Website LinkedIn Facebook YouTube

LUXPOWERTEK

Lux Power Technology Co., Ltd

Headquarter:+86 755 8520 9056
www.luxpowertek.com
Contact us: sales@luxpowertek.com

V2604

LUXPOWERTEK

YOUR RELIABLE ENERGY SOLUTION PARTNER



MARKET LAYOUT

350,000+
Systems

25kW
Max.Power

100+
Country operations

100%
Service coverage



Americas – Split-Phase Markets





LuxpowerTek, a solar inverter industry leader, brings over 20 years of expertise in designing intelligent energy solutions for both electrified and off-grid areas globally. With a strategic presence in major regions, LuxpowerTek has successfully installed over 300,000 solar inverter systems. Our user-centric approach prioritizes addressing concerns and feedback, ensuring continuous improvement.
LuxpowerTek offers comprehensive, robust energy storage solutions for residential and commercial applications, shaping a sustainable energy future.

CATALOGUE

LEADING THE SMART ENERGY TRANSITION

HYBRID SERIES

- **SPLIT-PHASE**



LXP-LB-US 5-10K

P03



LXP-LB-US 12K

P05



GEN-LB-US 8K/13K

P07



GEN-LB-US 9.6K PRO/13K PRO/ 16K

P09



GEN-HB-US 25K

P11

HYBRID SERIES

- **THREE-PHASE**



TriP2-LB-US 6-12K

P13



TriP2-HB-US 6-15K

P15

OFF-GRID SERIES

- **SPLIT-PHASE**



SNA-US 3K

P19



SNA-US 6K

P21



SNA-US 12-15K

P23

PowerHub



PowerHub

P25

HYBRID SERIES

Intelligent Working Modes

- Weather compensation and smart octopus charging packages
- Self consumption mode for high tariff areas
- Charge priority mode for areas where grid power is unstable
- Force charge & discharge mode for variable tariff integration

Smart EPS (Emergency Power Supply)

- Plug & Play integrated changeover, seamless switching under 20ms
- Auto backup power for critical load emergency supply

Intelligent Battery Integration

- Remote upgrade for battery management system (BMS) firmware
- Wide range of compatible battery brands
- Auto “wake-up” function of lithium battery from sleep mode
- Essential info uploaded to LUX server for quick ESS diagnosis
- Battery sharing with multi-inverters in single-phase or three-phase

Advanced Parallel Units (Parallel Versions)

- Up to 10 units parallel
- Single-phase and unbalanced three-phase paralleling

Key Features

- High PV input capacity for expanded solar coverage
- Fast charge & discharge performance for optimized energy use
- Compact, lightweight design for easy installation
- Real-time monitoring on LuxCloud (mobile & PC)
- Generator-ready for flexible backup power options
- Wide compatibility with leading battery brands and smart home systems



- **Split-Phase**

  LXP-LB-US 5-10K

  LXP-LB-US 12K

  GEN-LB-US 8K/13K

  GEN-LB-US 9.6K PRO/13K PRO/16K

  GEN-HB-US 25K

- **Three-Phase**

  TriP2-HB-US 6-15K

  TriP2-LB-US 6-12K

LXP-LB-US 5-10K

- 2 MPPTs with 4 strings input, Max. PV input 15kW
- Supports up to 10pcs in parallel for on/off grid
- On/off grid seamless switching
- Peak shaving function
- AFCI protection integrated
- Breakers (Grid, Gen, Load and Battery) are integrated
- Separate port for
  -Generator connection
  - Auto generator control
  - Support generator exercise
  - Support generator boost function

