

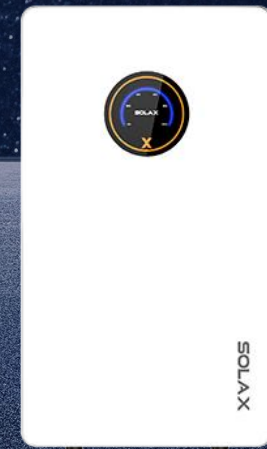
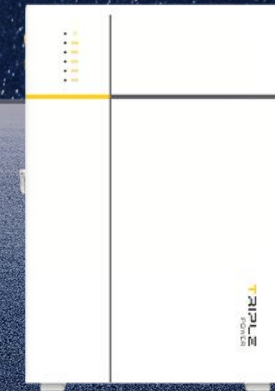
X3-NEO LV + Battery (5kWh/16kWh)

Residential Advanced Energy Storage Solution



01

System Solution Overview



SYSTEM SOLUTION OVERVIEW: LOW-VOLTAGE ENERGY ECOSYSTEM

Integrated Inverter, Battery, Smart Loads & Backup — **One Multi-Energy System.**



SYSTEM SOLUTION CONFIGURATION: POWER-BASED INVERTER RECOMMENDATIONS

From **Essential living** to **Full-house power**, X3-NEO LV scales with your energy needs — More power, more appliances, more freedom

5 kW

– Essential Home Loads

Covers daily household essentials:



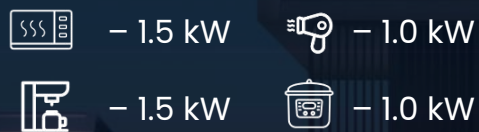
TYPICAL SCENARIO:

Basic living loads, suitable for small households or apartments

10 kW

– More Kitchen & Daily Appliances

Everything in 5 kW, **plus** :



UPGRADE VALUE:

Supports multiple kitchen **appliances and laundry simultaneously**, ideal for medium-sized families

15 kW

– Heavy Loads

Everything in 10 kW, **plus** :



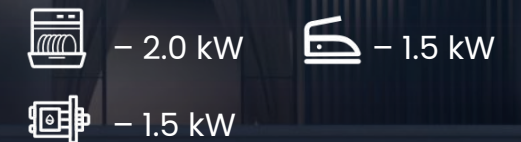
UPGRADE VALUE:

Handles **high-power and motor-driven loads**, suitable for villas, farms, or homes with water pumps

20 kW

– Full House Power Freedom

Everything in 15 kW, **plus** :



UPGRADE VALUE:

Enables **full-house operation with continuous critical loads**, ensuring higher comfort and reliability during peak usage or backup mode

X3-NEO series range from 5–20 kW with 6 models, covering **5 kW, 8 kW, 10 kW, 12 kW, 15 kW, and 20 kW** respectively

COMPLETE ENERGY STORAGE SOLUTION

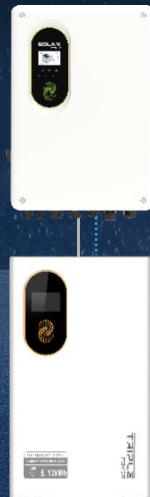


SYSTEM SOLUTION COMPARISON:

HV AND LV SYSTEMS FOR RESIDENTIAL USE

LOW VOLTAGE SYSTEM (LV)

- **Lower cost & flexible expansion**
- **Start from single battery** (low entry barrier)
- **Easy local operation** (LCD on inverter & battery)*



Cost-effective & User-friendly Local Control

————— DC
- - - - - Comm.

* Local display screen is available only for LD51 and LD160 models.

HIGH VOLTAGE SYSTEM (HV)

- **Higher efficiency** (+3–6% vs LV) & **lower losses**
- **Higher power & scalability**
- **AI Ecosystem** (Smart tariff-based charge/discharge)

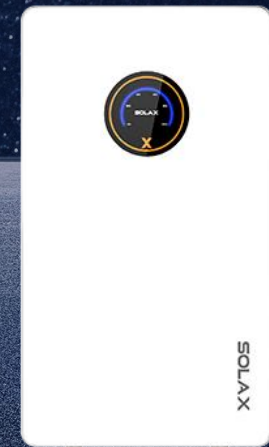


Higher Efficiency & Smart Energy Management

————— DC
- - - - - Comm.

02

Key Features



KEY FEATURES



X3-NEO-LV

5-20kW



High Performance

- **200%** oversizing and **200%** PV input power
- **Max. 36 A** PV input per MPPT



Money Saving

- **100%** Unbalanced Output
- Low start up voltage brings longer operation time
- Smart loads management
- Shadow Tracking for Optimal Energy Harvest



Flexible Adaptability

- **Max. 5pcs** parallel for on-grid and off-grid *
- Micro-grid and generator function for versatile operations



High safety & Reliability

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

*Data based on devices with the latest hardware version

KEY FUNCTIONS



X3-NEO-LV

5-20kW

	X3-NEO-LV
SPD(DC&AC)	SPD II
Arc-fault Circuit Interrupter(AFCI)	Optional
Lead-acid Batteries Compatible	Yes
Parallel Function	Yes(5pcs)*
Super Backup	Yes
Micro-grid	Yes
Generator	Yes
Smart Load	Yes
Wind Turbine	Yes
Dynamic Tariff	Yes
EV Charger	Yes

*Data based on devices with the latest hardware version

FULL POWER & FULL STORAGE, OVERSIZED PV READY

200% oversized PV power input

100% AC Output +100% Battery Storage

2X Oversized

**2X
10s EPS power**

High-efficiency and capacity

200% PV oversized and up to 110% AC output
—make sure sufficient daily energy storage

200% peak EPS apparent power, 10s
—Effortlessly handle unexpected power outages and avoid the inconvenience and losses they bring to your daily life



2MPPT

Built-in shadow tracking

SUPERIOR CAPACITY AND HIGH VERSATILITY

Low start-up voltage:
150V

Zone1

Zone2



450 Wp



540 Wp



600 Wp



670 Wp

36A

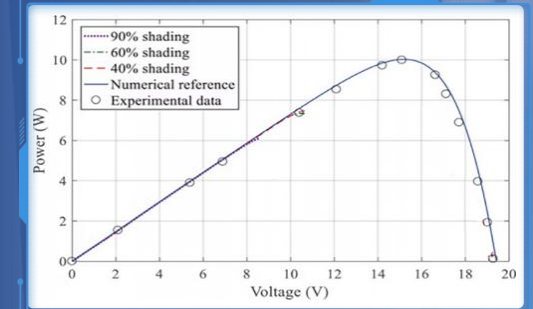
Up to 36A per MPPT

SHADOW TRACKING FOR OPTIMAL ENERGY HARVEST

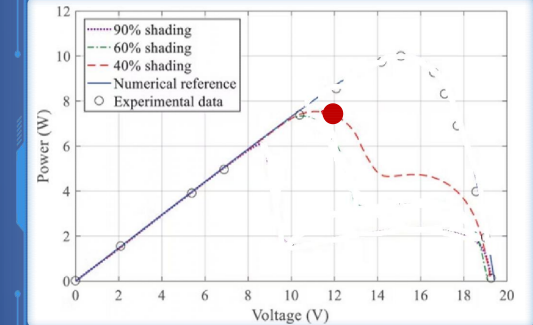
- Under Partial Shading, Multiple MPPT Peaks Are Tracked to Lock the Global Maximum Power Within 1 Minute
- Global MPP Scan Frequency Configurable at 1h / 2h / 3h



