

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			