  -Or smart load connection and auto control
  -Or AC coupling function





Model	LXP-LB-US 5K	LXP-LB-US 8K	LXP-LB-US 10K
Input (PV DC)			
Max. PV input power (W)	8000	12000	15000
Rated PV input voltage (V)	360		
Number of independent MPPT inputs	2 / (2:2)		
Max. PV input voltage (V)	600		
MPPT voltage range (V)	120 ~ 500		
Start-up voltage (V)	140		
Max. PV input current per MPPT (A)	25 / 25		
Max. PV short-circuit current input per MPPT (A)	31 / 31		
Battery			
Compatible battery type	Lithium-ion / Lead-Acid		
Rated battery voltage (V)	48		
Battery voltage range (V)	40 ~ 60		
Max. charging / discharging current (A)	115	167	210
Max. charging / discharging power (W)	5000	8000	10000
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	20.8A@240V / 24A@208V	33.3A@240V / 38.5A@208V	41.6A@240V / 48A@208V
Rated AC output power (W)	5000	8000	10000
Max. AC input current (A)	40	63	63
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)		
THDI	3%		
UPS			
Rated output power (W)	5000	8000	10000
Rated output voltage (V)	120 / 240; 120 / 208		
Rated output current (A)	20.8A@240V / 24A@208V	33.3A@240V / 38.5A@208V	41.6A@240V / 48A@208V
Rated output frequency (Hz)	50 / 60		
Surge power, duration	2 × rated power for 0.5s		
Switching time	20ms		
Wave form	Sine wave		
THDV	< 3%		
GEN			
Rated GEN voltage (V)	120 / 240; 120 / 208		
Rated GEN frequency (Hz)	50 / 60		
Rated GEN input current (A)	41.7	62.5	
Rated GEN input power (W)	10000	15000	
Efficiency			
Max. MPPT efficiency	99.9%		
Max. efficiency	97.5%		
Battery charge/discharge efficiency	94.0%		
CEC efficiency	96.4%		
Protection			
PV reverse polarity protection	YES		
Over current/voltage protection	YES		
Anti-islanding protection	YES		
AC short-circuit protection	YES		
Leakage current protecion	YES		
DC switch	YES		
AC/DC surge protection	YES		
Rapid shut down	YES		
Grid / AFCI / RSD monitoring	YES		
Grid / GEN breaker (Current / Voltage)	63A / 480V		
Load breaker (Current / Voltage)	63A / 480V		
Battery breaker (Current/Voltage)	250A / 80V		
General			
Dimensions (W × H × D)	520 × 750 × 285 mm / 20.5 × 29.5 × 11.2 in		
Weight	50 kg / 110 lbs		
Ingress protection rating	IP65 / NEMA 4X		
Relative humidity	0 ~ 100%		
Operating environment temperature range (°C)	-25 ~ 60°C, > 45°C Derating		
Storage temperature range (°C)	-25 ~ 60		
Display & Communication interface	Touch color screen, RS485 / Wi-Fi / CAN		
Warranty	5 / 10 years		
Cooling method	Smart Cooling		
Topology	Transformerless		
Max. operating altitude (m)	2000		
Standards & Certification			
UL1741SA, UL1741SB, CSA22.2, UL1741PCS CRD, CEC, FCC Part15B, IEEE1547.1.			

LXP-LB-US 12K

- 3 MPPTs with 4 strings input, Max. 18kW PV input
- 200A grid passthrough for whole home backup
- Supports up to 10pcs in parallel for on/off grid
- On/off grid seamless switching
- Peak shaving function
- AFCI protection integrated
- Separate port for
  -Generator connection
  - Auto generator control
  - Support generator exercise
  - Support generator boost function

  -Or smart load connection and auto control

  -Or AC coupling function





Model	LXP-LB-US 12K	LXP-LB-US Pro 10K
Input (PV DC)		
Max. PV input power (W)	18000	
Rated PV input voltage (V)	360	
Number of independent MPPT inputs	3 / (2:1:1)	
Max. PV input voltage (V)	600	
MPPT voltage range (V)	120 ~ 500	
Start-up voltage (V)	140	
Max. PV input current per MPPT (A)	25 / 15 / 15	
Max. PV short-circuit current input per MPPT (A)	31 / 19 / 19	
Battery		
Compatible battery type	Lithium-ion / Lead-Acid	
Rated battery voltage (V)	48	
Battery voltage range (V)	40 ~ 60	
Max. charging / discharging current (A)	250	208
Max. charging / discharging power (W)	12000	10000
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)	50	41.7
Rated AC output power (W)	12000	10000
Max. AC input current (A)	200	
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)	
THDI	< 3%	
Max. continuous AC passthrough current (A)	200	
GEN		
Rated GEN voltage (V)	120 / 240; 120 / 208	
Rated GEN frequency (Hz)	50 / 60	
Rated GEN input current (A)	62.5	
Rated GEN input power (W)	15000	
UPS		
Rated output power (W)	12000	10000
Rated output voltage (V)	120 / 240; 120 / 208	
Rated output current (A)	50	41.7
Rated output frequency (Hz)	50 / 60	50 / 60
Surge power, duration	2 × rated power for 0.5s	
Switching time	20ms	
Wave form	Sine wave	
THDV	< 3%	
Efficiency		
Max. MPPT efficiency	99.9%	
Max. efficiency	97.5%	
Battery charge / discharge efficiency	94.0%	
CEC efficiency	96.9%	
Protection		
PV reverse polarity protection	YES	
Over current / voltage protection	YES	
Anti-islanding protection	YES	
AC short-circuit protection	YES	
Leakage current protecion	YES	
DC switch	YES	
AC/DC surge protection	Type III	
Rapid shut down	YES	
Grid/AFCI/RSD monitoring	YES	
Load breaker (Current)	200A	
Battery breaker (Current/Voltage)	2*200A/80V	
General		
Dimensions (W × H × D)	520 × 870 × 285 mm / 20.5 × 34.2 × 11.2 in	
Weight	55 kg / 121.2 lbs	
Ingress protection rating	IP65 / NEMA 4X	NEMA 4X
Relative humidity	0 ~ 100%	
Operating environment temperature range (°C)	-25 ~ 60°C, > 45°C Derating	
Storage temperature range (°C)	-25 ~ 60	
Display & Communication interface	Touch color screen, RS485 / Wi-Fi / CAN	
Warranty	5 / 10 years	
Cooling method	Smart Cooling	
Topology	Transformerless	
Max. operating altitude (m)	2000	
Standards & Certification		
UL 1741SA, UL 1741SB, CSA C22.2, UL 1741PCS CRD, CEC, FCC Part15B, IEEE 1547.1		

