LUXPOWERTEK

ECO HYBRID*

SNA-US 3K-120

(Single-Phase)



8kW
Max. PV input power

70A
Max. charge/discharge current

16
Units parallel

- Up to 500V PV input voltage
- 120V off-grid output
- Dedicated generator port, AC coupling or intelligent charge management

*Available as Eco Hybrid solution in selected markets

SPECIFICATIONS

Model	SNA US 3K-120
Input (PV DC)	
Max. PV input power (W)	8000 (4000 / 4000)
Rated PV input voltage (V)	320
Number of independent MPPT inputs	2 / (1:1)
Max. PV input voltage (V)	500
MPPT voltage range (V)	120 ~ 385
Start-up voltage (V)	100
Max. PV input current per MPPT (A)	17 / 17
Max. PV short-circuit current input per MPPT (A)	25 / 25
Battery	
Compatible battery type	Lithium-ion / Lead-Acid
Rated battery voltage (V)	48
Battery voltage range (V)	38.4 ~ 60
Max. charging / discharging current (A)	70
Max. charging / discharging power (W)	3000
Force wake up battery from PV&Grid function	YES
Grid	
Rated AC voltage (V)	120
Rated AC frequency (Hz)	50 / 60
Max. AC input current (A)	40
Max. AC input power (W)	4500
Max. continuous AC passthrough current (A)	60
GEN	
Rated GEN voltage (V)	120
Rated GEN frequency (Hz)	50 / 60
Rated GEN input current (A)	32
Rated GEN input power (W)	3840
UPS	
Rated output power (W)	3000
Rated output voltage (V)	120
Rated output current (A)	25
Rated output frequency (Hz)	50 / 60
Surge power, duration	2 × rated power for 2s
Switching time	<10ms@Single / <20ms@Parallel
Wave form	Sine wave
THDV	< 3%
Efficiency	
Max. MPPT efficiency	99.9%
Max. efficiency	93.0%
Max. charge / discharge efficiency	93.0%
Protection	
Over current / voltage protection	YES
AC short-circuit current protection	YES
Grid monitoring	YES
AC surge protection	Type III
Battery reverse polarity protection	YES
DC switch	YES
PV arc fault detection	YES
General	
Dimensions (W × H × D)	330 × 505 × 135 mm / 13 × 19.9 × 5.3 in
Weight	14.5 kg / 31.97 lbs
Ingress protection rating	IP20
Operating environment temperature range (°C)	0 ~ 50
Storage temperature range (°C)	-15 ~ 60
Relative humidity	5% ~ 95%
Display & Communication interface	LCD+LED, RS485 / Wi-Fi / CAN
Warranty	2 years
Cooling method	Smart Cooling
Topology on AC / Battery side	Transformerless / Transformer
Max. operating altitude (m)	4000, > 2000 Derating
Noise emission (dB)	< 50
Standards & Certification	

CSA STD. C22.2 No.107.1, UL STD.1741,FCC Part 15B, ICES