Without shadow

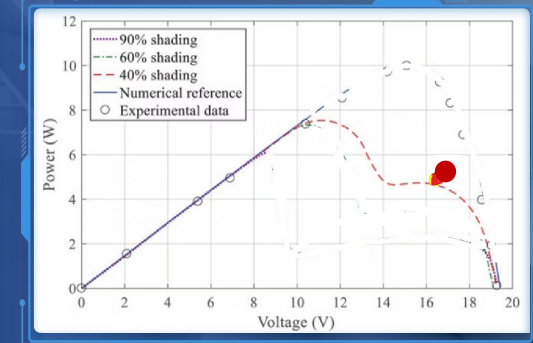


With shadow



GMPPT On

With shadow



GMPPT Off

AFCI + LIGHTNING-PROOF

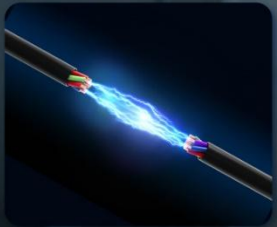
Maximum reliability and longer service life, reducing maintenance costs

BUILT-IN TYPE II SPD ON AC/DC SIDE (SPD)

Surge protection modules that meet EN/IEC61643-31(DC) and EN/IEC61643-11(AC) standards.

POWERED AFCI (OPTIONAL)*

Design to meet IEC63027 standards. Precise hazard detection with minimal false alarms.



0.5s Rapid Shutdown

200m+ Cable Arc Detection



10kA Lightning Protection

Dual Cable Arc Detection



FULL UTILIZATION: STRONG ABILITY AGAINST UNSTABLE GRID

SOLAX

< 3 milliseconds switchover time

No Worries for Power Breakdown, **TOP-tier** standards in the industry

Others

< 20 milliseconds switchover time

Effortlessly handling surge load scenarios

200% EPS overload for 10 sec

Effortlessly handling surge load scenarios

120%~150% EPS overloading

Continuous power supply to critical loads cannot be guaranteed

FULL UTILIZATION: STRONG ABILITY AGAINST UNSTABLE GRID

Half-wave loads supported

When the power is down, and you are using a half-wave load* device, it will be like...



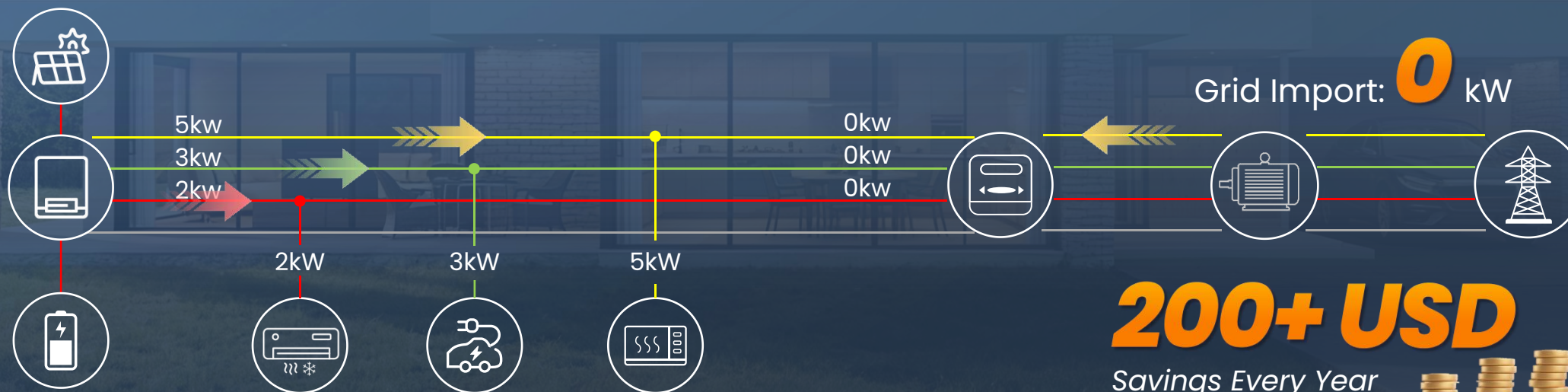
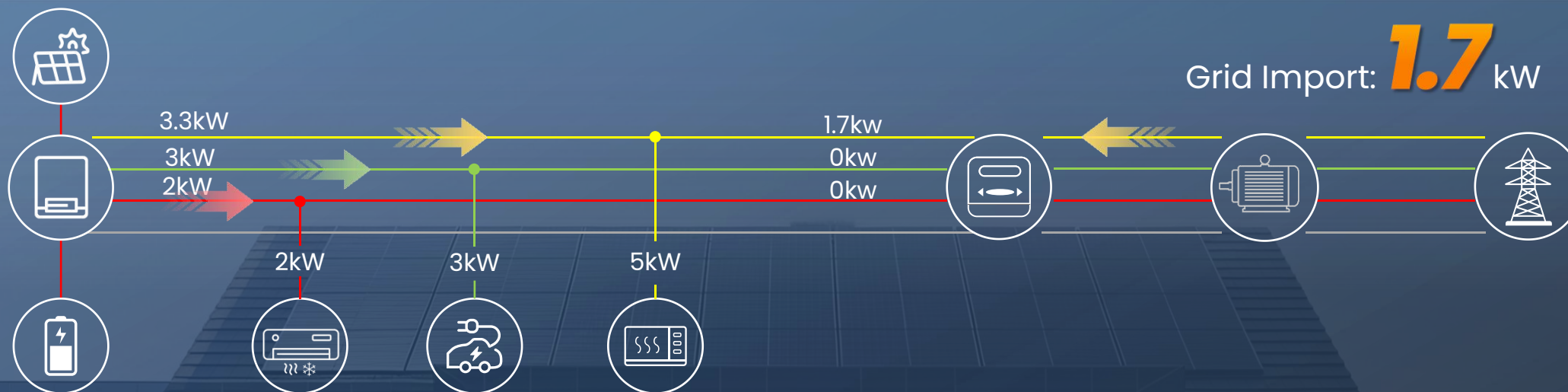
To sum up, **we've got you covered with all types of loads, including but not limited to inductive loads, surge loads, half-wave loads and more.** This ensures uninterrupted power supply even in off-grid conditions, regardless of the types of devices being used.