GEN-LB-US 8K/13K

- 2 MPPTs with 4 strings input, Max. 18kW PV input
- Supports up to 10pcs in parallel for on/off grid
- Peak shaving function
- Auto start/stop, works with battery and PV for load support.
- AC coupling function to retrofit the existing grid-tied system
- Remote Monitoring & AI Optimization





Model	GEN-LB-US 8K	GEN-LB-US 13K
Input (PV DC)		
Max. PV array power (W)	21000	
Max. PV input power (W)	18000	
Rated PV input voltage (V)	360	
Number of independent MPPT inputs	2 / (2:2)	
Max. PV input voltage (V)	550	
MPPT voltage range (V)	120 ~ 440	
Start-up voltage (V)	140	
Max. PV input current per MPPT (A)	26 / 26	
Max. PV short-circuit current input per MPPT (A)	31 / 31	
Battery		
Compatible battery type	Lithium-ion / Lead-Acid	
Rated battery voltage (V)	48	
Battery voltage range (V)	40 ~ 60	
Max. charging / discharging current (A)	167	208
Max. charging / discharging power (W)	8000	10000
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 with PV (A)	33.3A@240V/38.5A@208V	54
Rated AC output power with PV (W)	8000	13000@240V / 11200@208V
Max. AC input current (A)	63	
THDI	<3%	
Max. continuous AC passthrough current (A)	90	
GEN		
Rated GEN voltage (V)	120 / 240 ; 120 / 208	
Rated GEN frequency (Hz)	50 / 60	
Rated GEN input current (A)	62.5	
Max. GEN input current (A)	80	
Rated GEN input power (W)	15000	
UPS		
Rated output power (W)	8000	10000
Rated output voltage (V)	120 / 240 ; 120 / 208	
Rated output current (A)	33.3A@240V/38.5A@208V	41.6@240V ; 48@208V
Rated output frequency (Hz)	50 / 60	
Surge power, duration	2 × rated power for 0.5s	
Switching time	20ms	
Wave form	Sine wave	
THDV	< 3%	
Efficiency		
Max. MPPT efficiency	99.9%	
Max. efficiency	97.5%	
Battery charge / discharge efficiency	94.0%	
CEC efficiency	96.6%	
Protection		
PV reverse polarity protection	YES	
Over current / voltage protection	YES	
Anti-islanding protection	YES	
AC short-circuit protection	YES	
Leakage current protecion	YES	
DC switch	YES	
AC / DC surge protection	Type III	
Rapid shut down	YES	
Grid / AFCI / RSD monitoring	YES	
Load breaker	80A	
Battery breaker	250A / 80V	
General		
Dimensions (W × H × D)	566 × 773 × 285 mm / 22.3 × 30.4 × 11.2 in	
Weight	55 kg / 121.3 lbs	
Ingress protection rating	IP66 / NEMA 4X	
Relative humidity	0 ~ 100%	
Operating environment temperature range (°C)	-25 ~ 60°C, > 45°C Derating	
Storage temperature range (°C)	-25 ~ 60	
Display & Communication interface	Touch color screen, RS485 / Wi-Fi / CAN	
Warranty	5 / 10 years	
Cooling method	Smart Cooling	
Topology	Transformerless	
Max. Operating Altitude (m)	2000	
Standards & Certification		
UL 1741SA, UL 1741SB, CSA C22.2, CEC, FCC Part15B, IEEE 1547.1, HECO SRD V2.0		

HYBRID SERIES

GEN-LB-US 9.6K PRO/13K PRO
GEN-LB-US 16K

- 3 MPPTs with 5 strings input, Max. 21kW PV input
- 200A grid passthrough for whole home backup
- Supports up to 10pcs in parallel for on/off grid
- Peak shaving function
- Auto start/stop, works with battery and PV for load support.
- AC coupling function to retrofit the existing grid-tied system
- Remote Monitoring & AI Optimization



