

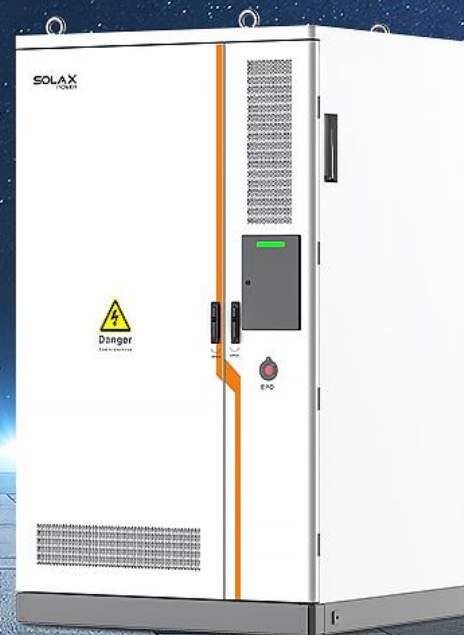


New Product






TRENE-P100B233L

C&I ESS Solution

Version: V1.1
Dept.: Marketing
Date: Jan. 18



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01. **Overview**

Liquid Cooling Intelligent Energy Storage System Design for C&I

- ALL IN ONE Solution



233kWh stand-alone capacity

Liquid Cooling Trene contains 5 battery packs, each battery pack 1P52S

System Overview

- One-stop solution

Various application scenarios

- Micro-grid supported
- VPP dispatch supported
- Warehouse, Factory, Mall etc
- Charging station