What does "half-wave loads" mean?

Some small household appliances may utilize half-wave loads, such as hair dryers, portable electric fans, electric blankets, and decorative lights.

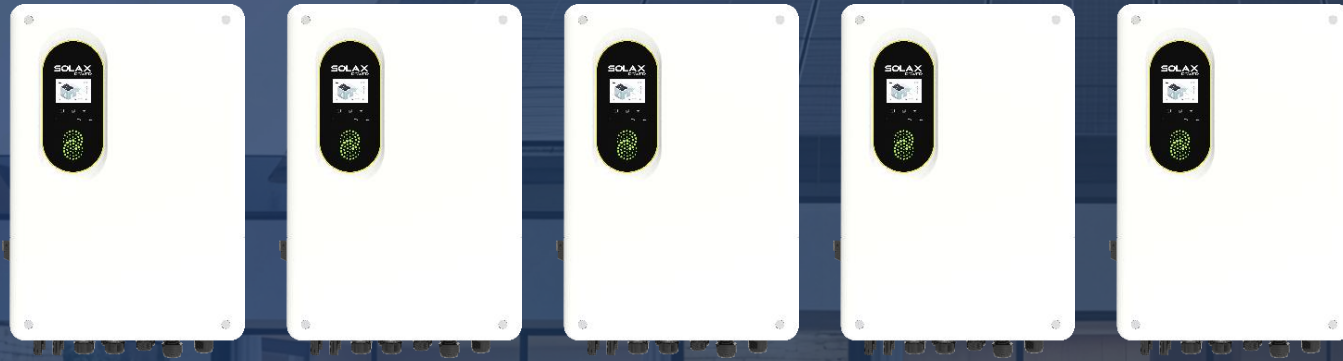
FULL UTILIZATION: UNBALANCED OUTPUT – MONEY SAVING



*Diagram shows 10 kW model capacity

*Single-phase output is up to 50% of rated power (max. 7.5 kW for the 20 kW model)

MAX. 5PCS PARALLEL FOR ON-GRID AND OFF-GRID:



Up to **5** Units for Safe Parallel operation *

Data based on devices with the latest hardware version



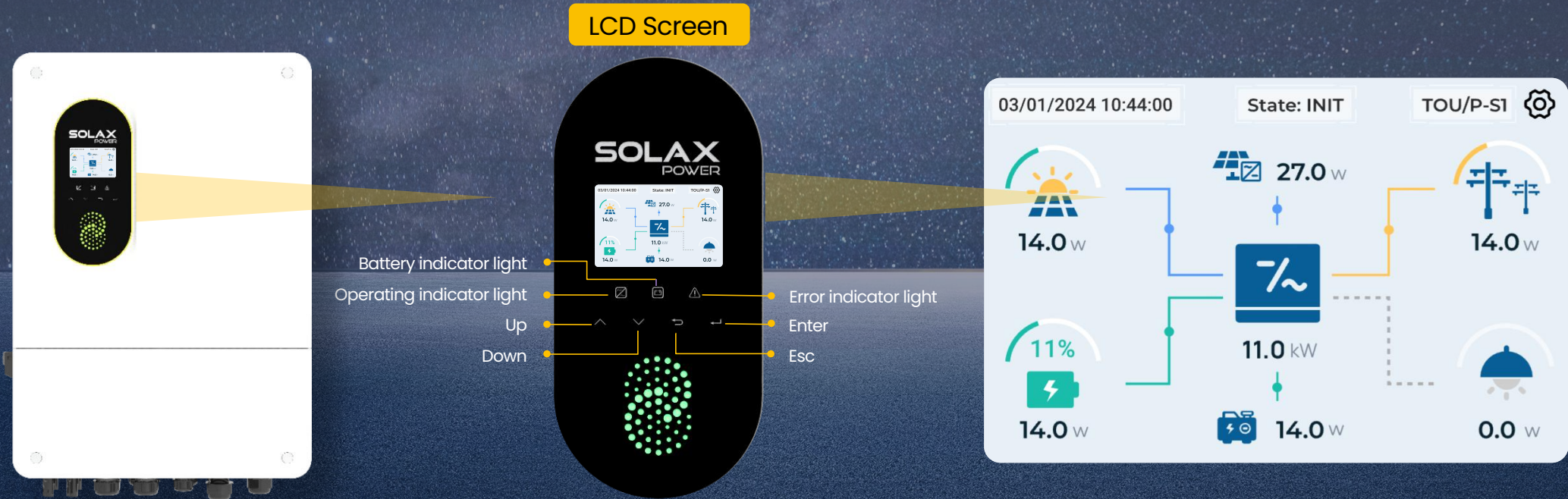
USER FRIENDLY – ILLUMINATE YOUR LIFE

LCD color touch screen & touch keys

- 3.5-inch
- 480*320 resolution

Light & compact

- Easy to install
- Space-saving



10s Data Refresh

- Clear, Visualized Data with a **10s data** refresh rate
- True real-time oversight

OTA-Remote Upgrade

- Always Stay Up to Date with the **Latest Software**

Role-Based, Layered Management

- Dedicated interfaces for each user, ensuring clarity and efficiency

Remote O&M

- **Remote troubleshooting** (e.g. CT reverse, avoiding unnecessary site revisits)