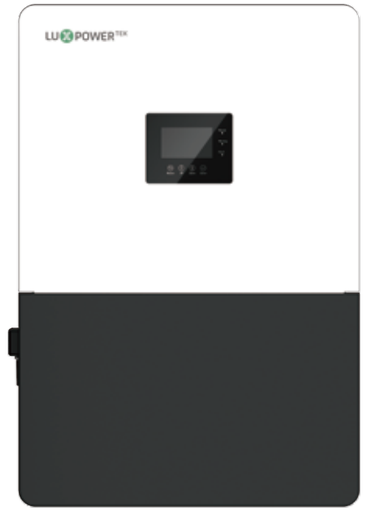


Model	GEN-LB-US 9.6K PRO	GEN-LB-US 13K PRO	GEN-LB-US 16K
Input (PV DC)			
Max. PV array power (W)	25000		
Max. PV input power (W)	21000		
Rated PV input voltage (V)	360		
Number of independent MPPT inputs	3 / (2:2:1)		
Max. PV input voltage (V)	550		
MPPT voltage range (V)	120 ~ 440		
Start-up voltage (V)	140		
Max. PV input current per MPPT (A)	26 / 26 / 15		
Max. PV short-circuit current input per MPPT (A)	31 / 31 / 19		
Battery			
Compatible battery type	Lithium-ion / Lead-Acid		
Rated battery voltage (V)	48		
Battery voltage range (V)	40 ~ 60		
Max. charging / discharging current (A)	250		
Max. charging / discharging power (W)	12000		
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 with PV (A)	40@240V; 46@208V	54@240V; 62.5@208V	66.7
Rated AC output power with PV (W)	9600	13000	16000@240V / 13800@208V
Max. AC input current (A)	200		
THDI	<3%		
Max. continuous AC passthrough current (A)	200		
GEN			
Rated GEN voltage (V)	120 / 240 ; 120 / 208		
Rated GEN frequency (Hz)	50 / 60		
Rated GEN input current (A)	62.5		
Max. GEN input current (A)	80		
Rated GEN input power (W)	15000		
UPS			
Rated output power (W)	12000		
Rated output voltage (V)	120 / 240 ; 120 / 208		
Rated output current (A)	50@240V ; 57.7@208V		
Rated output frequency (Hz)	50 / 60		
Surge power, duration	2 × rated power for 0.5s		
Switching time	20ms		
Wave form	Sine wave		
THDV	< 3%		
Efficiency			
Max. MPPT efficiency	99.9%		
Max. efficiency	97.5%		
Battery charge / discharge efficiency	94.0%		
CEC efficiency	96.9%		
Protection			
PV reverse polarity protection	YES		
Over current / voltage protection	YES		
Anti-islanding protection	YES		
AC short-circuit protection	YES		
Leakage current protecion	YES		
DC switch	YES		
AC / DC surge protection	Type III		
Rapid shut down	YES		
Grid / AFCI / RSD monitoring	YES		
Load breaker	200A		
Battery breaker	400A / 80V		
General			
Dimensions (W × H × D)	566 × 893 × 285 mm / 22.3 × 35.2 × 11.2 in		
Weight	57 kg / 125.7 lbs		
Ingress protection rating	IP66 / NEMA 4X		
Relative humidity	0 ~ 100%		
Operating environment temperature range (°C)	-25 ~ 60°C, > 45°C Derating		
Storage temperature range (°C)	-25 ~ 60		
Display & Communication interface	Touch color screen, RS485 / Wi-Fi / CAN		
Warranty	5 / 10 years		
Cooling method	Smart Cooling		
Topology	Transformerless		
Max. operating altitude (m)	2000		
Standards & Certification			
UL 1741SA, UL 1741SB, CSA C22.2, CEC, FCC Part15B, IEEE 1547.1, HECO SRD V2.0, UL 9540 System: UL9540 with PSHIELD MAX Battery			

HYBRID SERIES

GEN-HB-US 25K (High Voltage)

- 120/240 split-phase output 25kW
- 6 MPPTs with 8 strings, Max. 48kW PV input
- Working with High Voltage Battery
- Whole House Backup with 200A Output
- Supports up to 6 units in Parallel
- Optimized for Small C&I and High Energy Demand Households





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℃ (> 45℃, output derating)
Standby Losses	10W Sleep Mode, 30W Standby Mode
Cooling	Smart Cooling
Relative humidity range	0 ~ 100%
Max. operating altitude (m)	2000
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	

TriP2-HB-US 6-15K (Three-Phase)

- 120/208V Three-Phase Output
  Designed for American grid standards and multi-load environments
- Up to 3 MPPTs · 22.5kW Max. PV Input
  Flexible PV design for complex rooftops and multiple orientations
- 150% Phase Imbalance Capability
  Up to 7.5kW on a single phase, stable even with uneven loads
- Wide HV Battery Range: 100–600V
  Designed for flexible high-voltage battery integration
- Up to 15kW UPS Backup Output
  Millisecond-level switching for uninterrupted critical loads
- Parallel Up to 10 Units
  Scalable for both on-grid and off-grid systems
- Dedicated Smart GEN Port
  One port, three functions:
  • Automatic Generator Control
  • Smart Load Management
  • AC Coupling Support



