

**WITH SOLAX
YOU'VE GOT THE POWER**

RESIDENTIAL ENERGY STORAGE SOLUTIONS

Low Voltage and IES All-in-one Series



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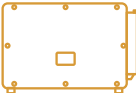
 www.solaxpower.com

 info@solaxpower.com

SOLAX
POWER

WE ARE SOLAX

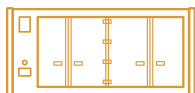
Established in 2012, SolaX Power is a publicly listed global leader specializing in solar energy storage and smart energy technologies. Offering a comprehensive product portfolio including inverters, batteries, energy storage systems, EV chargers, heat pumps, and integrated smart energy solutions, SolaX serves diverse application scenarios across residential, commercial and industrial, and utility-scale projects. With a strong commitment to innovation, driven by an R&D team representing 30% of its workforce, SolaX continues to deliver market-leading solutions worldwide. Dedicated to sustainability and backed by extensive global partnerships, SolaX helps customers in over 110 countries achieve their energy transition goals and significantly reduce carbon emissions.



Inverter



Battery



Energy storage system



Heat pump



EV charger



Smart energy solution



3,000+
Global Employees

1,100+
Global Certifications

1,000+
R&D Personnel

110+
Shipping Countries

1,400,000
Shipping Units



red dot



TÜVRheinland®
Precisely Right.



EUPD(2019-2025)



Comprehensive Quality Management System

Social Responsibility



Business Governance



Dortmund Partnership

Strategic partnership with Borussia Dortmund, charging towards a more brighter and greener future in both sustainable development and sports.



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SINGLE PHASE 2.5-8kW+5.1-20.4kWh

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X3-IES-P
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ON/OFF GRID SOLUTION

In regions where grid power is unstable and household appliances frequently fall into standby or interruption modes, SolaX Power offers a reliable residential energy solution by integrating solar PV and battery storage. When grid outages occur, the system automatically switches to the solar and storage supply, ensuring the continuous and stable operation of home loads. With ongoing solar energy generation, the solution not only maintains power reliability but also supports long-term energy sustainability.

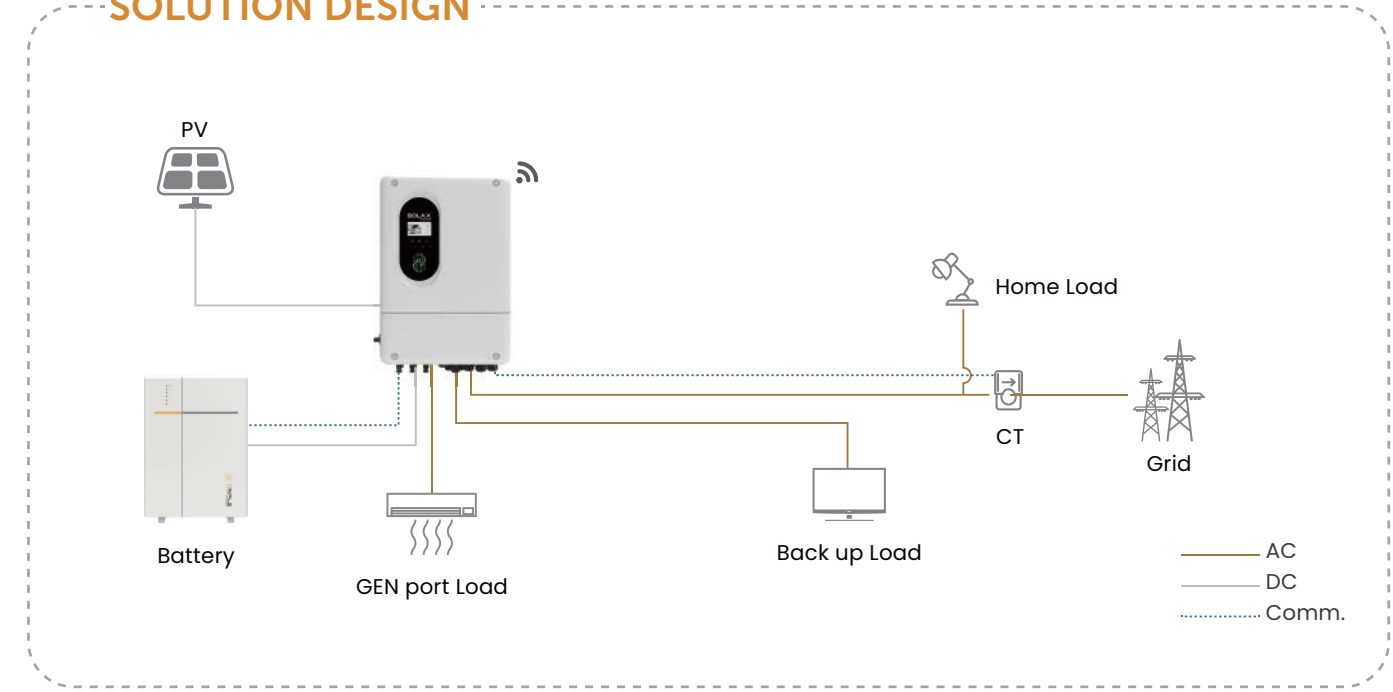


GENERATOR SOLUTION

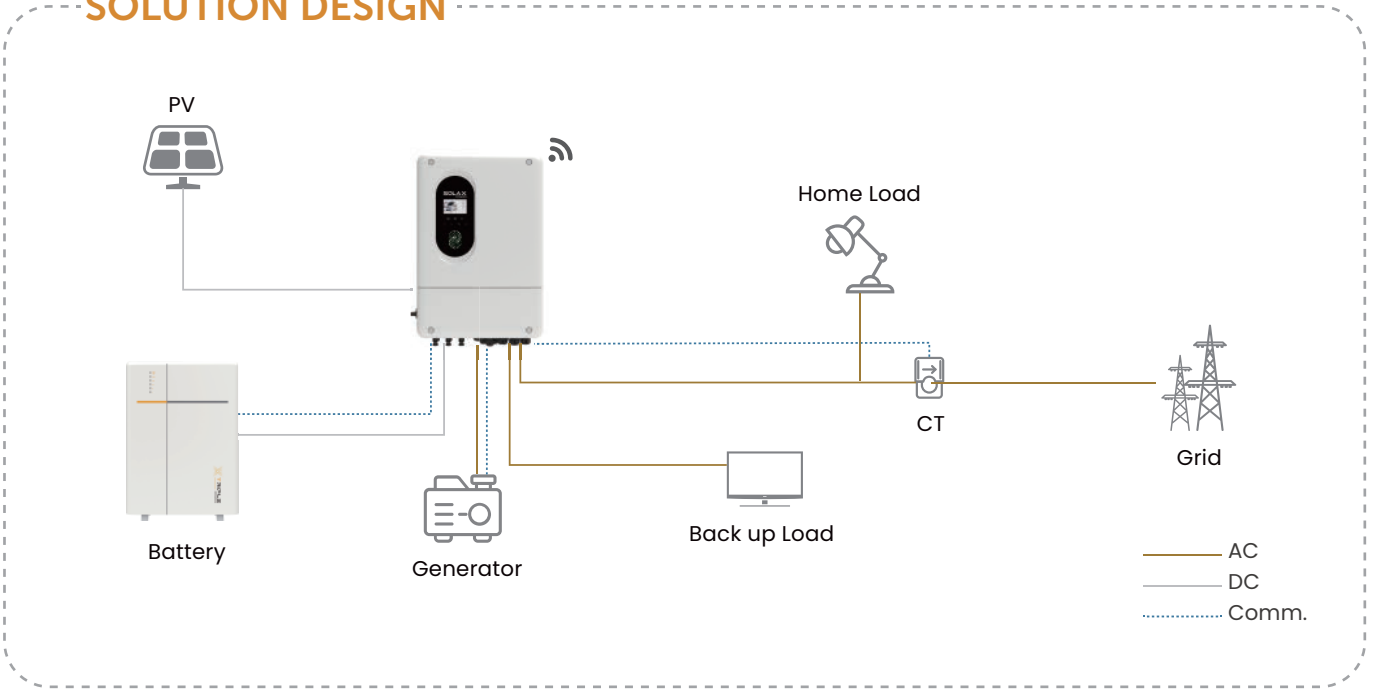
In applications where frequent switching between diesel generators and grid power is required, SolaX low-voltage energy storage inverters offer a dedicated generator interface to ensure a stable and reliable power supply. By intelligently coordinating generator operation, the system significantly reduces generator runtime, lowering diesel consumption and maintenance costs. Combined with renewable energy integration, it enables users to cut operational expenses while transitioning toward a cleaner and more sustainable energy solution.