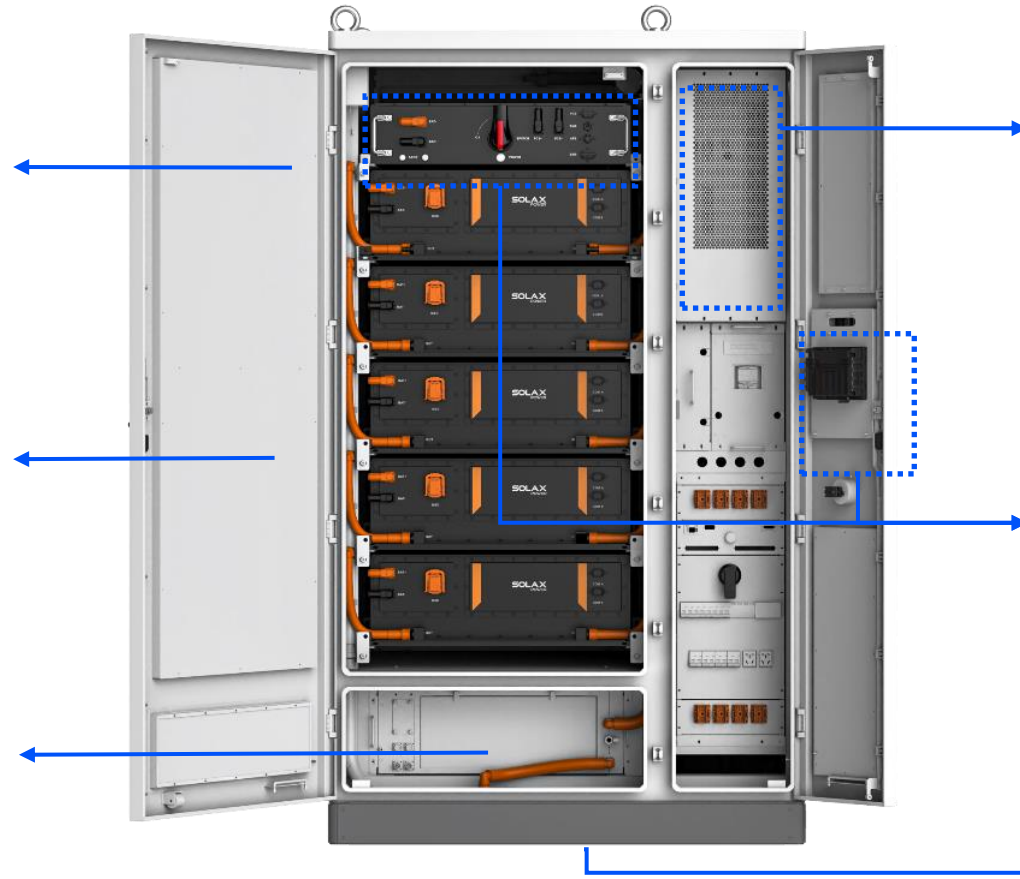
Superior capacity

- 280AH LFP battery
- 233 kWh capacity
- Expandable to MWh

Robust safety

Liquid cooling module

- Cell temperature difference < 3°C
- Four-level fire protection



High versatility

PCS

- 100kW, max 110kW output
- Three-phase unbalanced output
- Support SVG
- 3P4W system

Intelligent energy management

- Self-development EMS&BMS
- Solax Cloud & APP
- Smart Schedule & Smart scene
- cell level data real-time monitoring
- local data retention up to 1 year

All-in-one design

- Fast & simple installation
- Effortless O&M

Multiple Scenarios



Farms



Factories & Malls



Charging stations



Island micro-grid

Designed for industrial and commercial scenarios

Fast & simple installation

✓ Only **one hour** install to complete the whole solution

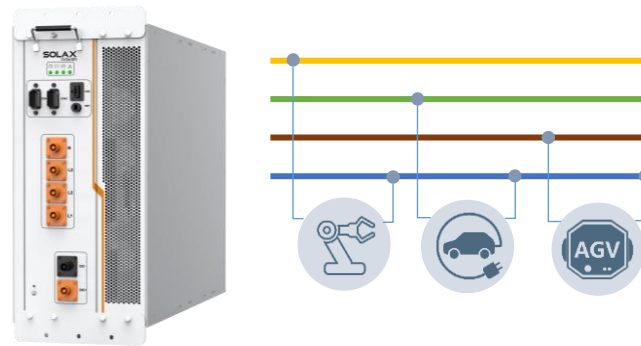
Simple wiring

Connect only grid wires



Quick connectors

3P4W design compatible for all your 1P and 3P loads



	On-grid	Off-grid
Nominal output power*	100kW	100kW
Transformer		

Wireless network

Paired with wireless bridge to access network fast



02.