High Voltage



Model	TriP2-HB-US 6K	TriP2-HB-US 8K	TriP2-HB-US 10K	TriP2-HB-US 12K	TriP2-HB-US 15K
Input (PV DC)					
Max. PV input power (W)	9000	12000	15000	18000	22500
Rated PV input voltage (V)	550				
Number of independent MPPT inputs	3 / (2:2:2)				
Max. PV input voltage (V)	650				
MPPT voltage range (V)	200 ~ 600				
Start-up voltage (V)	100				
Max. PV input current per MPPT (A)	40 / 40 / 40				
Max. PV short-circuit current input per MPPT (A)	50 / 50 / 50				
Battery					
Compatible battery type	Lithium-ion / Lead-Acid				
Rated battery voltage (V)	400				
Battery voltage range (V)	100 ~ 600				
Max. charging voltage (V)	600				
Max. charging / discharging current (A)	75				
Max. charging / discharging power (W)	6000	8000	10000	12000	15000
Force wake up battery from PV function	YES				
Grid					
Rated AC voltage (V)	3L / N / PE, 120 / 208Vac				
Rated AC frequency (Hz)	50 / 60				
Rated AC output current (A)	16.7	22.2	27.8	33.3	41.7
Rated AC output power (W)	6000	8000	10000	12000	15000
Max. AC input current (A)	25.0	33.3	41.7	50.0	62.5
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)				
THDI	< 3%				
Max. continuous AC passthrough current (A)	75				
GEN					
Rated GEN voltage (V)	3L / N / PE, 120 / 208Vac				
Rated GEN frequency (Hz)	50 / 60				
Rated GEN input current (A)	30				
Rated GEN input power (W)	10800				
UPS					
Rated output power (W)	6000	8000	10000	12000	15000
Rated output voltage (V)	3L / N / PE, 120 / 208Vac				
Rated output current (A)	16.7	22.2	27.8	33.3	41.7
Rated output frequency (Hz)	50 / 60				
Surge power, duration	1.5 × rated power for 5min				
Switching time	10ms				
Wave form	Sine wave				
THDV	< 3%				
Efficiency					
Max. efficiency	97.2%	97.3%	97.4%		97.5%
Max. charge / discharge efficiency	97.1%	97.2%			97.3%
Protection					
PV reverse polarity protection	YES				
Battery reverse polarity protection	YES				
PV Insulation Detection	YES				
Over current / voltage protection	YES				
Anti-islanding protection	YES				
AC Short-circuit protection	YES				
Leakage current protecion	YES				
Grid monitoring	YES				
DC switch	YES				
Ingress protection	YES				
DC Surge protection	Type III				
AC Surge protection	Type III				
General					
Dimensions (W × H × D)	480 × 703 × 257 mm / 18.9 × 27.7 × 10.1 in				
Weight	50 kg / 110.2 lbs				
Ingress protection rating	IP65				
Operating environment temperature range (°C)	-25 ~ 60				
Storage temperature range (°C)	-40 ~ 70				
Relative humidity	0 ~ 100%				
Display & Communication interface	Touch color screen, RS485/Wifi/CAN				
Warranty	5 / 10 years				
Cooling method	Smart cooling				
Topology	Transformerless				
Max. operating altitude (m)	2000				
Noise emission (dB)	50				
Standards & Certification					

TriP2-LB-US 6-12K (Three-Phase)

- 120/208V Three-Phase Output
  - 120V (L–N) / 208V (L–L)
  - For global 120/208V three-phase systems
- Independent Phase Control
  - 150% unbalanced output
  - Up to 7.5kW per phase
  - Independent export control on each phase
- Flexible PV Design
  - Max. 3 MPPTs
  - Max. PV input: 18kW
- 48V Low-Voltage Battery Compatible
  - Supports multiple 48V battery brands
  - Lower cost, safer installation
- Time of Use (TOU)
  - 8 programmable charge/discharge periods
- Scalable & Reliable
  - Up to 10 units in parallel
  - On-grid & off-grid support



Low Voltage



Model	TriP2-LB-US 6K	TriP2-LB-US 8K	TriP2-LB-US 10K	TriP2-LB-US 12K
Input (PV DC)				
Max. PV input power (W)	9000	12000	15000	18000
Rated PV input voltage (V)	550			
Number of independent MPPT inputs	3 / (1:1:1)			
Max. PV input voltage (V)	650			
MPPT voltage range (V)	200 ~ 600			
Start-up voltage (V)	100			
Max. PV input current per MPPT	20 / 20 / 20			
Max. PV short-circuit current input per MPPT (A)	25 / 25 / 25			
Battery				
Compatible battery type	Lithium-ion / Lead-Acid			
Battery voltage range (V)	40-60			
Max. charging / discharging current (A)	150	200	220	250
Max. charging / discharging power (W)	6000	8000	10000	12000
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Grid				
Rated AC voltage (V)	3L / N / PE, 120 / 208Vac			
Rated AC frequency (Hz)	50 / 60			
Rated AC output power (W)	6000	8000	10000	12000
Rated AC output current (A)	16.7	22.2	27.8	33.3
Max. AC input current (A)	50			
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)			
THDI	< 3%			
Max. continuous AC passthrough current (A)	30		50	
GEN				
Rated GEN voltage (V)	3L / N / PE, 120 / 208Vac			
Rated GEN frequency (Hz)	50 / 60			
Rated GEN input current (A)	30			
Rated GEN input power (W)	10800			
UPS				
Rated output power (W)	6000	8000	10000	12000
Rated output voltage (V)	3L / N / PE, 120 / 208Vac			
Rated output current (A)	16.7	22.2	27.8	33.3
Rated output frequency (Hz)	50 / 60			
Surge power, duration	1.5 × rated power for 5min			
Switching time	10ms			
Wave form	Sine wave			
THDV	< 3%			
Efficiency				
Max. efficiency	97.2%	97.3%		97.4%
Max. charge / discharge efficiency	97.1%	97.2%		
Protection				
PV reverse polarity protection	YES			
PV Insulation Detection	YES			
Over current / voltage protection	YES			
Anti-islanding protection	YES			
AC Short-circuit protection	YES			
Leakage current protecion	YES			
Grid monitoring	YES			
DC switch	YES			
Ingress protection	YES			
DC Surge protection	Type III			
AC Surge protection	Type III			
General				
Dimensions (W × H × D)	480 × 703 × 258 mm / 18.9 × 27.7 × 10.2 in			
Weight	53 kg / 116.85 lbs			
Ingress protection rating	IP66			
Operating environment temperature range (°C)	-25 ~ +60, >45℃ derating			
Storage temperature range (°C)	-25 ~ +60			
Relative humidity	0 ~ 100%			
Display & Communication interface	Touch color screen, RS485/Wifi/CAN			
Warranty	5 / 10 years			
Cooling method	Smart cooling			
Topology	Transformerless			
Max. operating altitude (m)	2000			
Noise emission (dB)	50			
Standards & Certification				

ECO HYBRID / OFF-GRID



- SNA US 3K
- SNA US 6K
- SNA US 12-15K

The ultimate pick for off-grid applications, empowering energy independence. seamlessly switching between on and off-grid modes, it's tailored for remote regions and unstable power scenarios, enabling direct off-grid usage.