SOLUTION DESIGN

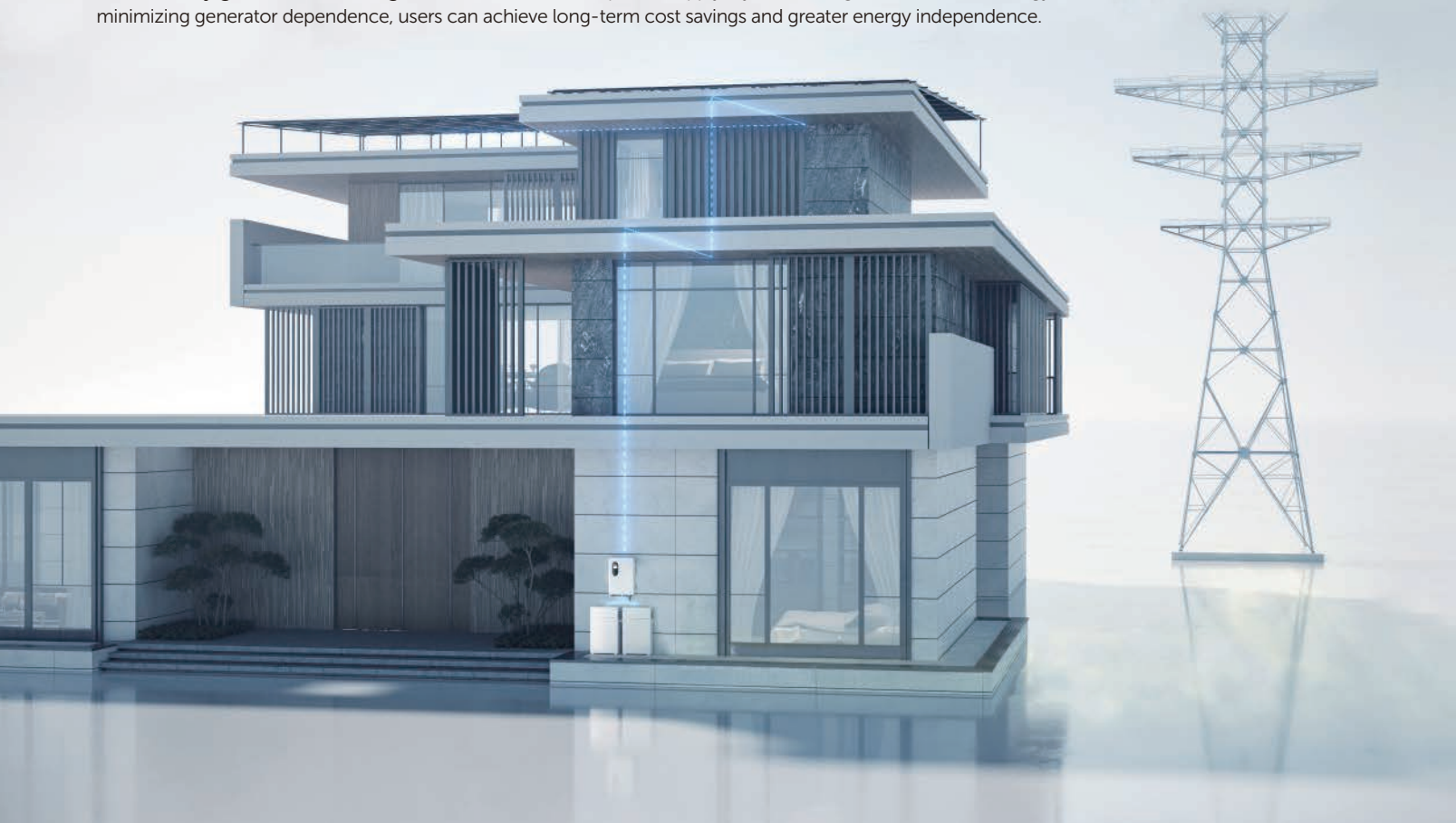


SOLUTION DESIGN



OFF-GRID SOLUTION

In off-grid or remote areas with limited or no access to utility power, SolaX Power delivers a hybrid energy solution by integrating solar PV, battery storage, and diesel generator support. The system enables predominantly off-grid operation, significantly reducing reliance on the utility grid while ensuring continuous and reliable power supply. By maximizing the use of solar energy and minimizing generator dependence, users can achieve long-term cost savings and greater energy independence.



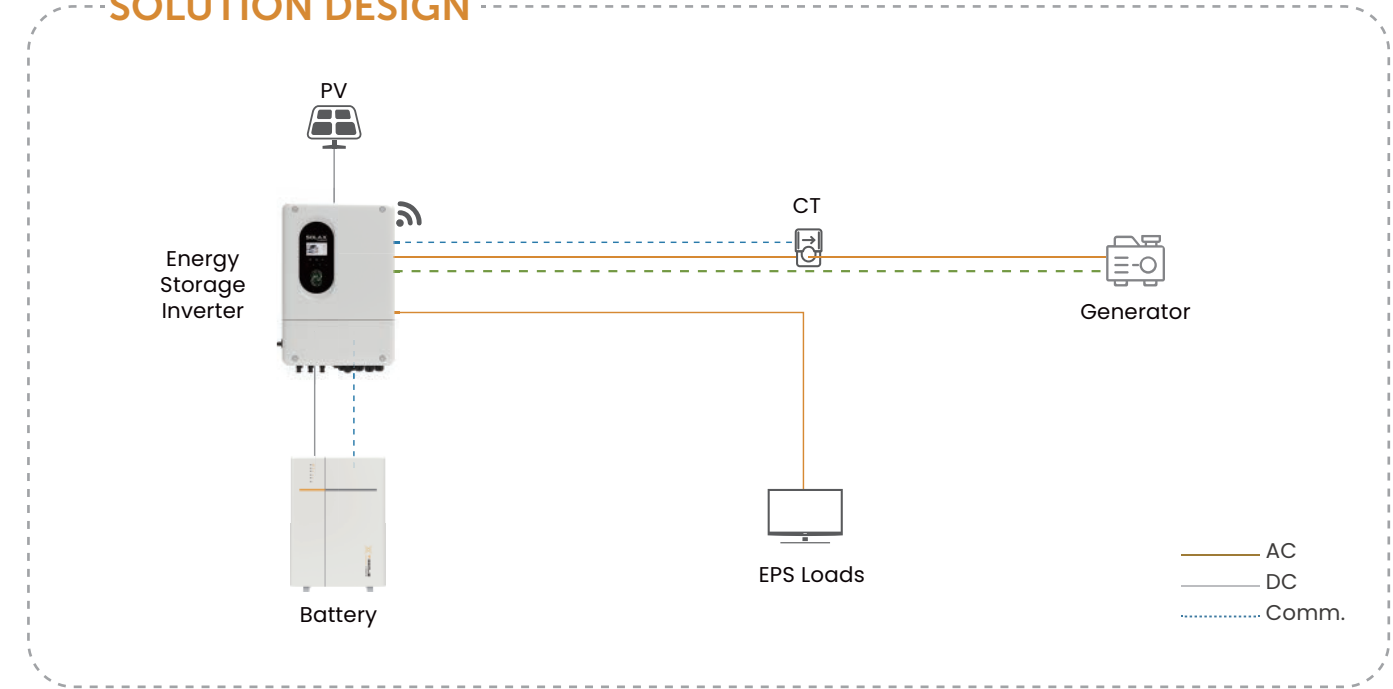
INVERTER PARALLEL SOLUTION

When energy demands outgrow the capacity of a single inverter, SolaX Power's inverter parallel solution offers exceptional scalability and power, allowing up to 10 units* to be configured in parallel. This flexible system meets substantial energy demands across various applications and its high capacity ensures a robust and efficient energy storage solution.

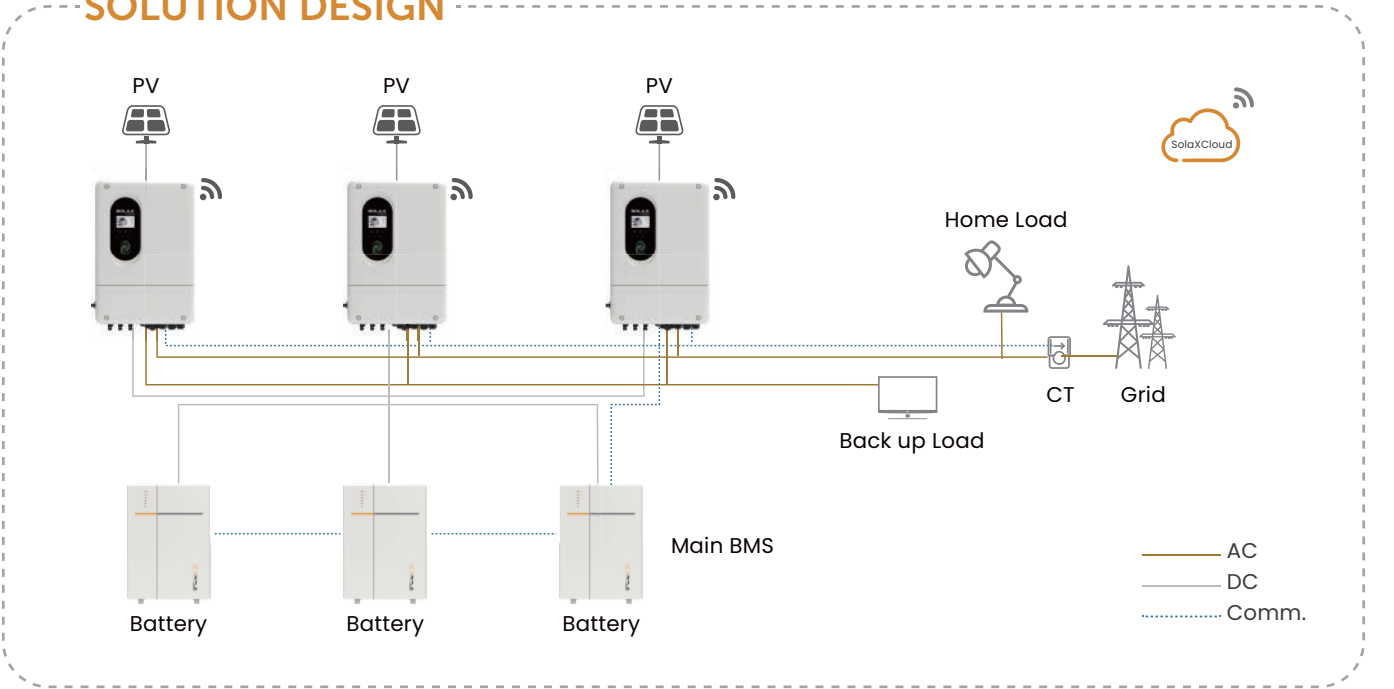


*3-5 pcs available now, 10 pcs with future update

SOLUTION DESIGN



SOLUTION DESIGN





OG SERIES

Single-Phase Residential Off-Grid Inverter



OG SERIES

5kW / 6kW



Intelligent Operation and Maintenance

- Smart reminder for dust filter replacement (or cleaning)*
- With startup wizard, self-diagnosis, and OTA remote upgrades, enjoy fast installation and effortless maintenance*
- Built-in WiFi enables easy remote monitoring



High Performance

- Low-noise operation, less than 50dB, for a quiet and undisturbed environment
- Maximum PV input current up to 28A, easily compatible with high-power modules
- Maximum charge and discharge current up to 120A/140A, meeting high-power application needs



Assured Reliability

- 0ms seamless switching ensures uninterrupted power supply*
- Up to 200% EPS overload for 5s



Flexible Adaptability

- Independent generator and smart load ports for intelligent power distribution
- Supports up to 12 units in parallel for easy system capacity expansion*
- Supports single-phase and three-phase group connection for versatile application scenarios
- Equipped with a BMS interface for compatibility with more battery types and broader applicability
- Personalize your energy storage inverter with a variety of stylish colors to match any setting or preference