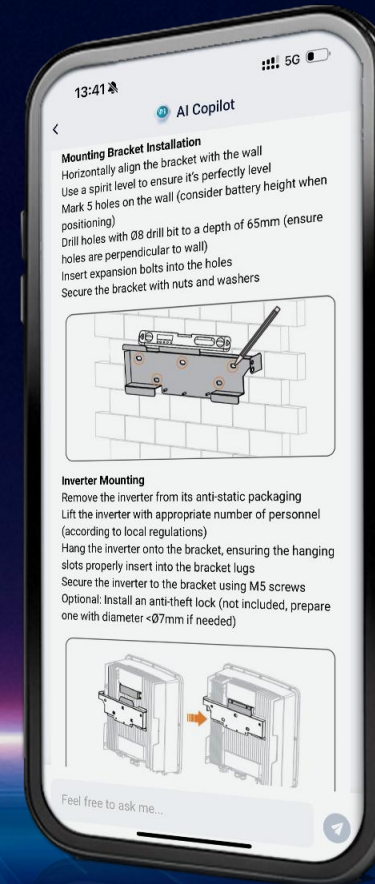
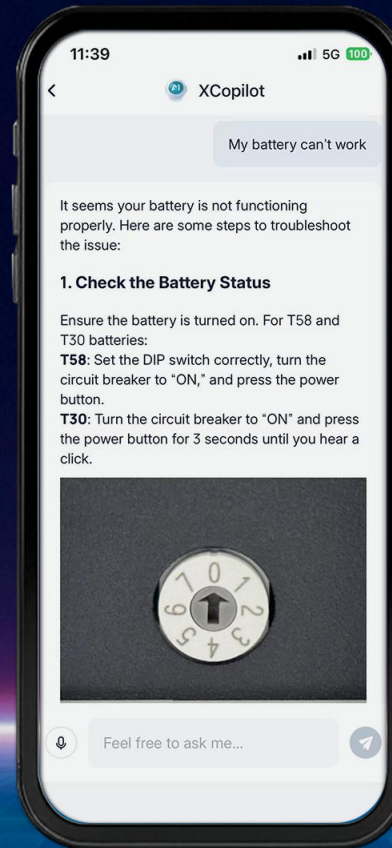
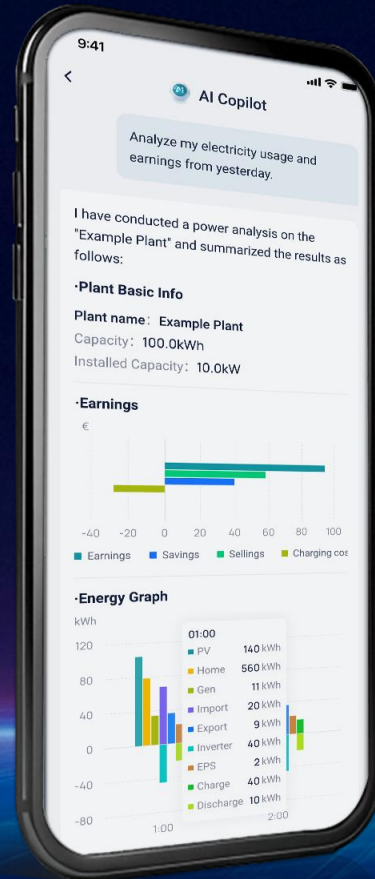
Data Security

- Globally Certified and Trusted
- ISO **27001** Certification, The **SOC 2 TYPE 2** Certification, EN**18031** Certification, ETSI EN **303 645** Certification



XCOPILOT – ALL IN ONE CHAT

Instant Product Genius:
Manuals, Specs, Insights at
Your Fingertips



Unlock Your Plant's Full Potential:
Analyze, Optimize, Maximize

Your 24/7 Expert Guard: Instant
Diagnosis, Anytime

* Available to all SolaX users

KEY FEATURES



LD53 (IP65)

5.3kWh



Smart Management

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



High Performance

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



Assured Reliability

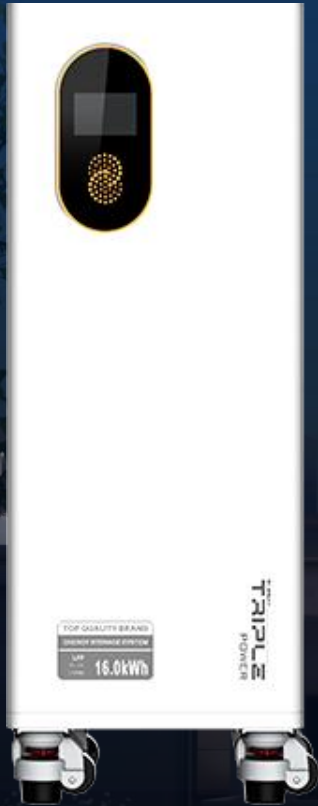
- **IP65** ingress protection
- LFP battery cell & high-performance processors



Flexible Adaptability

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

KEY FEATURES



LD160 (IP40)

16.0kWh



Smart Management

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



High Performance

- **16 ~ 256 kWh** wide capacity range
- Max. 155 A / 220 A charge / discharge current
- Cycle life **> 8000 cycles**



Assured Reliability

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

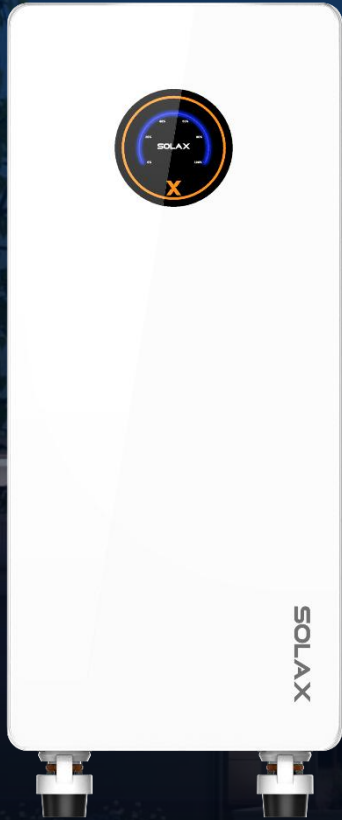


Flexible Adaptability

- 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

KEY FEATURES

Launching
soon



LD16 (IP65)

16.0kWh



Smart Management

- Remote fault diagnosis, upgrade and maintenance
- Rugged **IP65** design
- User-friendly LCD touchscreen for intuitive and easy interaction



High Performance

- Max. 155 A / 200 A charge / discharge current
- Peak output power **32.1 kW** for **3 s**



Assured Reliability

- **Aerosol fire** suppression and **CO detector** for precise protection
- Reliable feedback-type DC circuit breaker



Flexible Adaptability

- **CTP** (Cell-to-Pack) design maximizes space and energy density for superior performance
- **Plug-and-Play** terminals design
- Wheel design enables more convenient installation

KEY FEATURES



LD51 (IP40)

5.1kWh



Smart Management

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



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



Flexible Adaptability

- Expandable to **16 units** in parallel
 - **CTP (Cell-to-Pack)** design maximizes space and energy density for superior performance
- * New product under development.

KEY FEATURES

Launching
soon



LD5 (IP65)

5.1kWh



Smart Management

- Remote fault diagnosis, upgrade and maintenance
- Rugged IP65 design with optional **battery heating** (Optional)
- User-friendly LCD touchscreen for intuitive and easy interaction (Optional)



High Performance

- Max. charge /discharge current: **100 A/130 A** Peak
- output power **10.2 kW** for **10 s**



Assured Reliability

- **Aerosol fire suppression and CO detector** for precise protection (Optional)
- Reliable feedback-type **DC circuit breaker**



Flexible Adaptability

- **CTP** (Cell-to-Pack) design maximizes space and energy density for superior performance
- Plug-and-Play terminals
- **IP65** and **IP40** LD51 support mixed deployment, expandable to 16 units in parallel (**5.1 ~ 81.9 kWh**)