OUR CORE FEATURES

16pcs Parallel

With 16 units designed for parallel connections, this solution offers enhanced efficiency and flexibility for your power conversion needs. Whether you're integrating solar panels, batteries, or other renewable energysources, "16pcs Parallel" ensures seamless operation and optimized performance. Whether you're a professional or a DIY enthusiast, this product will beyour ideal choice.

Three-phase system with variable loads on each phase

Introducing our parallelized three-phase system, where each phase may have adifferent load. This state-of-the-art solution offers unmatched flexibility and efficiency for power distribution across diverse environments. Whether you're overseeing industrial machinery, commercial facilities, or residential grids, oursystem seamlessly adapts to varying loads on each phase. With robust performance and precise load management capabilities, it's perfect for optimizing energy usage and ensuring a dependable power supply.

Separate Generator Port Available

This addition expands the diversity of energy independence options by providing additional flexibility in power source selection, Whether you're incorporatingsolar panels, batteries, or generators, our system offers seamless integrationand optimized performance. With its adaptable design and expanded options,it's the ideal solution for diversifying energy sources and ensuring reliablepower supply in various scenarios.

480V High Voltage PV Input

With this capability, our system allows for the integration of as many solarpanels as possible, optimizing energy generation potential. Whether forresidential, commercial, or industrial applications, this feature ensures efficient utilization of solar resources and enhanced energy output. Say goodbye to limitations and hello to unparalleled solar power flexibility with our high PV voltage input.

SNA US 3K

- 120V off-grid output.
- Supports up to 16 units in parallel.
- Maximum PV input voltage: 500V.
- 2 MPPTs, maximum PV input: 8kW.
- Maximum charge and discharge current: 70A.
- Dedicated generator port, AC coupling or intelligent charge management.





Model	SNA US 3K
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 function	YES
Force wake up battery from 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	Transformerless
Max. operating altitude (m)	2000
Noise emission (dB)	50
Standards & Certification	

ECO HYBRID

SNA US 6K

- 240V/120V off-grid split-phase output
- Supports up to 16pcs in parallel
- Off-grid seamless switching
- AFCI protection integrated
- Dedicated port for generator, AC coupling or smart load management
- Breakers (Grid, Load, Gen and Battery) and PV switch are integrated





Model	SNA US 6K
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)	125 / 140
Max. charging / discharging power (W)	6000
Force wake up battery from PV function	YES
Force wake up battery from Grid function	YES
Grid	
Rated AC voltage (V)	110(L-N) / 220(L1-L2); 120(L-N) / 240(L1-L2)
Rated AC frequency (Hz)	50 / 60
Max. AC input current (A)	41A@220V / 37.5A@240V
Max. AC input power (W)	9000
Max. continuous AC passthrough current (A)	50
GEN	
Rated GEN voltage (V)	120 / 240
Rated GEN frequency (Hz)	50 / 60
Rated GEN input current (A)	32
Rated GEN input power (W)	7370
UPS	
Rated output power (W)	6000
Rated output voltage (V)	110 / 220; 120 / 240
Rated output current (A)	28A@220V / 25A@240V
Rated output frequency (Hz)	50 / 60
Surge power, duration	2 × rated power for 2s
Switching time	<7ms@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
Rapid shut down	YES
PV Arc Fault Detection	YES
AC & UPS breaker (Current/Voltage)	50A / 230VAC
Battery breaker (Current/Voltage)	200A / 80V/DC
GEN breaker (Current/Voltage)	50A / 230V/AC
General	
Dimensions (W × H × D)	450 × 650 × 150 mm / 17.7 × 25.6 × 5.9 in
Weight	24 kg / 53 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	Transformerless
Max. operating altitude (m)	2000
Noise emission (dB)	50
Standards & Certification	
CSA STD. C22.2 No.107.1, UL STD.1741,FCC Part 15B, ICES	

*Note: 115A @48VDC (AC), 125A @44VDC (AC), 125A @48VDC (PV)

ECO HYBRID

SNA US 12-15K

- 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
- Integrated Design with Load and Battery Breaker
- PV or AC or Generator wake up battery
- AC/Generator (input 240V or 120V) charge function
- Supports up to 16 units in parallel
- Dedicated GEN Port with Auto-Start and GEN Boost Function