* Comming soon



0G548

0G648

PV INPUT		
Max. recommended PV array power	6 kWp	7.2 kWp
Max. PV input voltage ^①	450 V	
Rated PV input voltage	360 V	
Operating voltage range	90 - 450 V	
Start-up voltage	95 V	
No. of MPP trackers / strings per MPP tracker	1 / (2)	
Max. input current per MPPT	20 A	28 A
Max. input short circuit current per MPPT	28 A	
AC INPUT & OUTPUT		
Rated output power	5 kW	6 kW
Rated output current	21.8 A	26.1 A
Max. output apparent power	5 kVA	6 kVA
Max. output current	21.8 A	26.1 A
Peak output power	2 times of rated power, 5s	
Switchover time	< 4ms (for single), < 10ms (for parallel)	
Rated AC output voltage	230 V	
Rated AC output frequency	50 Hz / 60 Hz	
Max. input apparent power	9.2 kVA	
Max. input current	40.0 A	
Rated AC input voltage	230 V	
AC input voltage range	90 ~ 280 V	
Rated AC input frequency	50 Hz / 60 Hz	
THDi (rated power)	< 3%	
BATTERY		
Battery type	Lithium / Lead - acid	
No. of battery ports	1	
Rated battery voltage	48 V	
Battery voltage range	40 - 60 V	
Max. charge current	100 A	120 A
Max. discharge current	120 A	140 A
EFFICIENCY		
Max. efficiency	95%	
ENVIRONMENT LIMIT		
Ingress protection	IP20	
Operating temperature range	-10 ~ 50°C (derating above +45)	
Max. operating altitude	3000 m	
Relative humidity	5 ~ 95% RH (Condensing)	
Overvoltage category	Mains: III, Battery: II, PV: II	
GENERAL		
Dimensions (W × H × D)	320 × 395 × 115 mm	
Net weight	10 kg	
Cooling concept	Smart air cooling	
Communication interfaces	CAN, WiFi, RS485	
Display	LCD	
Topology	Non-isolated	
Certifications	CE	

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter



LOW-VOLTAGE HYBRID INVERTER FEATURES



Compatible with mainstream LFP
and lead-acid batteries from
SolaX and other major brands



200% peak EPS power
for 10 seconds



<4 ms UPS-level switchover
*Available on most models



Colorful LED touchscreen
for quick configuration



Max. 10 pcs parallel operation
*3-5 pcs available now,
10 pcs with future update



5-year standard warranty,
extendable up to 10 years



Diesel generator supported



IP65/66 protection level

Single-phase Low-voltage Residential Hybrid Inverter



X1-HYB-LV

3.0kW / 3.7kW / 4.0kW
5.0kW / 6.0kW



Smart Management

- Global MPP scan for optimal energy harvest*
- Smart loads management



High Performance

- Max. 2 MPPTs for versatile application scenarios
- 200% oversizing and 150% PV input power
- Max. 16 A PV input per MPPT
- Low start-up voltage for higher energy harvest



Assured Reliability

- Battery terminal temperature detection
- IP65 ingress protection
- Type II SPD on AC&DC side
- AFCI protection (optional)*
- Up to 200% EPS output for 10s
- Single unit UPS-level switchover time < 4 ms



Flexible Adaptability

- Max. 3pcs parallel for on-grid and off-grid
- Micro-grid and generator function for versatile operations*

* Feature to be upgraded in the future



	X1-HYB-3.0-LV	X1-HYB-3.7-LV	X1-HYB-4.0-LV	X1-HYB-5.0-LV	X1-HYB-6.0-LV
PV INPUT					
Max. recommended PV array power	6000 Wp	7360 Wp	8000 Wp	10000 Wp	12000 Wp
Max. PV input voltage ^①	550 V				
Rated PV input voltage	360 V				
Operating voltage range	80 ~ 520 V				
Start-up voltage	110 V				
No. of MPP trackers / strings per MPP tracker	2 / (1 / 1)				
Max. input current per MPPT	16 A / 16 A				
Max. input short circuit current per MPPT	20 A / 20 A				
AC INPUT & OUTPUT(ON-GRID)					
Rated output power	3000 W	3680 W	4000 W	5000 W	6000 W
Rated output current	13.1 A @ 230 V	16.0 A @ 230 V	17.4 A @ 230 V	21.8 A @ 230 V	26.1 A @ 230 V
Max. output apparent power	3300 VA	3680 VA	4400 VA	5000 VA	6000 VA
Max. output continuous current	14.4 A @ 230 V	16.0 A @ 230 V	19.2 A @ 230 V	21.8 A @ 230 V	26.1 A @ 230 V
Rated AC voltage	220 / 230 / 240 V				
Max. AC input apparent power	6000 VA	7360 VA	8000 VA	9200 VA	
Max. AC input current	26.1 A @ 230 V	32.0 A @ 230 V	34.8 A @ 230 V	40.0 A @ 230 V	
Max. continuous AC passthrough (grid to load)	40 A				
Rated AC frequency	50 Hz / 60 Hz				
AC frequency range ^②	50±5 Hz / 60±5 Hz				
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)				
THDi (rated power)	< 3%				
BATTERY					
Battery type	LFP / Lead - acid				
Battery voltage range	40 ~ 60 V				
Max. charge / discharge current	75 A / 75 A			120 A / 120 A	
EPS (OFF-GRID) OUTPUT (WITH BATTERY)					
Rated EPS output voltage, frequency	230 V, 50 Hz / 60 Hz				
Rated EPS output power	3000 VA	3680 VA	4000 VA	5000 VA	6000 VA
Peak EPS output power	6000 VA 2 times of rated power, 10s	7360 VA 2 times of rated power, 10s	8000 VA 2 times of rated power, 10s	10000 VA 2 times of rated power, 10s	12000 VA 2 times of rated power, 10s
Switchover time	< 4 ms				
EFFICIENCY					
Max. efficiency	97.6%				
European efficiency	97.0%				
ENVIRONMENT LIMIT					
Ingress protection	IP65				
Operating temperature range	-25 ~ 60°C (> 45°C derating)				
Max. operating altitude	3000 m				
Relative humidity	4 ~ 100% RH (condensing)				
Overvoltage category	Mains: III, Battery: II, PV: II				
GENERAL					
Dimensions (W × H × D)	397 × 490 × 201 mm				
Net weight	16.5 kg			17.3 kg	
Cooling concept	Natural cooling			Smart air cooling	
Communication interfaces	RS485, CAN, USB, DI/DO				
Display	LCD				
Topology	Non-isolated for PV side / HF for battery side				
Certifications	NRS 097-2-1, IEC 61727, IEC 62116, PEA, MEA, BIS, EN IEC 62109-1 / -2				
PROTECTION					
Protections	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Back feed current monitoring, Residual current detection, Active anti-islanding method, Over temperature protection				
Active anti-islanding method	Frequency shift				
Surge protection	DC: Type II, AC: Type II				
Arc-fault circuit interrupter (AFCI)	optional				

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage the inverter

② The AC frequency range may vary from different country codes

Single-phase Low-voltage Residential Hybrid Inverter



X1-Lite-LV

8kW / 10kW / 12kW



Smart Management

- Global MPP scan for optimal energy harvest*
- Smart loads management



High Performance

- Max. 3 MPPTs for versatile application scenarios
- 200% oversizing and 200% PV input power
- Max. 32 A PV input per MPPT
- Low start-up voltage for higher energy harvest



Assured Reliability

- Battery terminal temperature detection
- IP65 ingress protection
- Type II SPD on AC&DC side
- AFCI protection (optional)*
- Up to 200% EPS output for 10s
- Single unit UPS-level switchover time < 6 ms



Flexible Adaptability

- Max. 3pcs parallel for on-grid and off-grid
- Micro-grid and generator function for versatile operations*

* Feature to be upgraded in the future



X1-Lite-8.0-LV

X1-Lite-10.0-LV

X1-Lite-12.0-LV

		PV INPUT	
Max. recommended PV array power	16000 Wp	20000 Wp	24000 Wp
Max. PV input voltage①	600 V		
Rated PV input voltage	360 V		
Operating voltage range	50 ~ 550 V		
Start-up voltage	110 V		
No. of MPP trackers / strings per MPP tracker	2 / (2 / 2)	3 / (2 / 2 / 2)	
Max. input current per MPPT	32 A / 32 A	32 A / 32 A / 32 A	
Max. input short circuit current per MPPT	40 A / 40 A	40 A / 40 A / 40 A	
AC INPUT & OUTPUT (ON-GRID)			
Rated output power	8000 W	10000 W	12000 W
Rated output current	34.8 A @ 230 V	43.5 A @ 230 V	52.2 A @ 230 V
Max. output apparent power	8800 VA	11000 VA	13200 VA
Max. output continuous current	38.3 A @ 230 V	47.9 A @ 230 V	57.4A @ 230 V
Rated AC voltage	220 / 230 / 240 V		
Max. AC input apparent power	12650 VA	14950 VA	18400 VA
Max. AC input current	55 A @ 230 V	65 A @ 230 V	80 A @ 230 V
Max. continuous AC passthrough (grid to load)	75 A	80 A	90 A
Rated AC frequency	50 Hz / 60 Hz		
AC frequency range②	50 ± 5 Hz / 60 ± 5 Hz		
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)		
THDi (rated power)	< 3%		
BATTERY			
Battery type	LFP / Lead - acid		
Battery voltage range	40 ~ 60 V		
Max. charge / discharge current	190 A / 190 A	220 A / 220 A	250 A / 250 A
EPS (OFF-GRID) OUTPUT (WITH BATTERY)			
Rated EPS output voltage, frequency	230 V, 50 Hz / 60 Hz		
Rated EPS output power	8000 VA	10000 VA	12000 VA
Peak EPS output power	16000 VA 2 times of rated power, 10s	20000 VA 2 times of rated power, 10s	24000 VA 2 times of rated power, 10s
Switchover time	< 6 ms		
EFFICIENCY			
Max. efficiency	97.6%		
European efficiency	97.0%		
ENVIRONMENT LIMIT			
Ingress protection	IP65		
Operating temperature range	-25 ~ 60°C (> 45°C derating)		
Max. operating altitude	3000 m		
Relative humidity	4 ~ 100% RH (condensing)		
Overvoltage category	Mains: III , Battery: II , PV: II		
GENERAL			
Dimensions (W × H × D)	462 × 651 × 280 mm		
Net weight	38.5 kg		
Cooling concept	Smart air cooling		
Communication interfaces	RS485, CAN, USB, DI/DO		
Display	LCD		
Topology	Non-isolated for PV side / HF for battery side		
Certifications	IEC/EN 62109-1/-2, NRS 097-2-1, IEC 61727, IEC 62116, PEA, MEA, BIS		
PROTECTION			
Protections	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Over temperature protection		
Active anti-islanding method	Frequency shift		
Surge protection (DC / AC)	DC: Type II , AC: Type II		
Arc-fault circuit interrupter (AFCI)	Optional		

