

LU  POWER^{TEK}

HYBRID SERIES //

GEN-HB-US 25K

(Split-Phase)



(High Voltage)



48kW

Max. PV input power



200A

Backup output current



25kW

120/240V output power

- Working with high- voltage battery
- Support up to 6 units in parallel
- Optimized for small C&I and high energy demand households

SPECIFICATIONS

Model	GEN-HB-US 25K
Input (PV DC)	
Max. PV input power (W)	48000
Rated PV input voltage (V)	360
Number of independent MPPT inputs	6 (A:2 / B:2 / C:1 / D:1 / E:1 / F:1)
Max. PV input voltage (V)	550
MPPT voltage range (V)	120 ~ 480
Start-up voltage (V)	120
Max. PV input current per MPPT (A)	34 / 34 / 17 / 17 / 17 / 17
Max. PV short-circuit current input per MPPT (A)	50 / 50 / 30 / 30 / 30 / 30
Battery	
Compatible battery type	Lithium-ion / Lead-Acid
Rated battery voltage (V)	307.2
Battery voltage range (V)	120 ~ 454.4
Max. charging / discharging current (A)	100
Max. charging / discharging power (W)	25000
Force wake up battery from PV function	YES
Grid	
Rated AC voltage (V)	120 / 240, 120 / 208
Rated AC frequency (Hz)	50 / 60
Rated AC output current (A)	104
Rated AC output power (W)	25000
Max. AC input current (A)	160
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)
THDI	< 5%
Max. continuous AC passthrough current (A)	104A / Split ; Bypass 200A
GEN	
Rated GEN voltage (V)	120 / 240 ; 120 / 208
Rated GEN frequency (Hz)	50 / 60
Rated GEN input current (A)	104
Rated GEN input power (W)	25000
EPS Output - with Battery	
Rated output power (W)	25000
Rated output voltage (V)	120 / 240 ; 120 / 208
Rated output current (A)	104
Rated output frequency (Hz)	50 / 60
Surge power, duration	2 × rated power for 10s
Switching time	< 15ms
Wave form	Sine wave
THDV	< 3%
Efficiency	
MPPT efficiency	98.0%
Max. efficiency	96.6%
Max. charge / discharge efficiency	96.0%
CEC efficiency	96.5%
Protection	
Anti-islanding protection	YES
AC short-circuit protection	YES
Leakage current protection	YES
Grid monitoring	YES
PV DC switch	YES
Grid / Load / Generator / Smart Load breaker integrated	YES
Battery / PV reverse polarity protection	YES
Over current / voltage protection	YES
PV insulation detection	YES
Battery soft start protection	YES
SPD protection	YES
AFCI / RSD protection	YES
GFCI	YES
General	
Dimensions (W × H × D)	626 × 924 × 285 mm / 24.7 × 36.4 × 11.2 in
Weight	73 kg / 160.94 lbs
Ingress protection rating	IP65
Display	LCD
Topology	Tranformerless
Ambient temperature range	-25 ~ 60°C (> 45°C, output derating)
Standby Losses	10W Sleep Mode, 30W Standby Mode
Cooling	Smart Cooling
Relative humidity range	0 ~ 100%
Max. operating altitude (m)	4000, > 2000 Derating
Noise emission (dB)	< 55
Communication from Inverter	SunSpec Modbus RTU over RS485, RJ45 for ext Wifi Dongle
Standards & Certification	
UL 1741SA, UL 1741SB, CSA C22.2, CEC, IEEE 1547.1, HECO SRD V2.0, IEEE 2030.5, FCC Part 15B, ANSI C63.4-2014, UL 1998, UL 1699B, E5000	