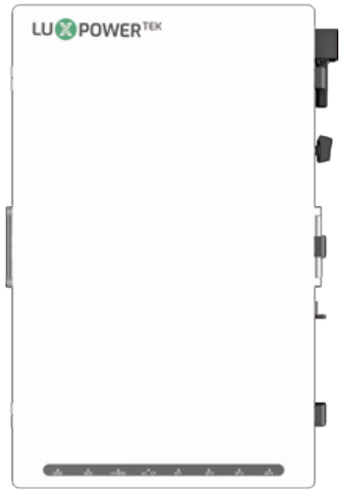


Model	SNA US 12K	SNA US 15K
Input (PV DC)		
Max. PV input power (W)	24000 (12000 / 12000)	
Rated PV input voltage (V)	320	
Number of independent MPPT inputs	2 / (2:2)	
Max. PV input voltage (V)	480	
MPPT voltage range (V)	120 ~ 440	
Start-up voltage (V)	100	
Max. PV input current per MPPT (A)	35 / 35	
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	
Max. charging / discharging power (W)	12000	
Force wake up battery from PV and Grid function	YES	
Grid		
Rated AC voltage (V)	120 / 240; 120 / 208	
AC Start-up Voltage	90 (L-L)	
Acceptable Input Voltage Range (V)	130 ~ 280（L-L）	
Rated AC frequency (Hz)	50 / 60	
Rated AC input current (A)	100A@240V	
Rated AC input power (W)	24000	
PF	0.99	
THDI	< 5%	
Max. continuous AC passthrough current(A)	100	
GEN		
Rated GEN voltage (V)	120 / 240; 120 / 208	
Rated GEN frequency (Hz)	50 / 60	
Rated GEN input current (A)	62.5	
Rated GEN input power (W)	15000	
UPS		
Rated output power (W)	12000	15000@240V (with PV + Battery)
Rated output voltage (V)	120 / 240; 120 / 208	
Rated output current (A)	50@240V	62.5@240V
Rated output frequency (Hz)	50 / 60	
Surge power, duration	2 × rated power for 5s	
Switching time (UPS)	<10ms	
Wave form	Sine wave	
THDV	3%	
Overload protection	5s@≥150% load / 10s@110%~150% load	
Efficiency		
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 Surge protection	Type III	
AC Surge protection	Type III	
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 × 150 mm / 17.72 × 25.59 × 5.9 in	
Weight	47.5 kg / 104.72 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)	50	
Standard & Certification		
CSA STD.C22.2 No.107.1, UL1741, FCC part 15B, ICES		

PowerHub

Key Features:

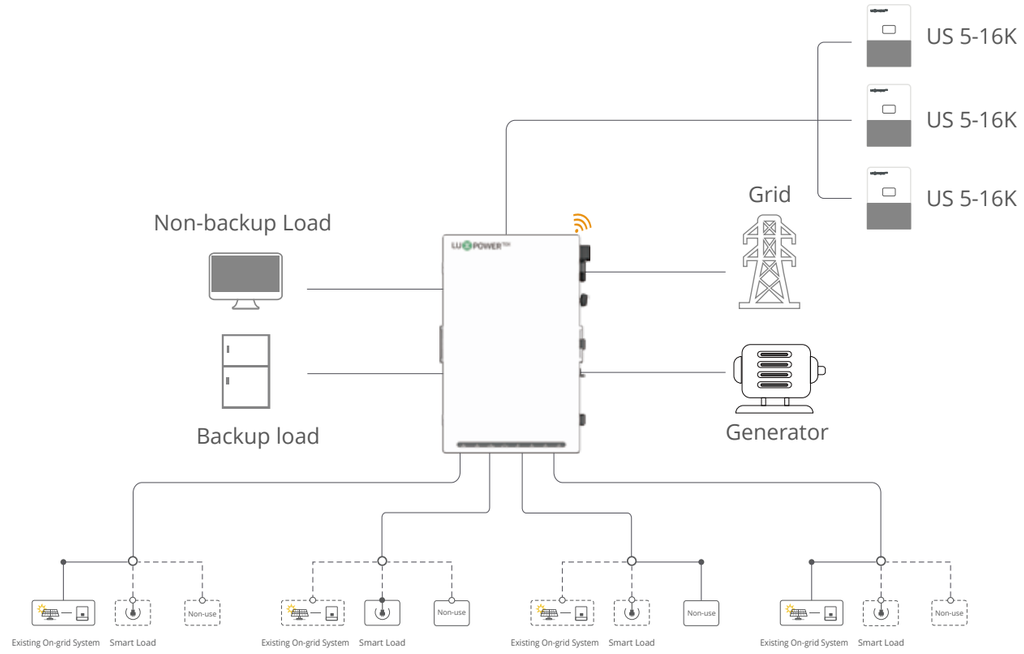
- **Centralized Control:**
  PowerHub acts as the central controller for all home power sources, efficiently integrating the grid, existing grid-tied systems, generators, and directly connecting to various types of loads to supply uninterrupted electricity to your home.
- **Seamless Transition:**
  Automatically transitions your home's power supply from grid power to backup power, ensuring that essential appliances like refrigerators and network routers remain unaffected during grid outages.
- **Flexible Connections:**
  With four independent smart ports, PowerHub offers versatile connectivity options for integrating with existing systems or directly powering loads.
- **Enhanced Reliability:**
  By managing and optimizing multiple power sources, PowerHub enhances the reliability and stability of your home's energy supply.