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage the inverter

② The AC frequency range may vary from different country codes

Single-phase Low-voltage Residential Hybrid Inverter



X1-RENO-LV

8kW



Smart Management

- Smart loads management
- Cloud monitoring and operations & maintenance
- Global MPP scan for optimal energy harvest*



High Performance

- 200% oversizing and 200% PV input power
- Max. 36A PV input per MPPT
- Low start-up voltage for higher energy harvest
- Up to 200% EPS output for 10s
- Single unit UPS-level switchover time < 4 ms



Assured Reliability

- Battery terminal temperature detection
- IP66 ingress protection
- Type II SPD on AC&DC side
- AFCI protection (optional)*



Flexible Adaptability

- Max. 5 pcs parallel for on-grid and off-grid
- Compatible with multiple third-party batteries
- Micro-grid and generator function for versatile operations*

* Feature to be upgraded in the future



X1-RENO-8.0-LV

PV INPUT	
Max. recommended PV array power	16 kWp
Max. PV input voltage ^①	500 V
Rated PV input voltage	360 V
Operating voltage range	60 ~ 480 V
Start-up voltage	80 V
No. of MPP trackers / strings per MPP tracker	2 (2/2)
Max. input current per MPPT	36 A / 36 A
Max. input short circuit current per MPPT	45 A / 45 A
AC INPUT & OUTPUT (ON-GRID)	
Rated output power	8 kW
Rated output current	34.8 A@230 V
Max. output apparent power	8.8 kVA
Max. output continuous current	38.3 A@230 V
Rated AC voltage	220 / 230 / 240 V
Max. AC input apparent power	11 kVA
Max. AC input current	47.9 A@230 V
Max. continuous AC passthrough (grid to load)	50 A
Rated AC frequency	50 Hz / 60 Hz
AC frequency range ^②	50±5 Hz / 60±5 Hz
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)
THDi (rated power)	< 3%
BATTERY	
Battery type	LFP / Lead-acid
Battery voltage range	40 ~ 60 V
Max. charge / discharge current	190 A / 190 A
EPS (OFF-GRID) OUTPUT (WITH BATTERY)	
Rated EPS output voltage, frequency	230 V, 50 Hz / 60 Hz
Rated EPS output power	8 kVA
Peak EPS output power	16 kVA 2 times of rated power, 10s
Switchover time	< 4 ms
EFFICIENCY	
Max. efficiency	97.6%
European efficiency	97.0%
ENVIRONMENT LIMIT	
Ingress protection	IP66
Operating temperature range	-40°C ~ 60°C (> 45°C derating)
Max. operating altitude	3000 m
Relative humidity	4 ~ 100%RH (condensing)
Overvoltage category	Mains: III, Battery: II, PV: II
GENERAL	
Dimensions (W × H × D)	420 × 528.4 × 209mm
Net weight	26.3kg
Cooling concept	Smart air cooling
Communication interfaces	CAN, RS485, USB, DI/DO
Display	LCD
Topology	Non-isolated for PV side / HF for battery side
Certifications	NRS 097-2-1, IEC61727, IEC62116, INMETRO, IEC/EN 62109-1/-2
PROTECTION	
Protections	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Over temperature protection
Active anti-islanding method	Frequency shift
Surge protection (DC / AC)	DC: Type II, AC: Type II
Arc-fault circuit interrupter (AFCI)	Optional

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage the inverter

② The AC frequency range may vary from different country codes

Three-phase Low-voltage Residential Hybrid Inverter



X3-NEO-LV

5kW / 8kW / 10kW
12kW / 15kW / 20kW



Smart Management

- Global MPP scan for optimal energy harvest*
- Smart loads management



High Performance

- Max. 2 MPPTs for versatile application scenarios
- 200% oversizing and 200% PV input power
- Max. 36 A PV input per MPPT
- Low start-up voltage for higher energy harvest



Assured Reliability

- Battery terminal temperature detection
- IP65 ingress protection
- Type II SPD on AC&DC side
- AFCI protection (optional)*
- Up to 200% EPS output for 10s
- Single unit UPS-level switchover time < 3 ms



Flexible Adaptability

- Max. 3pcs parallel for on-grid and off-grid
- Micro-grid and generator function for versatile operations*

* Feature to be upgraded in the future



X3-NEO-5K-LV

X3-NEO-8K-LV

X3-NEO-10K-LV

X3-NEO-12K-LV

X3-NEO-15K-LV

X3-NEO-20K-LV

PV INPUT						
Max. recommended PV array power	10 kWp	16 kWp	20 kWp	24 kWp	30 kWp	40 kWp
Max. PV input voltage ^①	1000 V					
Rated PV input voltage	640 V					
Operating voltage range	160 ~ 950 V					
Start-up voltage	150 V					
No. of MPP trackers / strings per MPP tracker	2 / (1 / 1)		2 / (2 / 1)	2 / (2 / 2)		
Max. input current per MPPT	18 A / 18 A		36 A / 18 A	36 A / 36 A		
Max. input short circuit current per MPPT	25 A / 25 A		50 A / 25 A	50 A / 50 A		
AC INPUT & OUTPUT (ON-GRID)						
Rated output power	5 kW	8 kW	10 kW	12 kW	15 kW	20 kW
Rated output current	7.3 A @ 230 V	11.6 A @ 230 V	14.5 A @ 230 V	17.4 A @ 230 V	21.8 A @ 230 V	29.0 A @ 230 V
Max. output apparent power	5.5 kVA	8.8 kVA	11 kVA	13.2 kVA	16.5 kVA	22.0 kVA
Max. output continuous current	8.0 A @ 230 V	12.8 A @ 230 V	16.0 A @ 230 V	19.2 A @ 230 V	24.0 A @ 230 V	31.9 A @ 230 V
Rated AC voltage	3W / N / PE, 220 / 380 V 3W / N / PE, 230 / 400 V 3W / N / PE, 240 / 415 V					
Max. AC input apparent power	10 kVA	16 kVA	20 kVA	24 kVA	30 kVA	30 kVA
Max. AC input current	14.5 A @ 230 V	23.2 A @ 230 V	29.0 A @ 230 V	34.8 A @ 230 V	43.5 A @ 230 V	43.5 A @ 230 V
Max. continuous AC passthrough (grid to load)	40 A					
Rated AC frequency	50 Hz / 60 Hz					
AC frequency range ^②	50 ± 5 Hz / 60 ± 5 Hz					
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)					
THDi (rated power)	< 3%					
BATTERY						
Battery type	LFP / Lead - acid					
Battery voltage range	40 ~ 60 V					
Max. charge / discharge current	125 A / 125 A	200 A / 200 A	250 A / 250 A	280 A / 280 A	300 A / 300 A	350 A / 350 A
EPS (OFF-GRID) OUTPUT (WITH BATTERY)						
Rated EPS output voltage, frequency	230 V / 400 V, 50 Hz / 60 Hz					
Rated EPS output power	5 kVA	8 kVA	10 kVA	12 kVA	15 kVA	20 kVA
Peak EPS output power	10 kVA 2 times of rated power, 10s	16 kVA 2 times of rated power, 10s	20 kVA 2 times of rated power, 10s	24 kVA 2 times of rated power, 10s	30 kVA 2 times of rated power, 10s	40 kVA 2 times of rated power, 10s
Switchover time	< 3 ms					
EFFICIENCY						
Max. efficiency	97.6%					
European efficiency	97.0%					
ENVIRONMENT LIMIT						
Ingress protection	IP65					
Operating ambient temperature range	-25 ~ 60°C (> 45°C derating)					
Max. operation altitude	3000 m					
Relative humidity	4 ~ 100% RH (condensing)					
Overvoltage category	Mains: III, Battery: II, PV: II					
GENERAL						
Dimensions (W × H × D)	520 × 705 × 258 mm					
Net weight	44.6 kg					45.2 kg
Cooling concept	Natural cooling		Smart air cooling			
Communication interfaces	RS485, CAN, USB, DI/DO					
Display	LCD					
Topology	Non-isolated for PV side / HF for battery side					
Certifications	EN IEC 62109-1 / -2, NRS 097-2-1, IEC 61727, IEC 62116, PEA, MEA, BIS, G98 / G99 ^③					
PROTECTION						
Protections	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Residual current detection, Over temperature protection					
Active anti-islanding method	Frequency shift					
Surge protection	DC: Type II, AC: Type II					
Arc-fault circuit interrupter (AFCI)	Optional					

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage the inverter

② The AC frequency range may vary from different country codes

③ G98 certification covers 5-10kw power ranges and G99 covers 12-15kW. 20kW will be certificated in future



LOW-VOLTAGE BATTERY

FEATURES



90-95% depth of discharge



>6000/8000 cycle life



-20°C to +55°C wide temperature tolerance



LFP battery cell & high-performance processors



Expandable to 16 units in parallel, wide capacity range



New models with LCD touchscreen & build-in Wi-Fi for efficient interaction

Low-voltage Battery System



LD51C

5.1 kWh



High Performance

- 5.1 ~ 81.9 kWh wide capacity range
- Max. 100 A /135 A charge/discharge current
- Cycle life > 6000 cycles



Assured Reliability

- IP40 ingress protection
- LFP battery cell & high-performance processors



Smart Management

- Remote fault diagnosis, upgrade and maintenance
- Wide temperature tolerance
- User-friendly LCD touchscreen for intuitive and easy interaction



Flexible Adaptability

- Expandable to 16 units in parallel
- CTP (Cell-to-Pack) design maximizes space and energy density for superior performance



LD51C

GENERAL INFORMATION	
Battery model	LD51C
Battery type	LFP
Scalability	Max. 16 pcs in parallel
Rated voltage	51.2 Vdc
Operating voltage range	42.4 ~ 57.6 Vdc
Rated energy	5.1 kWh
Usable energy (90% DOD) ^①	4.6 kWh
Rated power	2.5 kW
Max. power	6.9 kW
Peak output power	10.2 kW, 10s
Recommend charge / discharge current	50 A
Max. charge / discharge current ^②	100 A / 135 A
Depth of discharge	90%
Cycle life (90% DOD) ^③	> 6000 cycles
Dimensions (W x H x D)	370 x 635 x 183 mm
Net weight	42.8 ± 1 kg
Warranty	5 Years
ENVIRONMENTAL REQUIREMENTS	
Charge temperature	0 ~ +55°C
Discharge temperature	-20~ +55°C
Cooling concept	Natural cooling
Storage temperature	-20 ~ +30°C (12 months) +30 ~ +60°C (6 months)
Relative humidity	5 ~ 95% RH (non-condensing)
Max. operating altitude	3000 m
Installation type	Wall mounting / Floor mounting
Ingress protection	IP40
Environment	Indoor
COMMUNICATION INTERFACES	
Display	Indicators / LCD
Communication interfaces	CAN2.0 / RS485
STANDARD	
Hazardous materials classification	Class 9
Transport testing requirement	UN38.3
Protection class	Class I
Certifications	IEC 62477, IEC 62619, IEC 60730, IEC 63056, IEC 61000, EMC