Key Features

Highly versatile PCS

Strong Ability Against Unstable Grid

Micro-grid Supported



Enable string inverters to harness
PV even during outages

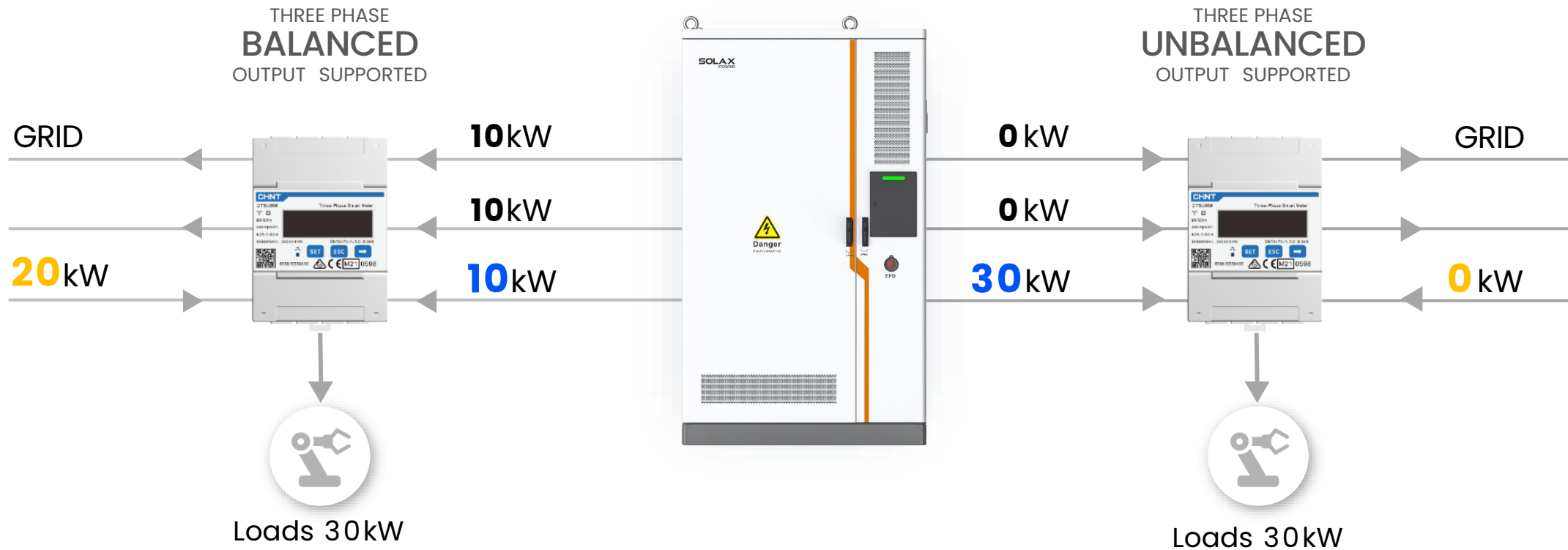
Generator Supported



Power your load
with generator

Highly versatile PCS

Maximizing self-use electricity



- Loads less than 30 kW, no need to buy electricity from the grid
- Prevent voltage imbalance when using high-power electrical appliances.

Highly versatile PCS

Flexible and Expandable, all as you need



Support maximum **10** units in parallel

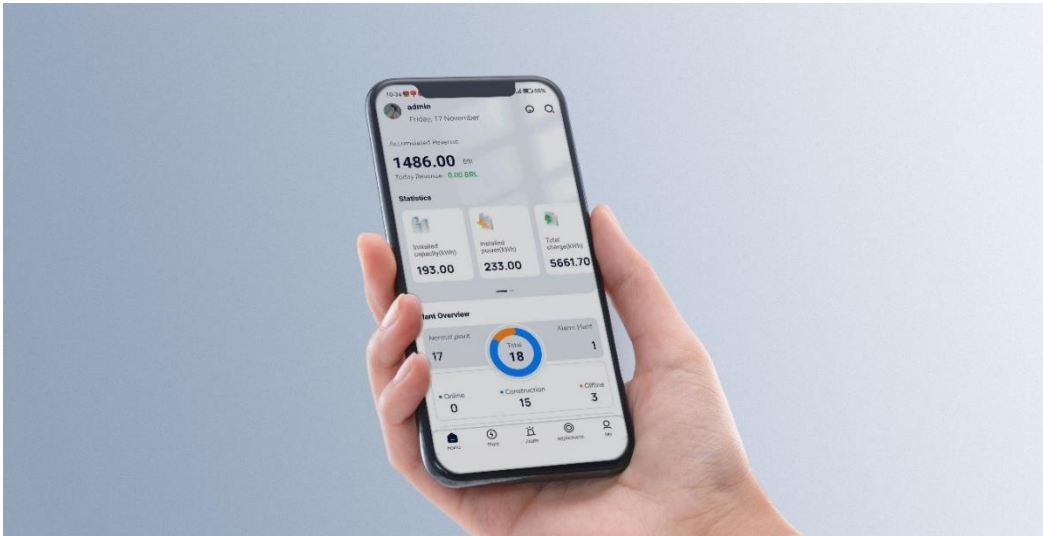
- Larger power capacity meets the demands of a broader range of industrial and commercial scenarios

Industry-leading battery

Robust safety guards maximized energy

Cell level real-time monitoring

Remote view voltage, current, temperature, SoC, daily production and historical data at any time



