

Integrated Microgrid Unit specification

Key Strengths

☒ High Integration:

Includes EMS, PCS, STS, Isolation Transformer, etc. Support optional configuration of MPPT, ATS, etc.

🔌 Plug-and-Play:

System commissioning completed at the factory, on-site operation requires only DC cable connection and power-on.

🔌 Support 125kW to 1500kW parallel operation

☔ High Protection Level:

Enclosure Designed for Harsh Environments in Africa, Including High Temperature, High Humidity, and High Salt Fog Conditions.

🔄 Seamless Transfer:

Supports Grid-Tied and Off-Grid seamless switch; Transfer Time $\leq 20\text{ms}$.

🔌 Flexible Configuration Support for PV + Storage + Grid + Diesel Control Strategies



Basic Parameters

Model	RS125	RS250	RS500
AC(on-grid)			
Max. output power (kW)	137	275	550
Rated output power (kW)	125	250	500
Rated voltage(V)	400/415		
Voltage range (V)	320-440		
Rated current (A)	180	361	722
Rated frequency (Hz)	50/60		
Frequency range (Hz)	45~55/55~65		
THDi	<3%		
Power factor	1leading-1lagging(settable)		
Grid type	3W+N+PE		
AC(off-grid)			
Max. output power (kW)	137	275	550
Rated power (kW)	125	250	500
Rated voltage (V)	400/415		
Rated current (A)	180	361	722
THDu	< 3% linear; < 5% nonlinear		
Rated frequency (Hz)	50/60		
Overload capacity	110% overload, 10 min		
PV input			
Max. PV input voltage (V)	1000		
Max. PV power (kW)	240	360	600
MPPT voltage range (V)	250~1000		
Battery input			
Battery voltage range (V)	620~950		
Max. charging power (kW)	137	275	550
General data			
Operation temperature (°C)	-30 ~ 55		
Relative humidity	0 ~95% non-condensing		
Ingress protection	IP54		
Noise emission (dB)	<80		
Operating altitude (m)	≤2000		
Cooling	Natural Air Cooling		
Display	LCD touch-screen & PC		
EMS communication	RS485, TCP/IP		



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