① Test conditions: 90% DOD, 0.5C charge & discharge @+25°C
② Current is affected by the number of batteries connected in parallel as well as temperature and SOC
③ Test conditions: 25 ± 2°C, 0.5C charge & discharge, 70%EOL

Low-Voltage Battery System



TSYS-LD117

11.7 kWh



High Performance

- 11.7 ~ 187.2 kWh wide capacity range
- Max. 230 A / 250 A charge / discharge current
- Cycle life > 6000 cycles



Smart Management

- Remote fault diagnosis, upgrade and maintenance
- Wide temperature tolerance
- User-friendly LCD touchscreen for intuitive and easy interaction



Assured Reliability

- IP40 ingress protection
- LFP battery cell & high-performance processors
- Aerosol fire suppression for precise protection



Flexible Adaptability

- Expandable to 16 units in parallel
- CTP (Cell-to-Pack) design maximizes space and energy density for superior performance



TSYS-LD117

GENERAL INFORMATION	
Battery model	TB-117
Battery type	LFP
Scalability	Max. 16 pcs in parallel
Nominal voltage	51.2 Vdc
Operating voltage range	42.4 ~ 57.6 Vdc
Nominal energy	11.7 kWh
Usable energy(95% DOD)①	11.1 kWh
Rated power	5.8 kW
Max. power	12.8 kW
Peak output power	23.5 kW, 10s
Recommend charge / discharge current	115 A
Max. charge / discharge current②	230 A / 250 A
Depth of discharge	95%
Cycle life (95% DOD)③	> 6000 cycles
Dimensions (W x H x D)	355 x 726 x 263 mm
Net weight	88 kg
Warranty	5 Years
ENVIRONMENTAL REQUIREMENTS	
Charge temperature	0 ~ 55°C
Discharge temperature	-20 ~ 55°C
Cooling concept	Natural cooling
Storage temperature	-20 ~ 30°C (12 months) 30 ~ 60°C (6 months)
Relative humidity	5 ~ 95% RH (non-condensing)
Max. operating altitude	3000 m
Installation type	Wall mounting / floor mounting
Ingress protection	IP40
Environment	Indoor
COMMUNICATION INTERFACES	
Display	Indicators / LCD
Communication interfaces	CAN2.0 / RS485
STANDARD	
Hazardous materials classification	Class 9
Transport testing requirement	UN38.3
Protection class	Class I
Certifications	IEC 62619, CE

① Test conditions: 95% DOD, 0.5C charge & discharge @+25°C
② Current is affected by the number of batteries connected in parallel as well as temperature and SOC
③ Test conditions: 25 ± 2°C, 0.5C charge & discharge, 70%EOL

Low-voltage Battery System



TSYS-LD160
16.0 kWh



TSYS-LD143
14.3 kWh



High Performance

- 16 ~ 256 kWh (LD160) / 14.3 ~ 229.3 kWh (LD143) wide capacity range
- Max. 155 A / 220 A (LD160), 140 A / 225 A (LD143) charge / discharge current
- Cycle life > 8000 cycles



Smart Management

- Remote fault diagnosis, upgrade and maintenance
- Wide temperature tolerance
- User-friendly LCD touchscreen for intuitive and easy interaction



Assured Reliability

- IP40 ingress protection
- LFP battery cell & high-performance processors
- Aerosol fire suppression for precise protection



Flexible Adaptability

- Expandable to 16 units in parallel
- CTP (Cell-to-Pack) design maximizes space and energy density for superior performance
- Pulley design enables more convenient installation



TSYS-LD160		TSYS-LD143	
GENERAL INFORMATION			
Battery model	TB-LD160		TB-LD143
Battery type	LFP		
Scalability	Max. 16 pcs in parallel		
Nominal voltage	51.2 Vdc		
Operating voltage range	42.4 ~ 57.6 Vdc		
Nominal energy	16 kWh	14.3 kWh	
Usable energy (95% DOD) ^①	15.2 kWh	13.6 kWh	
Rated power	7.9 kW	7.1 kW	
Max. power	11.2 kW	11.5 kW	
Peak output power	15.8 kW, 10s	14.3 kW, 10s	
Recommend charge / discharge current	155 A	140 A	
Max. charge / discharge current ^②	155 A / 220 A	140 A / 225 A	
Depth of discharge	95%		
Cycle life (95% DOD) ^③	> 8000 cycles		
Dimensions (W x H x D)	356 x 953 x 289mm		
Net weight	118.5 kg	115.5 kg	
Warranty	5 Years		
ENVIRONMENTAL REQUIREMENTS			
Charge temperature	0 ~ +55°C		
Discharge temperature	-20 ~ +55°C		
Cooling concept	Natural cooling		
Storage temperature	-20 ~ +30°C (12 months) 30 ~ +60°C (6 months)		
Relative humidity	5 ~ 95% RH (non-condensing)		
Max. operating altitude	3000 m		
Installation type	Floor mounting		
Ingress protection	IP40		
Environment	Indoor		
COMMUNICATION INTERFACES			
Display	Indicators / LCD		
Communication interfaces	CAN2.0 / RS485		
STANDARD			
Hazardous materials classification	Class 9		
Transport testing requirement	UN38.3		
Protection class	Class I		
Certifications	IEC 62619, CE-LVD, CE-EMC		

① Test conditions: 95% DOD, 0.5C charge & discharge @+25°C
② Current is affected by the number of batteries connected in parallel as well as temperature and SOC
③ Test conditions: 25 ± 2°C, 0.5C charge & discharge, 70%EOL

Low-voltage Battery System



T-BAT-SYS-LV D53



High Performance

- 5.3 ~ 85.1 kWh wide capacity range
- Max. 100 A / 120 A charge / discharge current
- Cycle life > 6000 cycles



Assured Reliability

- IP65 ingress protection
- LFP battery cell & high-performance processors



Smart Management

- Remote fault diagnosis, upgrade and maintenance
- Wide temperature tolerance



Flexible Adaptability

- Expandable to 16 units in parallel
- Quick and easy installation



T-BAT-SYS-LV D53

GENERAL INFORMATION	
Battery model	TP-LD53
Battery type	LFP
Scalability	Max. 16 pcs in parallel
Rated voltage	51.2 Vdc
Operating voltage range	45 ~ 58 Vdc
Rated energy	5.3 kWh
Usable energy (95% DOD) ^①	5.03 kWh
Rated power	2.6 kW
Max. power	6.1 kW
Peak output power	7.7 kW, 10 s
Recommend charge / discharge current	50 A
Max. charge / discharge current ^②	100 A / 120 A
Depth of discharge	95%
Cycle life (95% DOD) ^③	>6000 cycles
Dimensions (WxHxD)	430 × 645 × 150 mm
Net weight	48.5 ± 1 kg
Warranty	10 Years
ENVIRONMENTAL REQUIREMENTS	
Charge temperature	0 ~ +53°C
Discharge temperature	-20 ~ +53°C
Cooling concept	Natural cooling
Storage Temperature	-20 ~ +30°C (12 months) +30 ~ +50°C (6 months)
Relative humidity	4 ~ 100% RH (condensing)
Max. operating altitude	3000 m
Installation type	Wall mounting / Floor mounting
Ingress protection	IP65
Environment	Outdoor / indoor
COMMUNICATION INTERFACES	
Display	Indicators
Communication interfaces	CAN2.0 / RS485
STANDARD	
Hazardous materials classification	Class 9
Transport testing requirement	UN38.3
Protection class	Class I
Certifications	IEC62619, IEC62040, CE

① Test conditions: 95% DOD, 0.5C charge & discharge @+25°C
② Current is affected by the number of batteries connected in parallel as well as temperature and SOC
③ Test conditions: 25 ± 2°C, 0.5C charge & discharge, 70%EOL

Low-voltage Battery System



TP-LD150



High Performance

- 15 ~ 240 kWh wide capacity range
- Max. 155 A charge/discharge current
- Cycle life > 6000 cycles



Assured Reliability

- IP65 ingress protection
- LFP battery cell & high-performance processors



Smart Management

- Remote fault diagnosis, upgrade and maintenance
- Wide temperature tolerance



Flexible Adaptability

- Expandable to 16 units in parallel
- Quick and easy installation



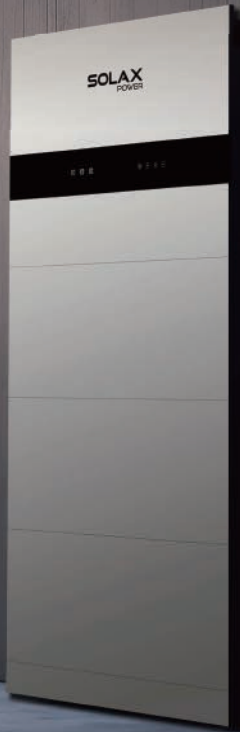
TP-LD150

GENERAL INFORMATION	
Battery model	TP-LD150
Battery type	LFP
Scalability	Max. 16 pcs in parallel
Rated voltage	48 Vdc
Operating voltage range	42 ~ 54 Vdc
Rated energy	15.0 kWh
Usable energy (90% DOD) ^①	13.5 kWh
Rated power	7.4 kW
Max. power	7.4 kW
Peak output power	15.0 kW, 10s
Recommend charge / discharge current	155 A
Max. charge / discharge current ^②	155 A
Depth of discharge	90%
Cycle life (90% DOD) ^③	> 6000 cycles
Dimensions (W × H × D)	540 × 900 × 220 mm
Net weight	125 kg
Warranty	5 Years
ENVIRONMENTAL REQUIREMENTS	
Charge temperature	0 ~ +55°C
Discharge temperature	-20 ~ +55°C
Cooling concept	Natural cooling
Storage temperature	-20 ~ +30°C (12 months) +30 ~ +60°C (6 months)
Relative humidity	4 ~ 100% RH (condensing)
Max. operating altitude	3000 m
Installation type	Floor mounting
Ingress protection	IP65
Environment	Outdoor / indoor
COMMUNICATION INTERFACES	
Display	Indicators
Communication interfaces	CAN2.0 / RS485
STANDARD	
Hazardous materials classification	Class 9
Transport testing requirement	UN38.3
Protection class	Class I
Certifications	IEC62619, CE

① Test conditions: 90% DOD, 0.5C charge & discharge @+25°C
② Current is affected by the number of batteries connected in parallel as well as temperature and SOC
③ Test conditions: 25 ± 2°C, 0.5C charge & discharge, 70%EOL

All-in One System

Sleek and elegantly designed for seamless integration into home decor, with an ultra-thin profile.