Advanced battery management unit

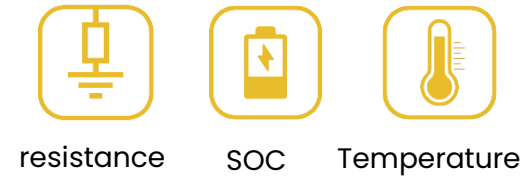
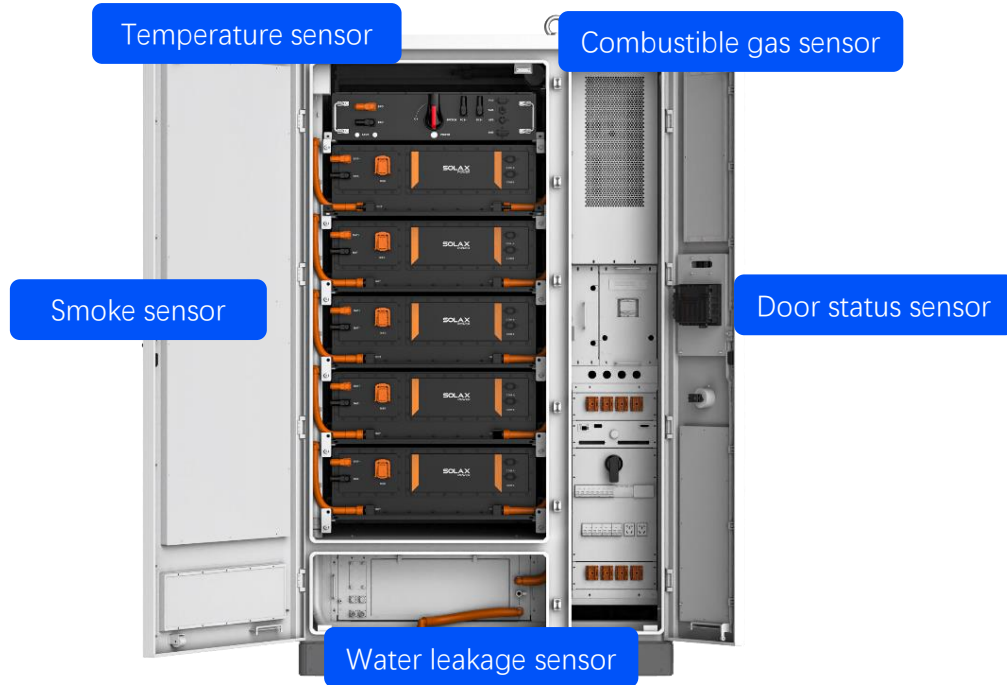
Developed and Manufactured by SolaX, BMU embraces advanced hazards detection and earliest protection to enhance the Battery system



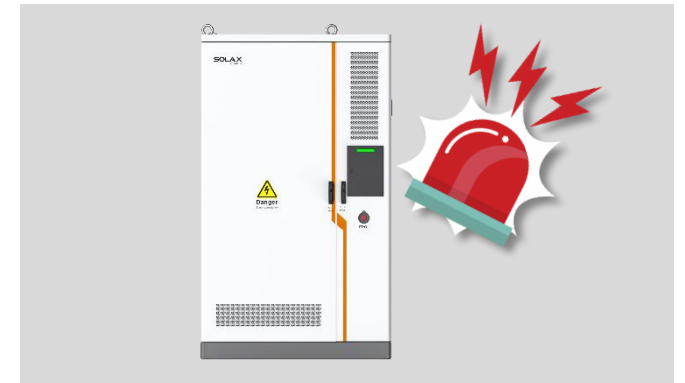
- Higher energy density – LFP battery
- Larger capacity – 280Ah, 200kWh stand-alone capacity

Four-level safety design

1. Multiple sensors real-time monitoring to trigger early warning



AI monitoring of Cell health
based on sensing technology



Four-level safety design

2. Multistage breaking designed for severe faults



1、 Rack breaking

2、 PCS breaking

3、 Combiner breaking

accurately identify the severe faults and automatically break the circuit to reduce the loss