BATTERY

Features		LD51 IP40	LD5 IP65	LD53 IP65
Smart Management	• Remote fault diagnosis, upgrade and maintenance	• ✓	• ✓	• ✓
	• Charge / Discharge temperature	• Charge temperature: 0 ~ +55°C • Discharge temperature: -20 ~ +55°C	• Charge temperature: 0 ~ +55°C ; -20 ~ +55°C • Discharge temperature: -20 ~ +55°C	• Charge temperature: 0 ~ +55°C • Discharge temperature: -20 ~ +55°C
	• User-friendly LCD touchscreen for intuitive and easy	• ✓	• ✓	• With indicators
Assured Reliability	• LFP battery cell and high-performance processors	• ✓	• ✓	• ✓
	• Ingress protection	• IP40	• IP65	• IP65
High Performance	• 5.1 ~ 81.9 kWh wide capacity range	• 5.1 ~ 81.9 kWh	• 5.1 ~ 81.9 kWh	• 5.3 ~ 85.1 kWh
	• Charging / discharging current	• Max. 100A / 135A charging / discharging current	• Max. 100A / 130A charging / discharging current	• Max. 100A / 100A charging / discharging current
	• Cycle life	• > 6000 cycles	• > 6000 cycles	• > 6000 cycles
	• Peak output power	• 10.2 kW for 10 s	• 10.2 kW for 10 s	• 7.7 kW for 10 s
Flexible Adaptability	• Expandable to 16 units in parallel	• ✓	• ✓	• ✓
	• CTP(Cell-to-Pack) design maximizes space and energy density for superior performance	• ✓	• ✓	• -

BATTERY

Features		LD160 IP40	LD16 IP65
Smart Management	• Remote fault diagnosis, upgrade and maintenance	• ✓	• ✓
	• Charge / Discharge temperature	• Charge temperature: 0 ~ +55°C • Discharge temperature: -20~ +55°C	• Charge temperature: 0 ~ +55°C; -20~+55°C • Discharge temperature: -20~ +55°C
	• User-friendly LCD touchscreen for intuitive and easy	• ✓	• ✓
Assured Reliability	• LFP battery cell and high-performance processors	• ✓	• ✓
	• Ingress protection	• IP40	• IP65
High Performance	• 5.1 ~ 81.9 kWh wide capacity range	• 16 ~ 256 kWh	• 16 ~ 256 kWh
	• Charging / discharging current	• Max. 155A / 220A charging / discharging current	• Max. 155A / 200A charging / discharging current
	• Cycle life	• > 8000 cycles	• > 8000 cycles
	• Peak output power	• 15.8 kW for 10 s	• 32.1 kW for 3 s
Flexible Adaptability	• Expandable to 16 units in parallel	• ✓	• ✓
	• CTP(Cell-to-Pack) design maximizes space and energy density for superior performance	• ✓	• ✓

LOW-VOLTAGE BATTERIES: SAFE, EFFICIENT, SCALABLE

Reliable Safety You Can Trust

6 Layers Of Battery Protection
For Your Home And Devices

	LD16	LD160	LD5	LD51	LD53
Aerosol	✓	✓	✓	-	-
CO detector	✓	-	✓	-	-
Decompression Valve	✓	-	✓	-	✓



- 1 Cell-Level**
Real-Time Temp / Voltage / Resistance Monitoring
- 2 Pack-Level**
Multi-Point Temperature Sensing
- 3 Cluster-Level**
Multi-Dimensional Diagnostics
Overvoltage & Overcurrent Protection
- 4 Pack-Level**
DC Circuit Breaker & Integrated Protection Devices
- 5 Monitoring Level**
24/7 Remote Monitoring & Analytics
- 6 Fire Suppression Level**
Instant Fire Suppression in 4 sec
Decompression Valve
CO Detector for Precise Protection

SMART LOADS MANAGEMENT

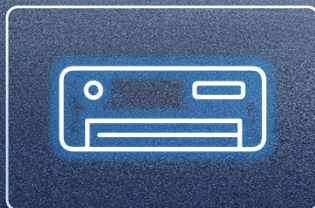
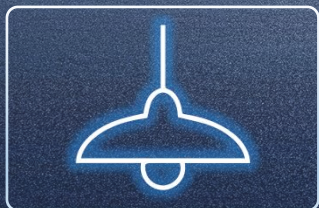


Loads are managed hierarchically according to energy availability
Critical loads are supplied with priority.



Priority power

Critical loads



Controllable Load Output

GEN port used as a smart load interface

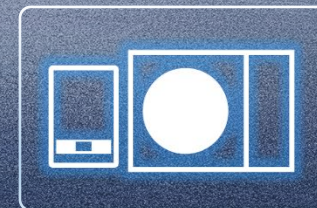


GEN



Excess energy

Non-critical loads



FAST INSTALLATION: 15 MINS INSTALLATION + 5 MINS COMMISSIONING

Quick-Connect Terminals & **Compact** Design



INVERTER & BATTERY TESTED FOR RELIABILITY:



Hybrid Inverter:

Total of **264** Tests,
Covering Comprehensive
Scenarios

- Functional & Control Testing
- Electrical Performance Testing
- Grid Compliance & Adaptability
- Safety & Protection Testing
- EMC Testing
- Reliability & Environmental Testing



Battery:

Total of **116** Tests, Covering
Comprehensive Scenarios

- Cell & Pack Performance
- BMS Function & Algorithms
- Safety & Abuse Testing
- Thermal Management Testing
- Lifetime & Reliability
- Mechanical & Environmental Testing

COMPATIBLE BATTERY – COMPATIBLE WITH MULTIPLE BATTERY TYPES

SolaX's low-voltage inverters support both SolaX and third-party LFP batteries compatible with the Pylontech protocol.

Additionally, they are also compatible with most lead-acid batteries.

LFP



Lead Acid



THIRD-PARTY BATTERY & INVERTER COMPATIBILITY:

THIRD-PARTY COMPATIBILITY LETTER FOR LOW-VOLTAGE ENERGY STORAGE LITHIUM BATTERIES

SOLUNA™



VOLTA



SUNESS



TIANNENG

Pytes

LEMOEN

DYNES



GREENRICH

GSL ENERGY
Much More Than Grade A

SLBATT®



GENIXGREEN®



ZTE

TOPBAND
BATTERY

LITHIUMVALLEY

WHY CHOOSE SOLAX NATIVE LV INVERTER + BATTERY



LD16 (IP65)

16.0kWh

LD160 (IP40)

16.0kWh

LD5 (IP65)

5.1kWh

LD51 (IP40)

5.1kWh

LD53 (IP65)

5.3kWh

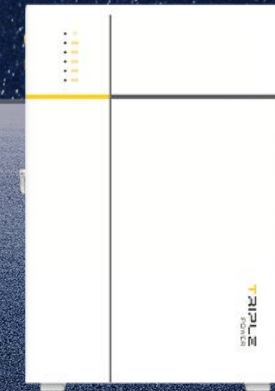
X3-NEO-LV (IP65)

5-20kW

- **Optimized Performance**
Native battery & inverter design
- **Seamless Communication**
Native protocol & data accuracy
- **Faster Commissioning**
Pre-configured parameters
- **Unified Safety strategy**
Consistent protection logic
- **One-Stop Solution**
Single supplier & warranty