200%
PV Oversizing & Input



Smart Scene with
EV Charger



UPS-Level
Switchover Time



Remote Control
with SolaXCloud

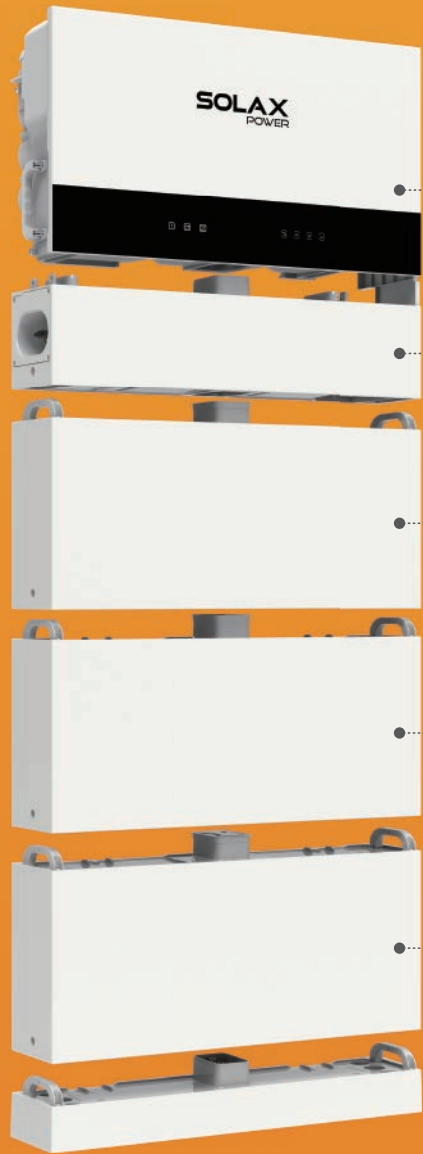


Assured Reliability



10-Year Warranty

ELEGANT STACKABLE PLUG AND PLAY



Inverter

BMS

5kWh
Battery

5kWh
Battery

5kWh
Battery

15kWh in total

SolaX
X1-IES & X3-IES-P
2.5-15kW | 5-30kWh

Empowering Diverse scenarios

RESIDENTIAL



Indoor



Outdoor

Small Commercial & Industrial



Indoor



Outdoor

All-in-one Residential ESS



X1-IES

2.5kW / 3.0kW / 3.7kW / 5.0kW /
6.0kW / 8.0kW



Smart Management

- AI ready, forecasting solar generation and home consumption for smart energy management strategy control*
- VPP ready with a variety of compatibility(OpenADR, IEEE2030.5, FCAS, API)**
- Smart loads management (e.g., heat pump, smart EV charger)
- Micro-grid support for real-time grid/off-grid balancing
- Wireless meter compatibility
- Global MPP scan for optimal energy harvest



Assured Reliability

- IP66 ingress protection
- Type II SPD on AC&DC side
- AFCI protection (optional)
- UPS-level switchover time <10ms



High Performance

- Max. 50A charge/discharge current
- 200% oversizing and 200% PV input power
- Up to 200% EPS output for 10s
- Low start-up voltage for longer operation
- Cycle life > 6000 cycles

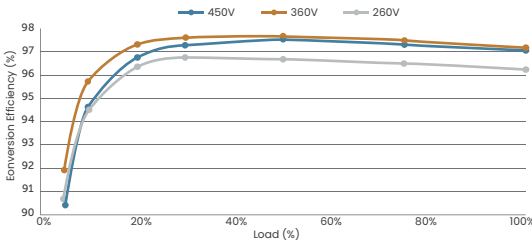


Flexible Adaptability

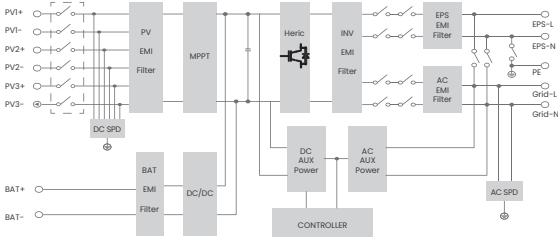
- All-in-one, plug-and-play design
- Max. 20A DC input current for high power solar panel

*Additional XHUB required
**Feature to be upgraded in the future

Efficiency Curve



Circuit Diagram

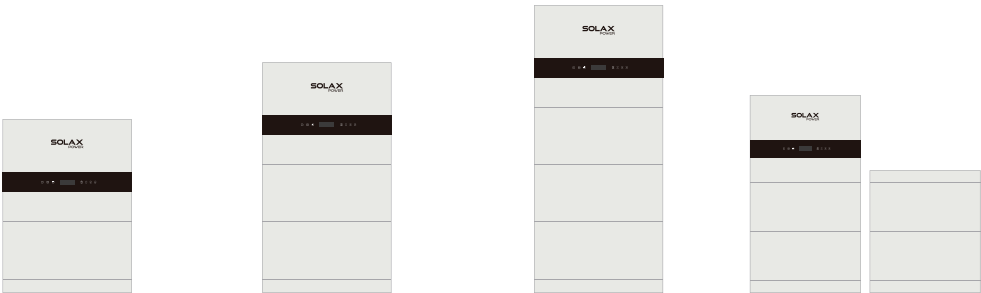


*V1.8 650.00040.00



SYSTEM OVERVIEW

System schematic



Rated power	2.5 kW / 3 kW / 3.7 kW / 5.0 kW / 6.0 kW / 8.0 kW			
Number of batteries	1	2	3	4
Rated energy ^①	5.1 kWh	10.2 kWh	15.3 kWh	20.4 kWh
Usable energy ^②	4.6 kW	9.2 kW	13.8 kW	18.4 kW
Max. charge / discharge power ^③	5.1 kW	8.0 kW	8.0 kW	8.0 kW
Ingress protection	IP66			
Operation temperature range	-30 ~ 53°C			
Relative humidity	5 ~ 95% (No condensation)			
Max. operation altitude	3000 m			
Net weight ^④	87.2 kg	134.2 kg	181.2 kg	134.2 kg / 99.2 kg
Dimension (W x H x D)	730 x 908 x 210 mm	730 x 1226 x 210 mm	730 x 1544 x 210 mm	730 x 1226 x 210 mm / 730 x 809 x 150 mm
Display	LCD			
Cooling concept	Natural cooling			
Topology	Non-isolated			
Communication interface	RS485, Pocket-X, CAN, DO, DI			

- ① Test conditions: 25°C, 100% depth of discharge (DoD), 0.2C charge & discharge
② System usable energy may vary with inverter different setting
③ The max.charge/discharge power must not exceed the rated output power (the table takes the maximum power inverter as an example)
④ Different inverter models have different weights. The heaviest one is taken as an example

INVERTER

	X1-IES-2.5K	X1-IES-3K	X1-IES-3.7K	X1-IES-5K	X1-IES-6K	X1-IES-8K
PV INPUT						
Max. recommended PV array power	5.0 kWp	6.0 kWp	7.4 kWp	10.0 kWp	12.0 kWp	16.0 kWp
Max. PV input voltage ^①	600 d.c. V					
Rated PV input voltage	360 d.c. V					
Operating voltage range	40 ~ 560 d.c. V					
Start-up voltage	50 d.c. V					
No. of MPP trackers / strings per MPP tracker	2 / (1 / 1)			3 / (1 / 1 / 1)		
Max. input current per MPPT	20 / 20 d.c. A			20 / 20 / 20 d.c. A		
Max. input short circuit current per MPPT	30 / 30 d.c. A			30 / 30 / 30 d.c. A		

	X1-IES-2.5K	X1-IES-3K	X1-IES-3.7K	X1-IES-5K	X1-IES-6K	X1-IES-8K
AC INPUT & OUTPUT (ON-GRID)						
Rated output apparent power	2500 VA	3000 VA	3680 VA	5000 VA (4600 for VDE4105, 4999 for AS4777)	6000 VA	8000 VA
Rated output current	10.9 a.c. A	13.1 a.c. A	16.0 a.c. A	21.8 a.c. A	26.1 a.c. A	34.8 a.c. A
Max. output apparent power	2500 VA	3300 VA	3680 VA	5000 VA (4600 for VDE4105, 4999 for AS4777, 5000 for C10/11)	6600 VA	8000 VA
Max. output continuous current	10.9 a.c. A	14.4 a.c. A	16.0 a.c. A	21.8 a.c. A	28.7 a.c. A	34.8 a.c. A
Rated AC voltage	220 / 230 / 240 a.c. V					
Max. AC input apparent power	6300 VA	6300 VA	7360 VA	9200 VA	9200 VA	9200 VA
Max. AC input current	27.4 a.c. A	27.4 a.c. A	32.0 a.c. A	40.0 a.c. A	40.0 a.c. A	40.0 a.c. A
Rated AC frequency	50 Hz / 60 Hz					
AC frequency range ^②	50 ± 5 Hz / 60 ± 5 Hz					
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)					
BATTERY						
Battery type	Lithium					
Battery voltage range	80 ~ 480 V					
Max. charge / discharge current	50 A					
EPS (OFF-GRID) OUTPUT (WITH BATTERY)						
Rated EPS apparent power	2500 VA	3000 VA	3680 VA	5000 VA	6000 VA	8000 VA
Peak EPS output power	2 times of rated power, 10s					
Rated EPS output voltage, frequency	220 V, 230 V, 240 V, 50 Hz / 60 Hz					
Switchover time	< 10 ms					
EFFICIENCY						
Max. efficiency	97.6%					
European efficiency	97.0%					
ENVIRONMENT LIMIT						
Ingress protection	IP66					
Operating temperature range	-35 ~ 60°C (derating at 45°C)					
Max. operating altitude	3000 m					
Relative humidity	4 ~ 100% RH (condensing)					
Overvoltage category	Mains: III , Battery: II , PV: II					
GENERAL						
Dimensions (W × H × D)	717 × 350 × 210 mm					
Net weight	26.2 kg			26.4 kg		
Cooling concept	Natural cooling					
Communication interfaces	RS485, Pocket-X, CAN, DO, DI					
Power consumption (night)	< 40 W for hot standby, < 5 W for cold standby					
Topology	Non-isolated					
Certifications	IEC62109-1 / IEC62109-2, VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 / G98 / G99 / AS4777 / EN50549 / CEI 0-21					
PROTECTION						
Protections	Over voltage protection, DC reverse-polarity protection, Residual current detection, Over temperature protection					
Surge protection	DC: Type II , AC: Type II					
Arc-fault circuit interrupter (AFCI)	Optional					