Rack breaking -> PCS breaking -> Combiner breaking

Four-level safety design

3. Aerosol and water spray fire-extinguishing, dual fire protection safeguards



Four-level safety design

4. Compartmentalized design ensure bulkheads capable of enduring fire for 1.5h



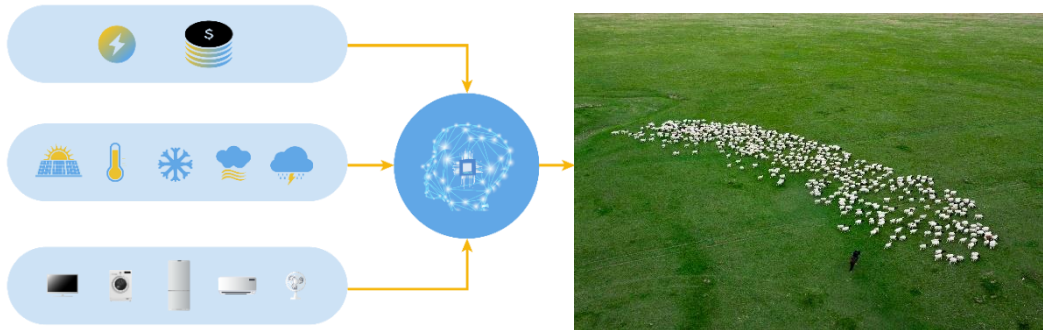
Compartmentalized design effectively slow the spread of the fire

03. **Application Systems**

Intelligent energy management

Smart Schedule – Define customized solution by your own

Smart Schedule



Auto tune to an optimal working mode based on deep-learning weather forecasting, usage habits, and electricity pricing in order to maximize energy efficiency.