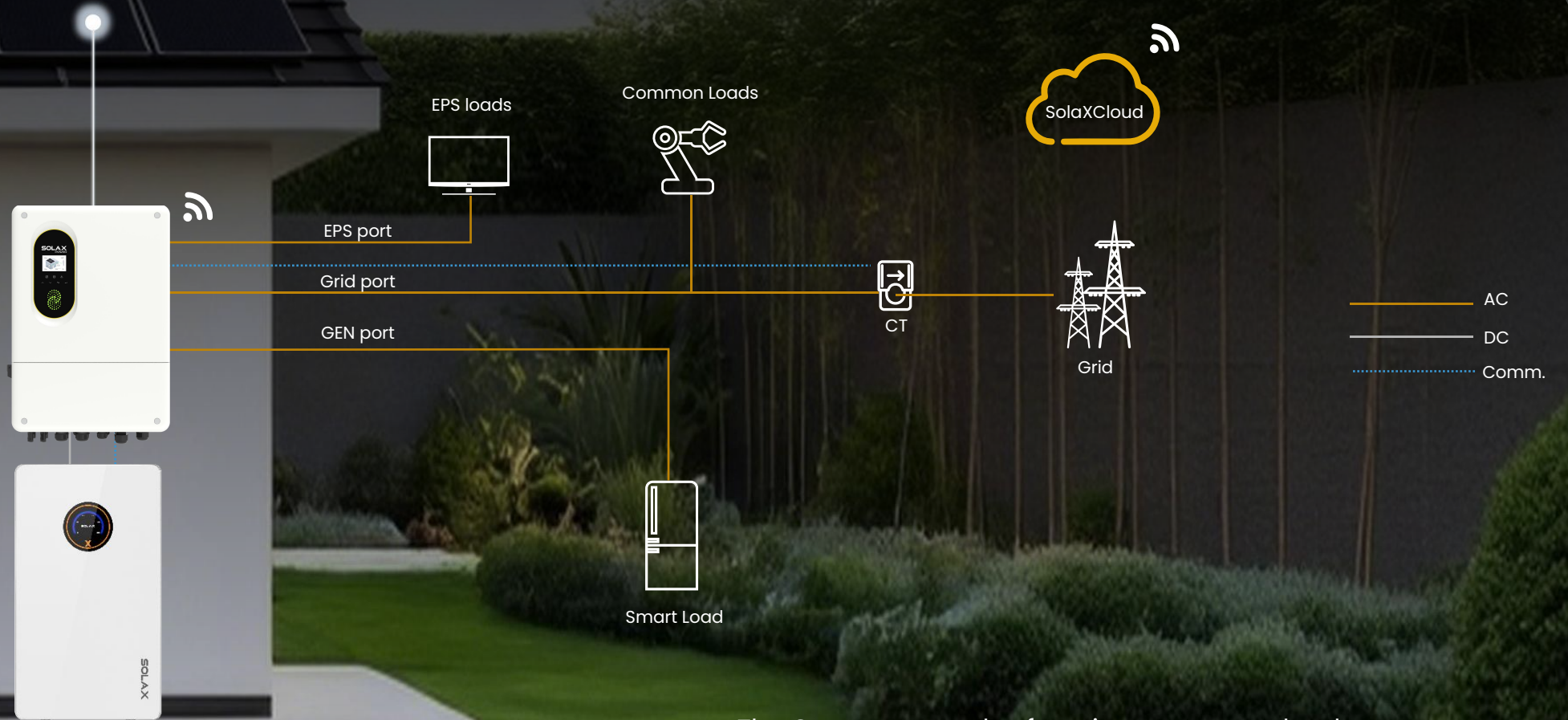
03

System Solutions



SYSTEM SOLUTION: SMART LOAD MANAGEMENT

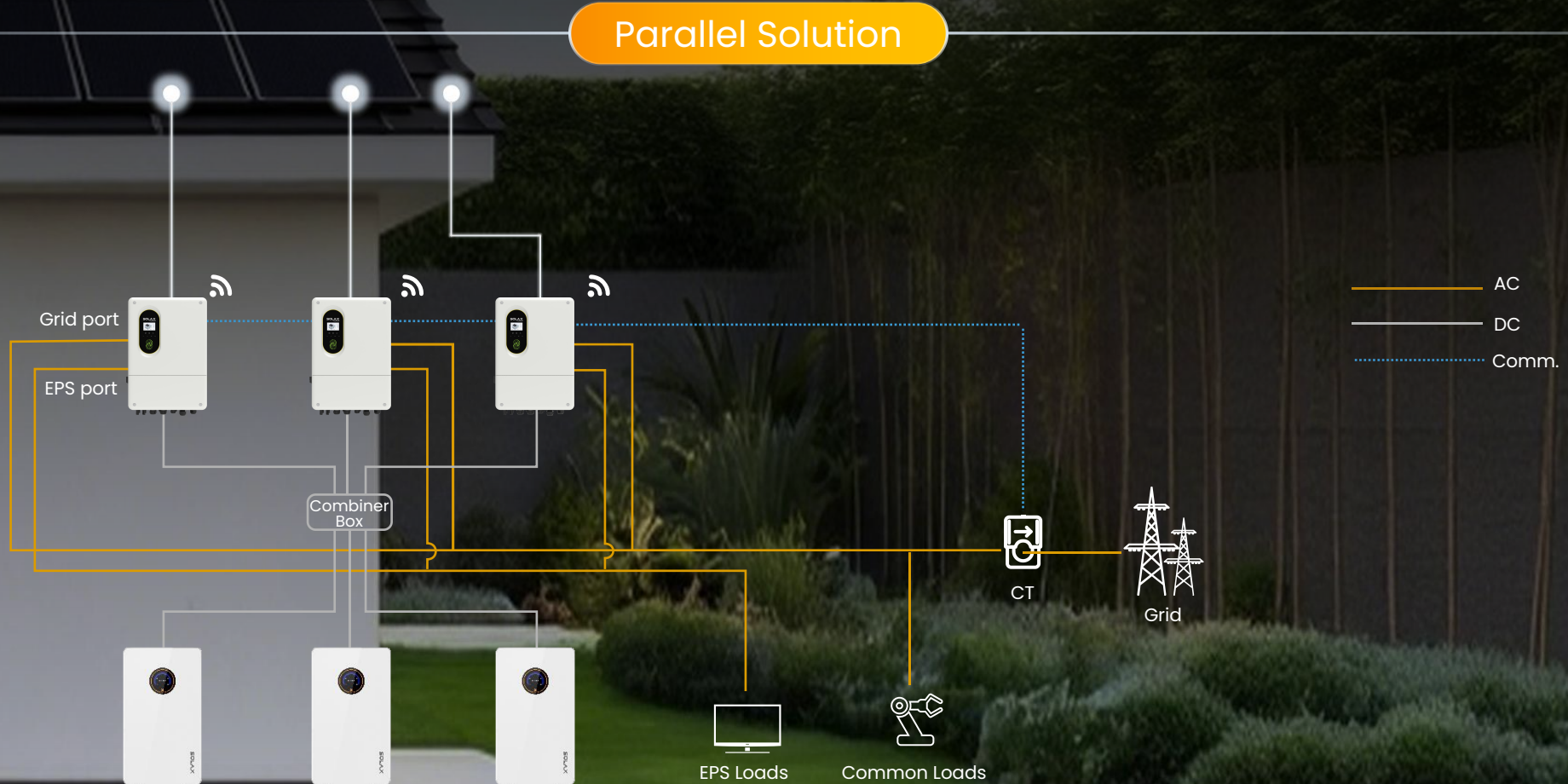
Smart Load



The Gen port can also function as a smart load management port, that can control the on and off of the load based on the working condition of the inverter.

