

# ECO HYBRID

## Split-Phase

# SNA US 12K

- 240/120V off-grid split-phase output
- 2 MPPTs with 4 strings, Max. 24kW PV input
- Max. charging and discharging current: 250A
- AFCI Protection Integrated
- Dual AC output ports for multiple load connections
- Separate GEN port
  - Up to 19.2kW Gen/AC coupling input
  - Auto generator start and stop control
- Integrated Design with Load and Battery Breaker
- PV or AC or Generator wake up battery
- AC/Generator (input 240V or 120V) charge function



# Specification

INPUT (PV DC)		SNA US 12000W
Max. PV array power (W)		24000 (12000/12000)
Reted PV input voltage (V)		320
Number of independent MPPT inputs		2/(2:2)
PV input voltage range (V)		100~480
MPPT voltage range (V)		120~385
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
Max. charging / discharging power (W)		12000
Force wake up battery from PV and Grid function		YES
Grid		
Rated AC voltage (V)		110/220; 120/240
Acceptable input voltage range (V)		90~280
Rated AC frequency (Hz)		60/50
Rated AC input current (A)		105@220V/100@240V
Rated AC input power (W)		24000
PF		0.99
THDI		<5%
Max. continuous AC passthrough current(A)		100
UPS		
Rated output power (W)		12000
Rated output voltage (V)		110/220; 120/240
Rated output current (A)		54@220V/50@240V
Rated output frequency (Hz)		50/60
Surge power, duration		2Pn, 5s
Switching time (UPS)		<10ms@Single and Parallel
Wave form		Sine wave
THDV		3%
GEN		
Acceptable input voltage range		110/220; 120/240
Max. AC input voltage (V)		280
Max. AC input current (A)		63
Rated input frequency		50Hz/60Hz (Auto detection)
Transfer time		<10ms@Single; <20ms@Parallel
THDV		<3%
Overload protection		5s@≥150% load /10s@110%~150% load
Efficiency		
Max. efficiency		90.0%
Max. charging / discharging efficiency		90.0%
Max. MPPT efficiency		99.0%
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 Surge protection Type III		YES
AC Surge protection Type III		YES
Battery reverse polarity protection(Y/N)		YES
RSD / AFCI monitoring(Y/N)		YES
UPS/Battery breakers integrated		YES
General		
Dimensions ( W*H*D mm )		530*830*150mm (17.72*25.59*5.9inch)
Weight		45kg/99.2lbs
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		