & Reliable

5-layer fire safety design; 3-level overcurrent protection; Intelligent cell management



Short Payback Period

AI & dynamic electricity tariffs; Integrated system design with pre-installation and pre-commissioning, reducing on-site setup time



Easy to Use

Support one-click remote OTA upgrade; Four-layer data security protection, ensuring zero information leakage; Product life-cycle support with fast maintenance and troubleshooting



Flexible Expansion

Parallel expansion with support to various scenarios; Intelligent energy dispatch to help increase revenue



High Energy Conversion Efficiency

System round-trip efficiency of 90% with flexible depth of discharge up to 100%

Model	ES130-261	ES130-522	ES130-783	ES130-1044
Energy System Count	1	2	3	4
Rated Capacity	261 kWh	522 kWh	783 kWh	1044 kWh
Rated Voltage	832 Vd.c.	832 Vd.c.	832 Vd.c.	832 Vd.c.
Voltage Range	728 - 949 Vd.c.	728 - 949 Vd.c.	728 - 949 Vd.c.	728 - 949 Vd.c.
Cell Specification	314 Ah / 0.5 P	314 Ah / 0.5 P	314 Ah / 0.5 P	314 Ah / 0.5 P
Energy System		ES130-261		
Battery Cluster Capacity	261 kWh			
Battery System Composition	1P260S			
Battery Pack Capacity	52.25 kWh			
PACK Count	5			
Battery Cluster Rated Voltage	832 V			
Operating Voltage Range	650 ~ 950 V			
C-rate	0.5 P			
Operating Temperature Range	Charging: 0 ~ 60 °C, Discharging: -20 ~ 60 °C			
Cooling Method	Plate Liquid Cooling			
Liquid Cooling System Power	5 kW			
Weight	≤2.5 T			
Ingress Protection Rating	IP55			
Dimensions (W*D*H)	1000*1350*2250 mm			
PACK		ES130-261		
Battery Pack Capacity	52.25 kWh			
Cell Specification	314 AH			
Series Count	1P52S			
Rated Voltage	166.4 V			
Operating Voltage Range	145.6 ~ 187.2 V			
Operating Power Consumption	≤3W			
Operating Temperature Range	Charging: 0 ~ 60 °C, Discharging: -30 ~ 60 °C			
Storage Temperature Range	-40 ~ 125 °C			
Single Cell Voltage Detection Range	0 ~ 5 V			
Single Cell Voltage Sampling Accuracy	±3%			
Weight	350 kg			
Ingress Protection Rating	IP67			
Dimensions (W*D*H)	770*1117*237 mm			
General		ES130-261		
Switch Time	20 ms			
Power Response Time	200 ms			
Ingress Protection Rating	Cabinet (IP54), Inverter (IP65), Distribution (IP54)			
Operating Temperature	-30 ~ 60 °C (derating over 45 °C)			
Relative Humidity	<95 % (No condensation)			
Cooling Method	Battery: liquid cooling; Inverter: intelligent air cooling			
System Functions	Active and reactive power scheduling, Grid voltage support, Grid three phase imbalance compensation, Grid harmonic suppression			
Display	LCD Capacitive Screen + LED			
Software Upgrade Method	Ethernet/USB			
Remote Communication	4G-EMS/APP			
Product Dimensions (W*D*H)	750 *1350*2250 mm			
Noise Level	≤75 db			
Backup		ES130-261		
Rated Power	130 kW			
Voltage	380 / 400 Va.c.			
Frequency	50 / 60 Hz			
Wiring Method	3Ph + N + PE			
Rated Current	197.5 Va.c.			
THDI	≤3%			
Power Factor	-1 ~ +1			
Grid		ES130-261		
Rated Power	130 kW			
Voltage	380 / 400 Va.c.			
Rated Current	400 A.a.c.			
Wiring Method	3Ph + N +PE			
Generator		ES130-261		
Rated Power	130 kW			
Voltage	380 /400 Va.c.			
Rated Current	197.5 A.a.c.			
Wiring Method	3Ph + N			
PV Input		ES130-261		
Max. Input Power	260 kW			
Max. Input Voltage	950 Vd.c.			
Rated Input Voltage	810 Vd.c.			
Starting Voltage	220 Vd.c.			
Min. Operating Voltage	200 Vd.c.			
MPPT Operating Voltage Range	200 ~ 950 Vd.c.			
MPPT Full Load Voltage Range	780 ~ 950 Vd.c.			
Max. MPPT Input Current	52 A			
Max. MPPT Instantaneous Current	55 A			
MPPT Count	6			
Number of PV Strings	6*3			

Standard Compliance

Grid Connection: DE: VDE-AR-N4105:2018; CZ: PPDS ANNEX 4:2022; AT: TOR Erzeuger Typ A V1.2:2022 OVE-Richtlinie R 25:2020, TOR Erzeuger Typ B V1.3:2024 OVE-Richtlinie R 25:2020; EN 50549: EN 50549-1:2019, EN 50549-1:2019/C1:2019, EN 50549-1:2019/A1:2023, EN 50549-2:2019, EN 50549-2:2019/A1:2023, EN50549-10:2022

Safety: Battery Cabinet: IEC 62477; PCS Cabinet: IEC 62109-1/2

EMC: IEC 61000

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