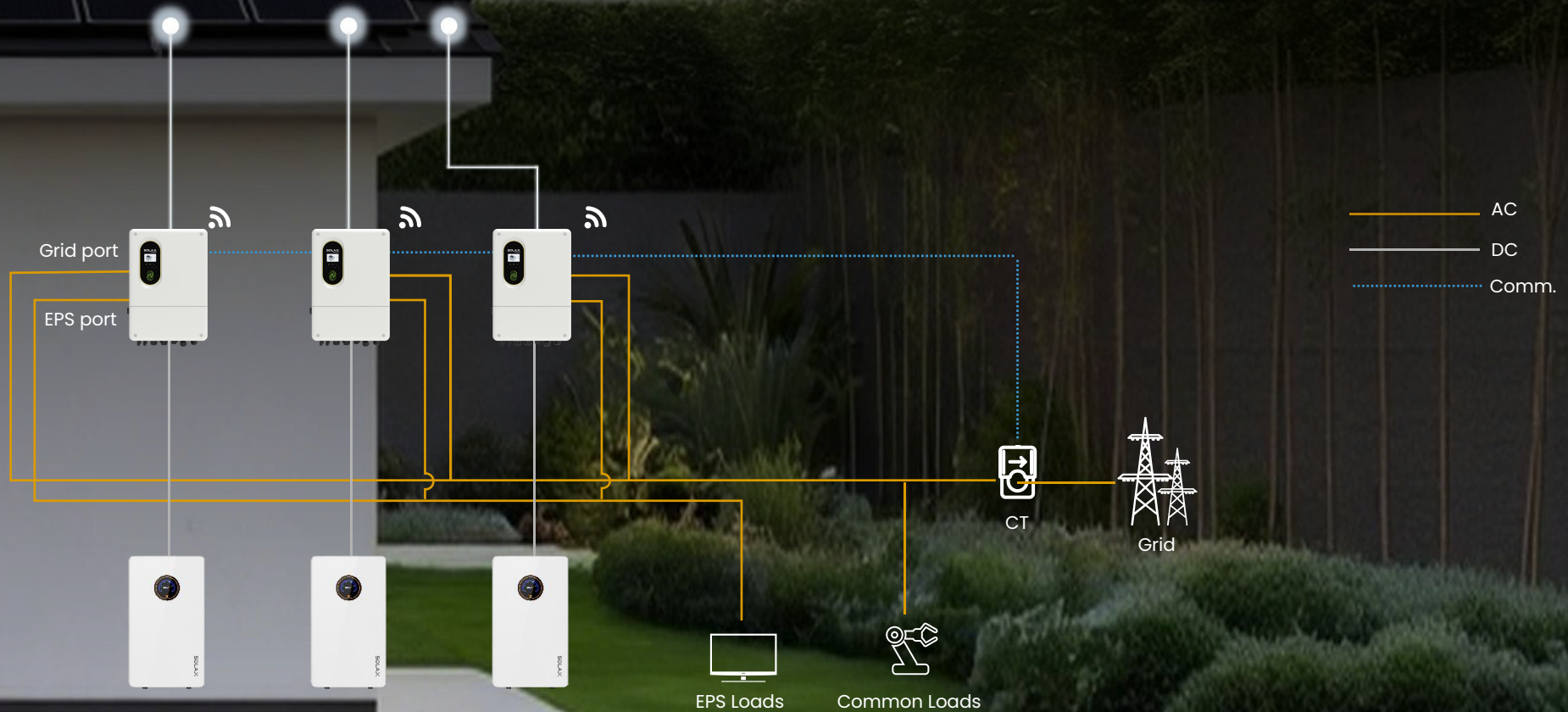
SYSTEM SOLUTION: MICRO GRID



[illegible]

