

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
- Dedicated GEN port with auto-start and GEN boost function
- Integrated design with load and battery breaker
- PV or AC or generator wake up battery
- Supports up to 16 units in parallel



Model	SNA-EU 12K		SNA-EU 14K
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)		
Max. PV input voltage (V)	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 / 60		
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@≥1.5 × rated power / 10s@(1.1~1.5) × rated power		
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)	530 × 830 × 150 mm / 17.72 × 25.59 × 5.9 in		
Weight	43.5 kg / 95.9 lbs		
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	Transformerless / Transformer		
Max. Operating Altitude (m)	2000		
Noise emission (dB)	55		
Standard & Certification			
IEC 62109-1/-2, EN 62109/EN 62920			