Satisfying various application scenarios

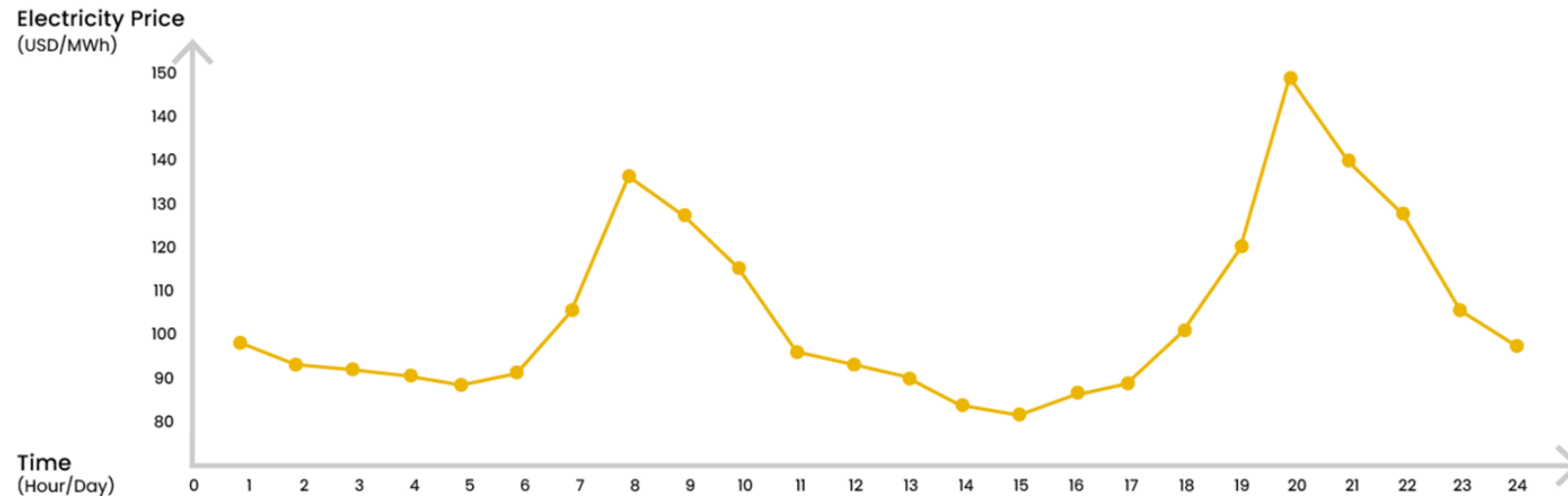


On the farm, the Smart Scene takes into account weather conditions, including light radiation & temperature and operational requirements at specific times, while meeting the demands of loads such as water pumps and greenhouse lights, effectively optimizing energy usage.

Intelligent energy management

7X24 Time of Use — Customized & Bill Saving

- Set specific work modes for **each hour of the day, 7 days a week**; the weekly plan can be repeated.
- **Various work modes** to choose from: Self-Use/Battery Off/Peak Shaving/Charging/Discharging.
- **Holiday import** supported.
- **Bulk deployment** supported (coming soon).



Previously

Only one mode per day

ToU

Set specific work modes to meet your needs, down to the hour, 24/7.

*Each color stands for a work mode



Satisfying various application scenarios

- Supermarkets



- Self-Use Mode
- Battery off
- Peak Shaving
- Charging Mode
- Discharging Mode

By setting different work modes for opening and closing times, TOU function enables shopping malls to save electricity during peak hours during working time.

Intelligent energy management

Smart scene – Define customized solution by your own

Smart Scene

Smart Scene innovatively **offers a customizable set of IF-THEN conditions and actions**, allowing users to create intelligent scenarios like automatically charging/discharging the battery based on preset conditions, making your life easier.



✓ Efficient



✓ Automatic



✓ Money saving

Example

IF – What you SET

IF condition is set at 2 AM, and the weather forecast predicts rain within the next 8 hours.

Then – What you GET

In response to this condition, the THEN action is programmed to charge the battery to 100% at 2 am, when the electricity price is typically lower.