SYSTEM SOLUTION: PARALLEL EXPANSION SOLUTION

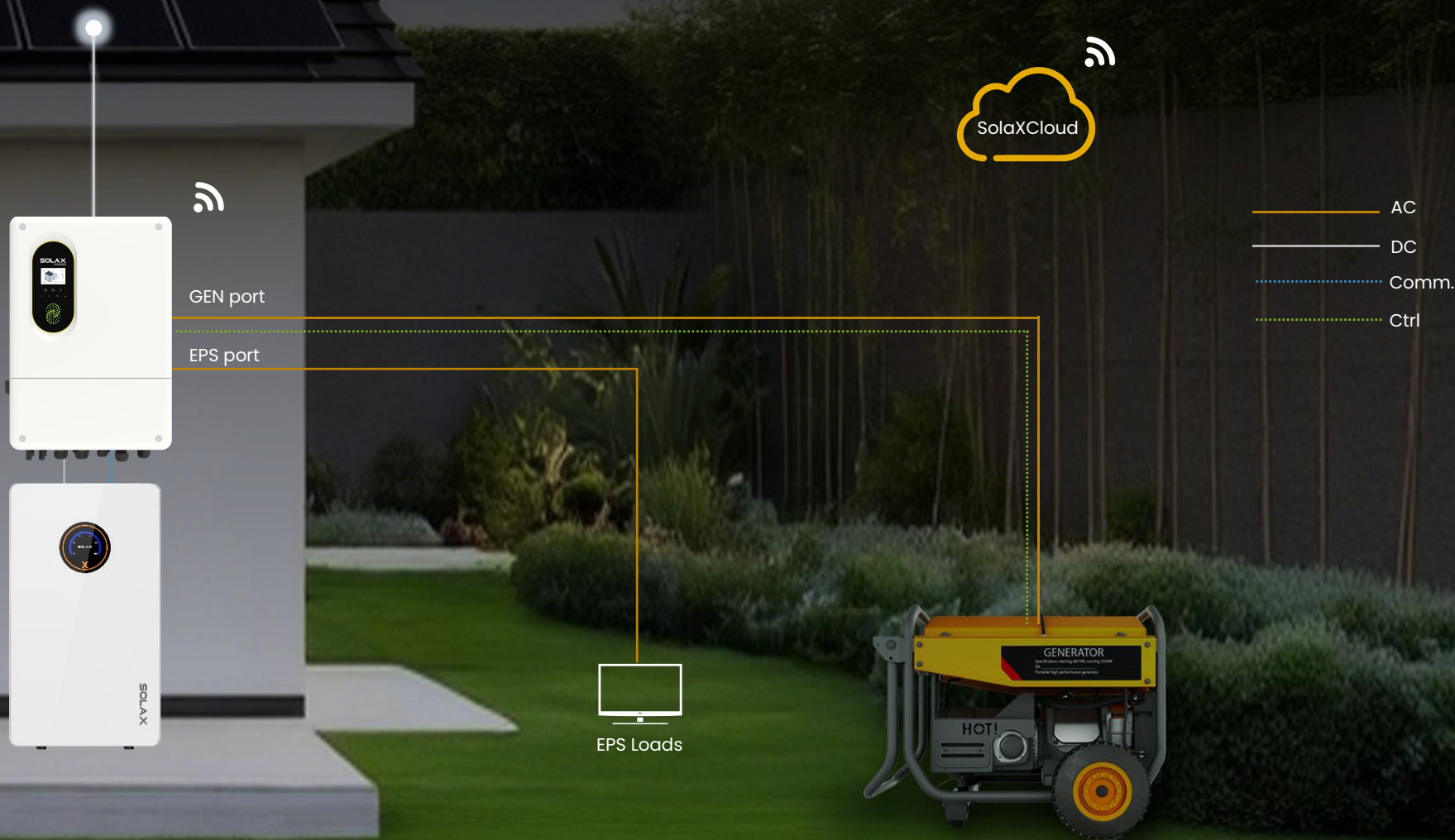
Parallel Solution



*only applicable to scenarios where grid stability is maintained and the frequency of off- grid switching is very low.

SYSTEM SOLUTION: GENERATOR SOLUTION

Generator solution



The diagram illustrates the EVC (Energy Vehicle Charger) Solution. It shows a solar inverter system with a 'Grid port' and an 'EPS port'. The 'Grid port' is connected to a CT (Current Transformer) and the 'Grid'. The 'EPS port' is connected to 'EPS Loads' and the 'SolaX EV Charger'. The 'SolaX EV Charger' is connected to the 'Grid' and the 'SolaXCloud'. A legend indicates that solid orange lines represent AC, solid blue lines represent DC, and dashed blue lines represent Comm. (Communication).

EVC Solution



Grid

SolaX EV Charger

CT

SYSTEM SOLUTION: WIND TURBINE SOLUTION

Wind Turbine solution



04

Competitive Comparison

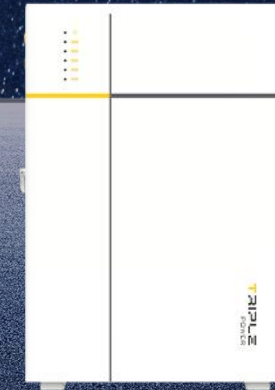


	SolaX X3-NEO-LV + IP65 LD5(WITH HEATING)-UP COMING	Vendor De
Parameters	• Lower Start-up voltage 150 V • Wider MPPT range: 160V-950 V • Max. charging/discharging current of 350 A, Max. charging/discharging current of 100 A / 130 A for bat • 95% recommend depth of discharge for bat	• Startup voltage : 160V • MPPT voltage range: 200-650V • Max. charging/discharging current of 240 A, Max. charging/discharging current of 100 A / 100 A for bat • 90% recommend depth of discharge for bat
Functions & Performance	• All power ranges are compatible with EV charger • User-friendly LCD touchscreen supported for bat	• EV charger not supported • User-friendly LCD touchscreen not supported for bat
Reliability	• IP65 for inv and IP65 for bat • Battery max. operation altitude : 3000m • Charging temperature: -20 to 55°C • CO detector and aerosol fire suppression for precise protection • Reliable feedback-type DC circuit breaker supported	• IP65 for inv and IP20 for bat • Battery max. operation altitude : 2000m • Charging temperature: 0 to 55° C • CO detector and aerosol not supported • Reliable feedback-type Dc circuit breaker not supported
User experience	• SolaX APP supports the realization of automation scenarios	• Automation scenarios not supported

	SolaX X3-NEO-LV + IP65 LD16 (WITH HEATING)-UP COMING	Vendor Fe
Parameters	- Lower Start-up voltage 150 V - Wider MPPT range: 160V-950 V - Max. charging/discharging current of 350 A, Max. charging/discharging current of 155 A / 200A for bat	- Startup voltage : 180V - MPPT voltage range: 160-900V - Max. charging/discharging current of 200 A, Max. charging/discharging current of 160 A / 160 A for bat
Functions & Performance	All power ranges are compatible with EV charger	EV charger not supported
Reliability	- Battery max. operation altitude : 3000m - Charging temperature: -20 to 55°C - CO detector and aerosol fire suppression for precise protection - Reliable feedback-type DC circuit breaker supported	- Battery max. operation altitude : 2000m - Charging temperature: 0 to 55°C - CO detector and aerosol not supported - Reliable feedback-type DC circuit breaker not supported
User experience	SolaX APP supports the realization of automation scenarios	Automation scenarios not supported

05

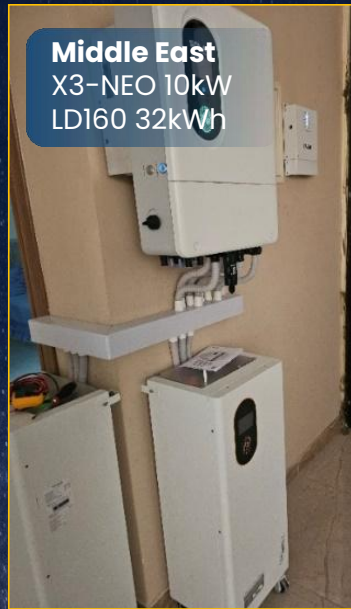
Success Stories



Success Stories – Residential Solutions



Vietnam
X3-NEO 15kW
LD160 16kWh



Middle East
X3-NEO 10kW
LD160 32kWh



Indonesia
X3-NEO 10kW
LD150 15kWh



Indonesia
X3-NEO 15kW
LD150 30kWh



Ukraine
X3-NEO 15kW
LD53 21.2kWh



Ukraine
X3-NEO 10kW
LD53 10.6kWh



Poland
X3-NEO 15kW
LD53 79.5kWh



Poland
X3-NEO 15kW
LD53 31.5kWh



Poland
X3-NEO 15kW
LD53 21.2kWh

THANKS

With SolaX, You've Got The Power

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The logo for SOLAX POWER is rendered in a 3D, metallic, brushed metal style. The word "SOLAX" is in a large, bold, sans-serif font, and the word "POWER" is in a smaller, similar font directly below it. The letters have a reflective surface with highlights and shadows, giving them a three-dimensional appearance. The background is a dark blue, starry space scene with a horizon line.