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter

② The AC frequency range may vary from different country codes

BATTERY

GENERAL INFORMATION	
Model name	HS50E
SYS model name	T-BAT HS 5
Nominal voltage	102.4 d.c.V
Operating voltage range	90 ~ 116 d.c.V
Nominal energy	5.1 kWh
Usable energy(90% DOD) ^①	4.6 kWh
Rated power	3.0 kW
Max. power	5.1 kW
Recommend charge / discharge current ^②	30 d.c. A
Max. charge / discharge current ^③	50 d.c. A
Max. short circuit current	3.57kA (0.333 ms)
Depth of discharge	90%
Cycle life (90% DOD) ^④	> 6000 Cycles
Dimensions (WxHxD)	730 x 150 x 558 mm
Net weight	60.2 kg
ENVIRONMENTAL REQUIREMENTS	
Charge temperature	-30 ~ 53°C (with heating function) 0 ~ 53°C (without heating function)
Discharge temperature	-30 ~ 53°C (with heating function) -20 ~ 53°C (without heating function)
Storage temperature	30°C ~ 50°C (6 months) -20°C ~ 30°C (12 months)
Relative humidity	4 ~ 100% RH (condensing)
Max. operating altitude	3000 m
Installation type	Wall mounting / Floor mounting
Ingress protection	IP66
Environment	Outdoor / Indoor (*Please refer to the user manual for installation condition)
BMS	
Model	TBMS-MCS0800E
Dimensions (WxHxD)	730 x 150 x 165 mm
Net weight	9.3 kg
BATTERY MODULE	
Battery model	TP-HS50E
Battery type	LFP
Scalability	1 ~ 6
Module capacity	5.1 kWh
Dimensions (WxHxD)	730 x 150 x 318 mm
Net weight	47 kg
COMMUNICATION INTERFACES	
Communication interfaces	RS485, CAN
STANDARD	
Certifications	CE, TUV (IEC62619), IEC 60730, IEC 62040, IEC63056, VDE 2510, IEC 60529:2013 (IP66)

ACCESSORIES

SERIES BOX	
Dimensions (WxHxD)	167 x 121 x 91.5 mm
Net weight	1.3 kg
BASE	
Dimensions (WxHxD)	730 x 150 x 75 mm
Net weight	3.9 kg

① Test conditions：90% DOD, 0.2C charge & discharge @+25°C

② The battery can only be discharged and can not be charged when the battery cell's temperature range is between -20°C and 0°C

③ Current is affected by the number of batteries connected in parallel as well as temperature and SOC

④ Test conditions：25±2°C,0.5C charge & discharge,70%EOL

All-in-one Residential ESS



X3-IES-P

4kW / 5kW / 6kW / 8kW /
10kW / 12kW / 15kW



Smart Management

- AI ready, forecasting solar generation and home consumption for smart energy management strategy control*
- VPP ready with a variety of compatibility (OpenADR, IEEE2030.5, FCAS, API)**
- Micro-grid support for real-time balance in grid/off-grid
- Wireless meter solution
- Smart Schedule, Smart Scene, and 7*24h TOU
- Global MPP scan for optimal energy harvest



High Performance

- Max. 3 MPPTs for versatile application scenarios
- 200% oversizing and 200% PV input power
- Max. 20A PV input per MPPT
- Low startup voltage for higher energy harvest



Assured Reliability

- IP66 protection degree
- Type II SPD on AC&DC side
- AFCI protection (optional)**
- Unique battery heating tech and wide temperature tolerance
- Up to 200% EPS output for 10s
- UPS-level switchover time <10ms



Flexible Adaptability

- All-in-one, plug-and-play design
- Support smart scene functions (e.g., heat pump, EV charger)
- Versatile installation for varied needs

*Additional Datahub1000 required
**Feature to be upgraded in the future



	X3-IES-4K-P	X3-IES-5K-P	X3-IES-6K-P	X3-IES-8K-P	X3-IES-10K-P	X3-IES-12K-P	X3-IES-15K-P
PV INPUT							
Max. recommended PV array power	8 kWp	10 kWp	12 kWp	16 kWp	20 kWp	24 kWp	30 kWp
Max. PV input voltage ^①	1000 V						
Nominal PV input voltage	600 V						
Operating voltage range	90 ~ 950 V						
MPPT voltage range ^②	110 ~ 950 V						
Start-up voltage	140 V						
No. of MPP trackers / Strings per MPP tracker	2 / (1 / 1)			3 / (1 / 1 / 1)			
Max. input current per MPPT (MPPT1//2/3)	20 A / 20 A			20 A / 20 A / 20 A			
Max. input short circuit current per MPPT (MPPT1/2/3)	25 A / 25 A			25 A / 25 A / 25 A			
AC INPUT & OUTPUT (ON-GRID)							
Rated output power	4kW	5kW (AS4777 4999)	6kW	8 kW	10 kW (AS4777 9999)	12 kW	15 kW (AS14999)
Rated output current	5.8 A	7.3 A	8.7 A	11.6 A	14.5 A	17.4 A	21.8 A
Max. output apparent power	4000 VA	5500 VA (AS4777 4999)	6600 VA	8800 VA	10000 VA (AS4777 9999)	13200 VA	16500 VA (AS14999)
Max. output continuous current	6.1 A	8.4 A	10 A	13.4 A	15.2 A	20.0 A	25.0 A
Nominal AC voltage	3 / N / PE, 220 / 380 V 3 / N / PE, 230 / 400 V						
Max. AC input apparent power	10kVA	10kVA	12kV	16 kVA	20 kVA	20 kVA	20 kVA
Max. AC input current	16.1 A	16.1 A	19.3 A	25.8 A	32.0 A	32.0 A	32.0 A
Nominal AC frequency	50 Hz / 60 Hz						
AC frequency range ^③	50 ± 5 Hz / 60 ± 5 Hz						
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)						
THDi (rated power)	< 3%						
BATTERY							
Battery voltage range	160 ~ 800 V						
Communication interfaces	CAN / RS485						
BMS module	TBMS-MCS0800E						
Battery module	TP-HS50E						
Composition	TBMS-MCS0800E + TP-HS50E x n + Base Dimensions + Series Box （Required for two columns）						
Battery type	Li-ion (LFP)						
Nominal capacity / Nominal capacity ^④	5.1 kWh / 50 Ah						
Usable energy ^⑤	4.6 kWh						
Standard power	3 kW						
Max power	5.1 kW						
Max. charge / discharge current ^⑥	50 A						
Cycle life	> 6000 cycles						
Warranty	10 years						
Safety	CE, RCM, TUV (IEC62619), RoHS, REACH						
TBMS-MCS0800E dimensions (W x H x D) / Weight	730 × 165 × 150 mm / 9.3 kg						
TP-HS50E dimensions (W x H x D) / Weight	730 × 318 × 150 mm / 47 kg						
Base dimensions (W x H x D) / Weight	730 × 75 × 150 mm / 3.9 kg						
Series box dimensions (W x H x D) / Weight	167 × 91.5 × 121 mm / 1.3 kg						

X3-IES-4K-P X3-IES-5K-P X3-IES-6K-P X3-IES-8K-P X3-IES-10K-P X3-IES-12K-P X3-IES-15K-P							
EPS (OFF-GRID) OUTPUT (WITH BATTERY)							
Rated EPS output voltage, frequency	230 V / 400 V, 50 Hz / 60 Hz						
Rated EPS output power	4 kVA	5 kVA	6 kVA	8 kVA	10 kVA	12 kVA	15 kVA
Peak EPS output power	2 times of rated power, 10 s						
Switchover time	< 10 ms						
EFFICIENCY							
Max. efficiency	98.0%						
European efficiency	97.7%						
ENVIRONMENT LIMIT							
Ingress protection	IP66						
Operating ambient temperature range ^⑦	-35 ~ 60°C						
Max. operating altitude	3000 m						
Relative humidity	0 ~ 100% RH (condensing)						
Overvoltage Category	Mains: III , Battery: II , PV: II						
GENERAL							
Dimensions (W × H × D)	717 × 405 × 209.5 mm						
Net weight	40 kg						
Cooling concept	Nature cooling						
Communication interfaces	RS485, Pocket-X, CAN + RS485, DO, DI						
Power consumption (night)	< 40 W for hot standby, < 5 W for cold standby						
Topology	Non-isolated						
Certificates and approvals	IIEC62109-1 / IEC62109-2, VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 / G98 / G99 / AS4777 / EN50549 / CEI 0-21						
AC auxiliary power supply (APS)	Built-in						
PROTECTION							
Protections	Over voltage protection, DC reverse-polarity protection, Residual current detection, Over temperature protection, DC isolation protection, Grid monitoring, DC injection monitoring, Back feed current						
Active anti-islanding method	Frequency shift						
Surge protection (DC / AC)	DC: Type II , AC: Type II						
Arc-fault circuit interrupter (AFCI)	Optional						

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage the inverter

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

③ The AC frequency range may vary from different country codes

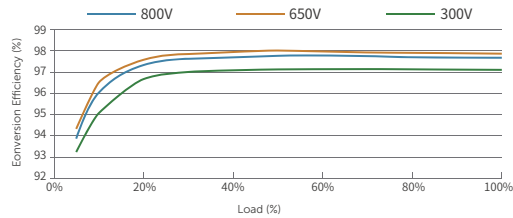
④ Test conditions: 25°C, 100% depth of discharge (DoD), 0.2C charge & discharge

