

ECO HYBRID

SNA-EU 12-14K (Single-Phase)

- 2 MPPTs with 4 strings, Max. 24kW PV input
- Max. charging and discharging current: 250A
- Off-grid application for high demand with 12kW output power
- Dual AC output ports for multiple load connections
- Integrated Design with Load and Battery Breaker
- PV or AC or Generator wake up battery
- Supports up to 16 units in parallel
- Separate GEN port
 - Up to 19.2kW Gen/AC coupling input
 - Auto generator start and stop control



Model	SNA-EU 12000	SNA-EU 14000
INPUT (PV DC)		
Max. PV input power (W)	24000 (12000/12000)	
Rated PV input voltage (V)	320	
Number of independent MPPT inputs	2/(2:2)	
PV input voltage range (V)	100-480	
MPPT voltage range (V)	120-440	
Start-up voltage (V)	100	
Max. PV input current per MPPT (A)	35/35	
Max. PV short-circuit current input per MPPT (A)	44/44	
Battery		
Compatible battery type	Lithium-ion/Lead-Acid	
Rated battery voltage (V)	48/51.2	
Battery voltage range (V)	46.4-60/38.4-60	
Max. charging / discharging current (A)	250	270
Max. charging / discharging power (W)	12000	13000
Force wake up battery from PV and Grid function	YES	
Grid		
Rated AC voltage (V)	230	
AC Start-up Voltage	90	
Acceptable Input Voltage Range (V)	130-280	
Rated AC frequency (Hz)	50/600	
Rated AC input current (A)	100	
Rated AC input power (W)	24000	
PF	0.99	
THDI	<5%	
Max. continuous AC passthrough current(A)	100	
GEN		
Rated GEN voltage (V)	230	
Rated GEN frequency (Hz)	50/60	
Rated GEN input current (A)	65	
Rated GEN input power (W)	15000	
UPS		
Rated output power (W)	12000	14000@230V (with PV + Battery)
Rated output voltage (V)	230	
Rated output current (A)	53	61
Rated output frequency (Hz)	50/60	
Switching time (UPS)	<10ms	
Wave form	Sine wave	
THDV	<3%	
Overload protection	5s@≥150% load /10s@110%~150% load	
Efficiency		
Max. MPPT efficiency	99.0%	
Max. efficiency	93.5%	
Max. charge / discharge efficiency	93.0%	
Protection		
PV reverse polarity protection(Y/N)	YES	
Over current / voltage protection(Y/N)	YES	
AC Short-circuit current protection(Y/N)	YES	
Grid monitoring(Y/N)	YES	
DC switch(Y/N)	YES	
DC / AC Surge protection	Type III	
Battery reverse polarity protection(Y/N)	Yes	
General		
Dimensions (W*H*D mm)	530*830*150mm / 17.72*25.59*5.9 in	
Weight	43.5kg / 95.9lbs	
Ingress protection rating	IP20	
Operating environment temperature range(°C)	0~45	
Storage temperature range(°C)	-15~60	
Relative humidity	5% ~ 95%	
Display & Communication interface	LCD+RGB, RS485 / Wifi / CAN	
Warranty	2 years	
Cooling method	Smart cooling	
Topology on AC / Battery side	Transformer-less / Transformer	
Altitude (m)	<2000	
Noise emission (typical)	<50dB	
Standard & Certification		
IEC 62109-1/-2, EN 62109/EN 62920		