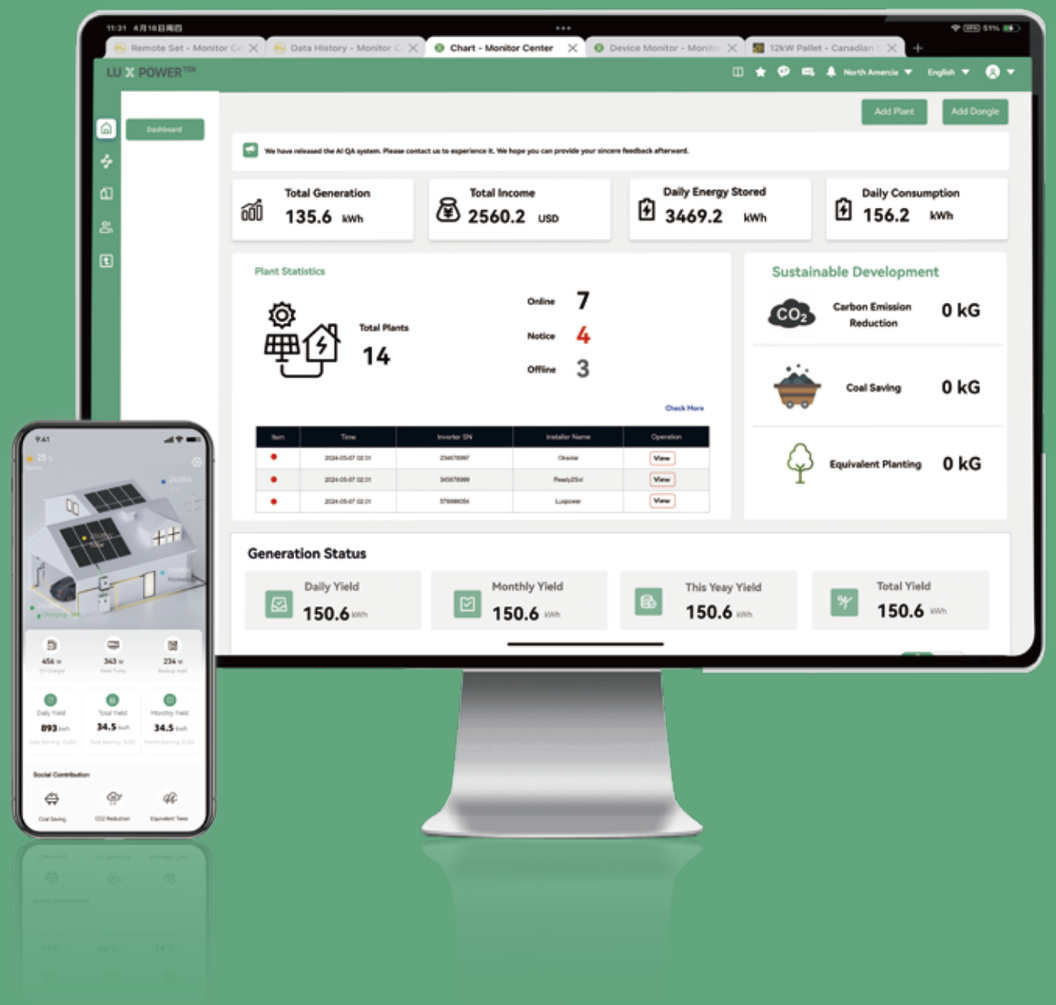
Performance specifications	PowerHub	
Port Name	**Port Qty**	**Max. Current**
For Hybrid Inverter	3	90
For Smart load	4	125
		80
		60
		60
For Backup load	1	200
For Non-backup load	1	200
For Generator	1	125
For Grid	1	200
General Data		
Operating ambient temperature range	-40°C to 60°C -40°F to 140°F	
Max. operating altitude	2000 m (6561 ft)	
Relative humidity	0 ~ 100%	
Outdoor rating	NEMA 3R	
Dimensions	500 × 800 × 180 mm / 19.7 × 31.5 × 7.1 in	
Weight	25 kg / 55 lbs	
Mounting	Wall-mounted	

UL1741, CSA22.2, UL869A, UL67, UL916, FCC Part 15 Class B, ICES



LUXPOWERTEK MONITORING CLOUD

Redefining energy management efficiency through AI empowerment



LuxBot Intelligent Customer Service

- 24/7 real-time multilingual support;
- Resolves user inquiries rapidly through Natural Language Processing (NLP), offering device diagnostics, energy consumption analysis, and operational guidance.

AI-Adaptive Operation Modes

- Intelligent Charging/Discharging Strategy: Dynamically optimizes cycles based on load forecasting and battery health monitoring to extend the lifespan of energy storage systems;
- Weather Optimization Algorithm: Integrates real-time meteorological data to automatically adjust energy dispatch (e.g., solar-storage coordination), ensuring system stability during extreme weather conditions.

For APP Download

Android

IOS

2017 — 2026













LuxpowerTek energy storage systems are widely adopted worldwide, providing stable and efficient solutions for homes and businesses. The smart monitoring system enables remote management, ensuring users can optimize energy usage anytime. With reliable performance and professional support, LuxpowerTek empowers customers toward a sustainable energy future.