⑤ System usable energy may vary with inverter different settings

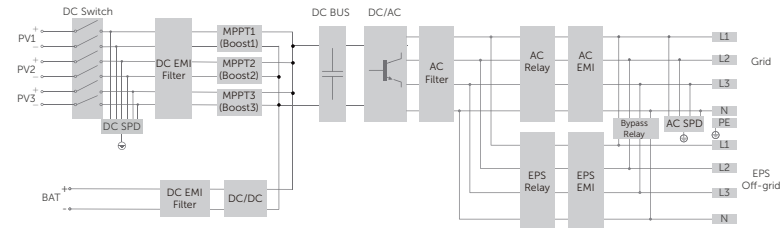
⑥ Discharge: In case of the battery cell's temperature range of -20°C~-10°Cand 45°C~53°C,the discharge current will be reduced; Charge: In case of the battery cell's temperature range of 0°C~25°C and 45°C~53°C, the charge current will be reduced. Product charge or discharge power depends on the actual temperature of the battery pack

⑦ Derating above +45°C

Efficiency Curve



Circuit Diagram



SYSTEM OVERVIEW



Rated output power	4 / 5 / 6 / 8 / 10 / 12 / 15 kW				
Number of batteries	2	3	4	5	6
Nominal capacity ^①	10.2 kWh	15.3 kWh	20.4 kWh	25.6 kWh	30.7 kWh
Usable energy ^②	9.2 kWh	13.8 kWh	18.4 kWh	23.0 kWh	27.6 kWh
Max. charge / discharge power ^③	10.2 kW	15.0 kW	15.0 kW	15.0 kW	15.0 kW
Degree of protection	IP66				
Operating temperature range	-30 ~ 53°C				
Allowable relative humidity range	5 ~ 95% (No condensation)				
Max. operating altitude	3000 m				
Net weight ^④	147.2 kg	194.2 kg	147.2 / 103.5 kg	147.2 / 150.5 kg	194.2 / 150.5 kg
Dimension (W x H x D)	730 x 1281 x 209.5 mm	730 x 1599 x 209.5 mm	730 x 1281 x 209.5 mm / 730 x 809 x 150 mm	730 x 1281 x 209.5 mm / 730 x 1127 x 150 mm	730 x 1599 x 209.5 mm / 730 x 1127 x 150 mm
Display	LCD				
Cooling concept	Natural cooling				
Topology	Non-isolated				
Communication	RS485, Pocket-X, USB, CAN, DO, DI				

① Test conditions: 25°C, 100% depth of discharge (DoD), 0.2C charge & discharge

② System usable energy may vary with inverter different setting

③ The max.charge/discharge power must not exceed the rated output power (the table takes the maximum power inverter as an example)

④ Different inverter models have different weights. The heaviest one is taken as an example

SolaX Cloud Monitoring

SolaX's smart energy management solution empowers users to optimize energy usage, reduce costs, and contribute to a more sustainable future. The intuitive SolaX Cloud Platform provides unparalleled control, featuring real-time data refresh, detailed consumption monitoring, and automatic notifications — with full access available via the mobile app.



 Real-Time Monitoring & User-Friendly Control

 Save More with Intelligent Energy Management

 Smart Scene: Automated Energy Optimization

 Secure & Scalable for the Future

**Smart Saving on Energy
with SolaXCloud!**
Download SolaX APP to join us →



Pocket WiFi V3.0-P



Feature

- Quick installation with "Plug & Play" function
- IP65 dust prevention and waterproof design
- Stable data transmission and good reliability
- Offline data storage and resume
- 10-second live data monitoring
- Modbus TCP support
- IEEE2030.5 support*
- OpenADR support*

Pocket LAN	
Model	Pocket WiFi+LAN
Power supply	5V 200mA DC
Wireless module	WiFi 2.4 GHz
Ethernet	10/100 M
Antenna gain	3 dBi
Data transfer interval	5 mins / 10s optional
Dimensions	112 x 45.7 x 28.5 mm
Weight	80 ± 10 g
Degree of protection	IP65
Operating temperature range	-35 ~ +60°C

Pocket WiFi+4GM

Feature

- Quick installation with "Plug & Play" function
- IP65 dust prevention and waterproof design
- Stable data transmission and good reliability
- Offline data storage and resume
- 10-second live data monitoring
- IEEE2030.5 support*
- OpenADR Support



Pocket WiFi	
Model	Pocket WiFi V3.0-P
Power supply	5V 260mA DC
Wireless module	WiFi 2.4 GHz
Antenna gain	3 dBi
Data transfer interval	5 mins / 10s optional
Dimensions	112 x 45.7 x 28.5 mm
Weight	107 ± 10 g
Degree of protection	IP65
Operating temperature range	-35 ~ +60°C

Pocket WiFi+LAN

Feature

- Quick installation with "Plug & Play" function
- IP65 dust prevention and waterproof design
- Stable data transmission and good reliability
- Offline data storage and resume
- 10-second live data monitoring
- Modbus TCP support
- IEEE2030.5 support*
- OpenADR support*
- Supports automatic switching between WiFi and LAN in different scenarios

Pocket 4G	
Model	Pocket WiFi+4GM
Power supply	5V 200mA DC
Wireless module	WiFi 2.4 GHz
Antenna gain	3 dBi
Sim card size	Nano - 4FF 12.3 x 8.8 mm
Support band	LTE-FDD: Cat M1: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/ B20/B25/B26/B27/B28/B66/B85 Cat NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/ B20/B25/B28/B66/B71/B85
Data transfer interval	5 mins / 10s optional
Dimensions	112 x 45.7 x 28.5 mm
Weight	124 ± 10 g
Degree of protection	IP65
Operating temperature range	-35 ~ +60°C

*Requires inverter and SolaX Cloud platform support for full functionality

SUCCESS STORIES ► Global Regions

PAKISTAN

X1-HYBRID-LV & LD53



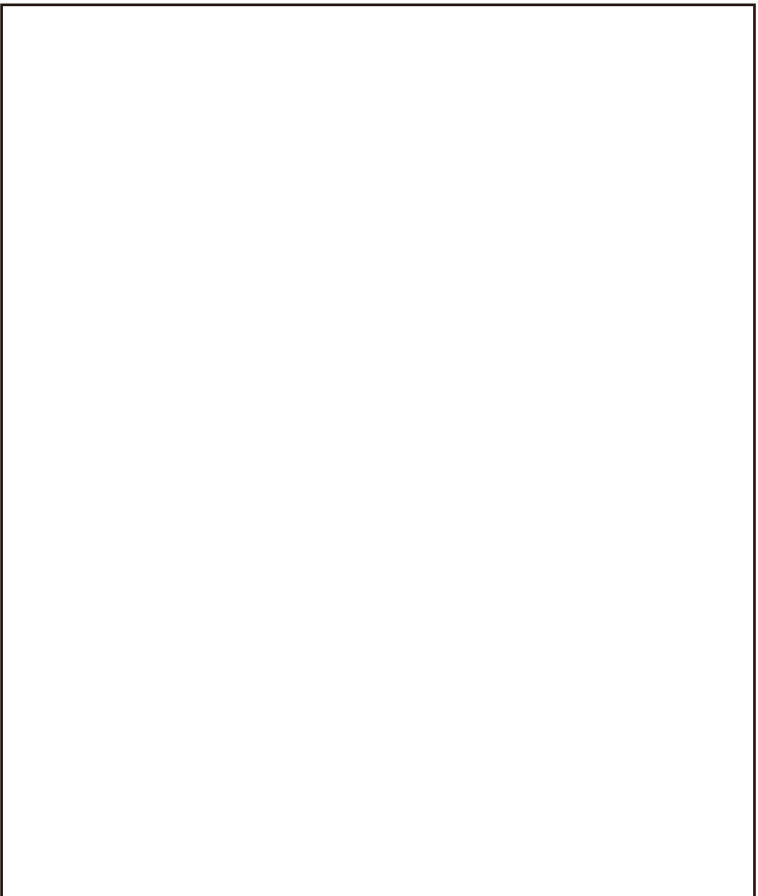
INDONESIA

X3-NEO-15K-LV & T-BAT-SYS-LV D150



ITALY

X1-HYBRID-LV & LD53



IRAQ

X3-NEO



IRAQ

X1-LITE-LV & TSYS-LD160



SUCCESS STORIES ► Global Regions

VIETNAM

X1-HYB-LV & TSYS-LD160



VIETNAM

X3-NEO-LV & TSYS-LD160



VIETNAM

X1-LITE-LV & T-BAT-SYS-LV D53



MAROC

X1-HYB-LV & T-BAT-SYS-LV D53



MAROC

X3-NEO-LV & LEAD ACID BATTERY

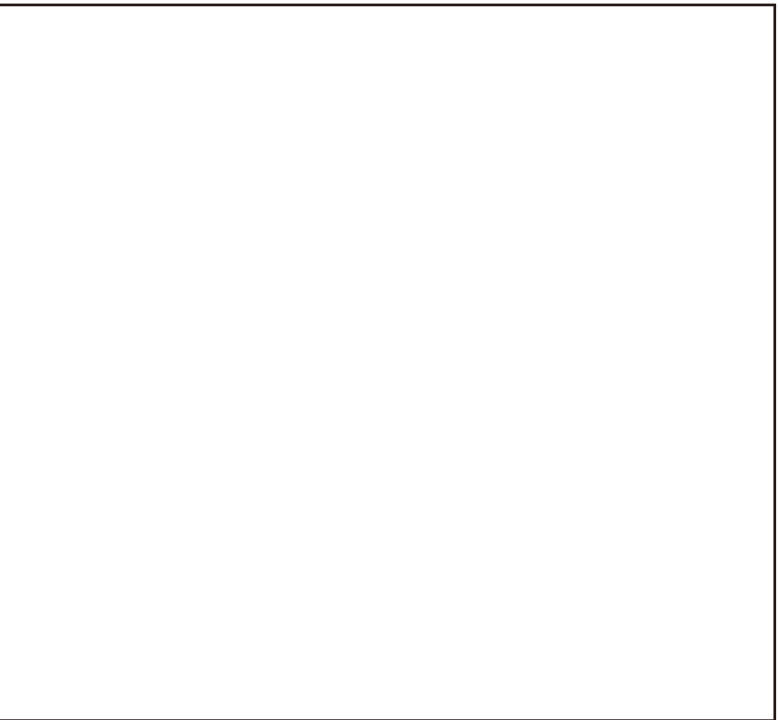


IRAQ

X1-LITE-LV & TSYS-LD160



X3-NEO-15K-LV & T-BAT-SYS-LV D150



SUCCESS STORIES ► Global Regions

Australia X-IES 15kWh



Australia X-IES 5kW +10kWh



Cardiff, UK X-IES 6kW+10kWh



Mere, Wiltshire

X-IES 6kW +5kWh



Mere, Wiltshire

IES