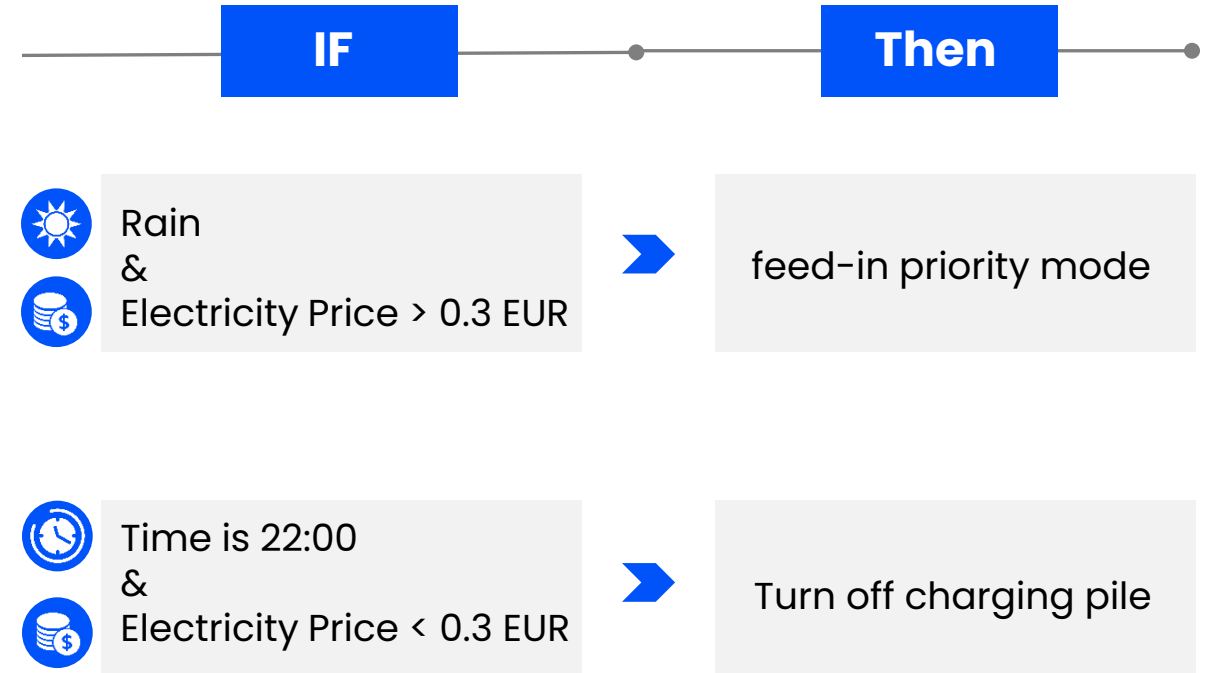
Forecasted
raining
tomorrow

EMS100



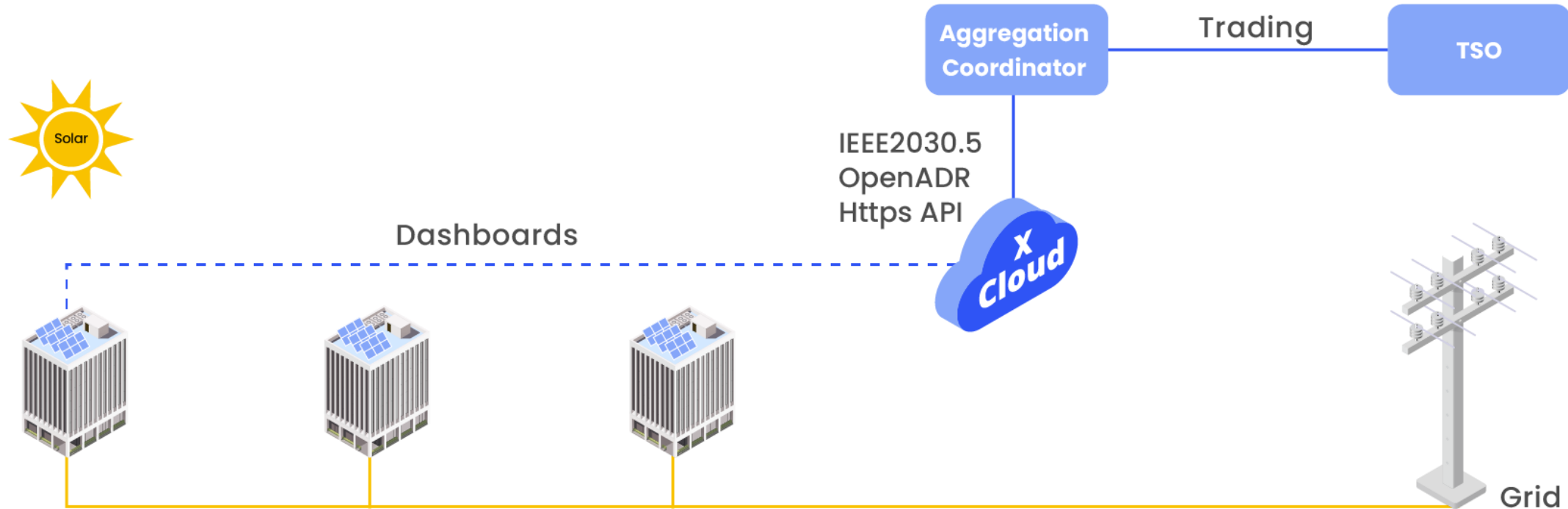
Auto
Charging

Satisfying various application scenarios



Intelligent energy management

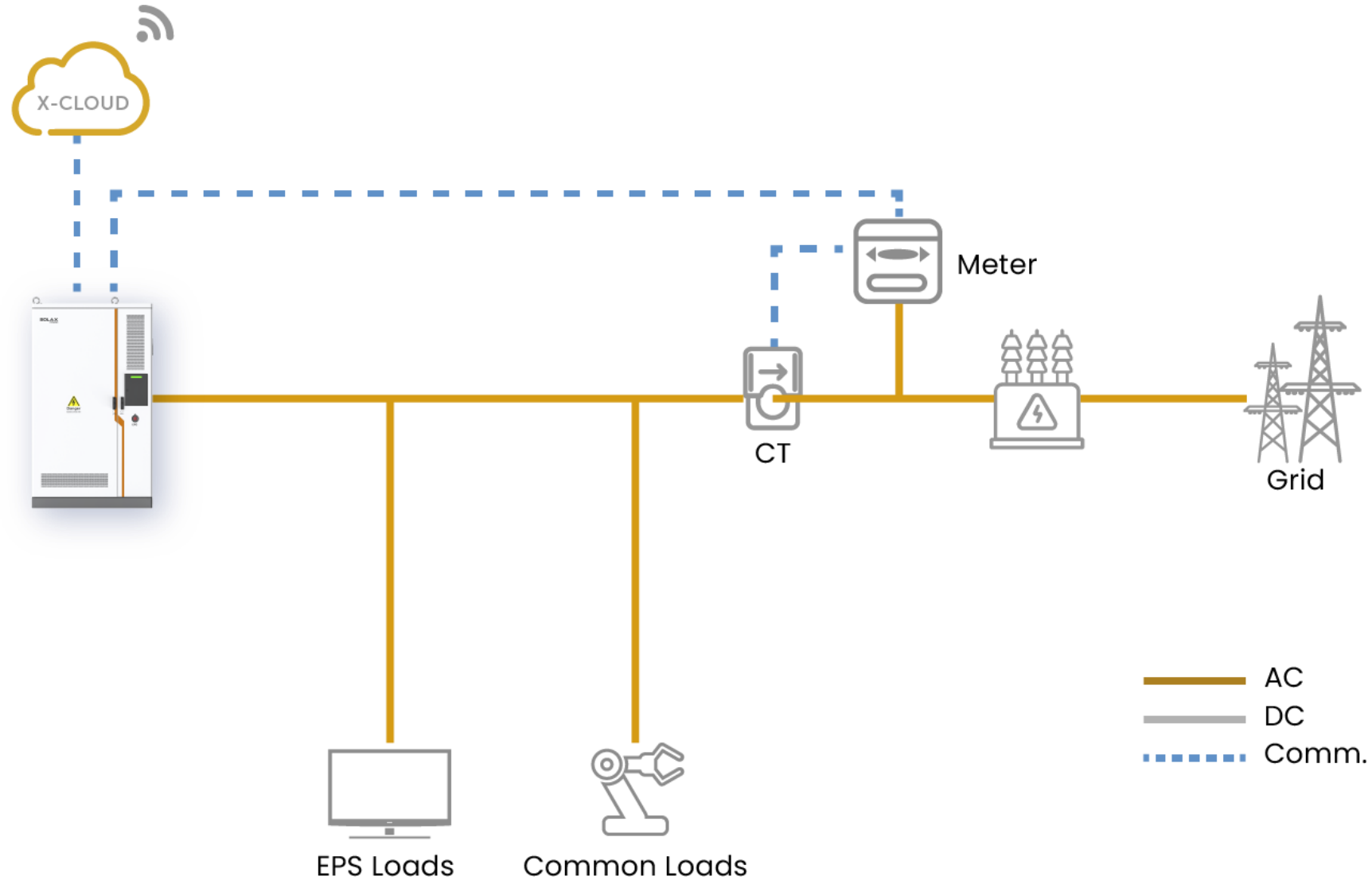
Support power VPP dispatch



VPP, also known as Virtual Power Plant, is a network of decentralized energy-generation systems, like solar systems, that are linked together and managed by a VPP operation platform.

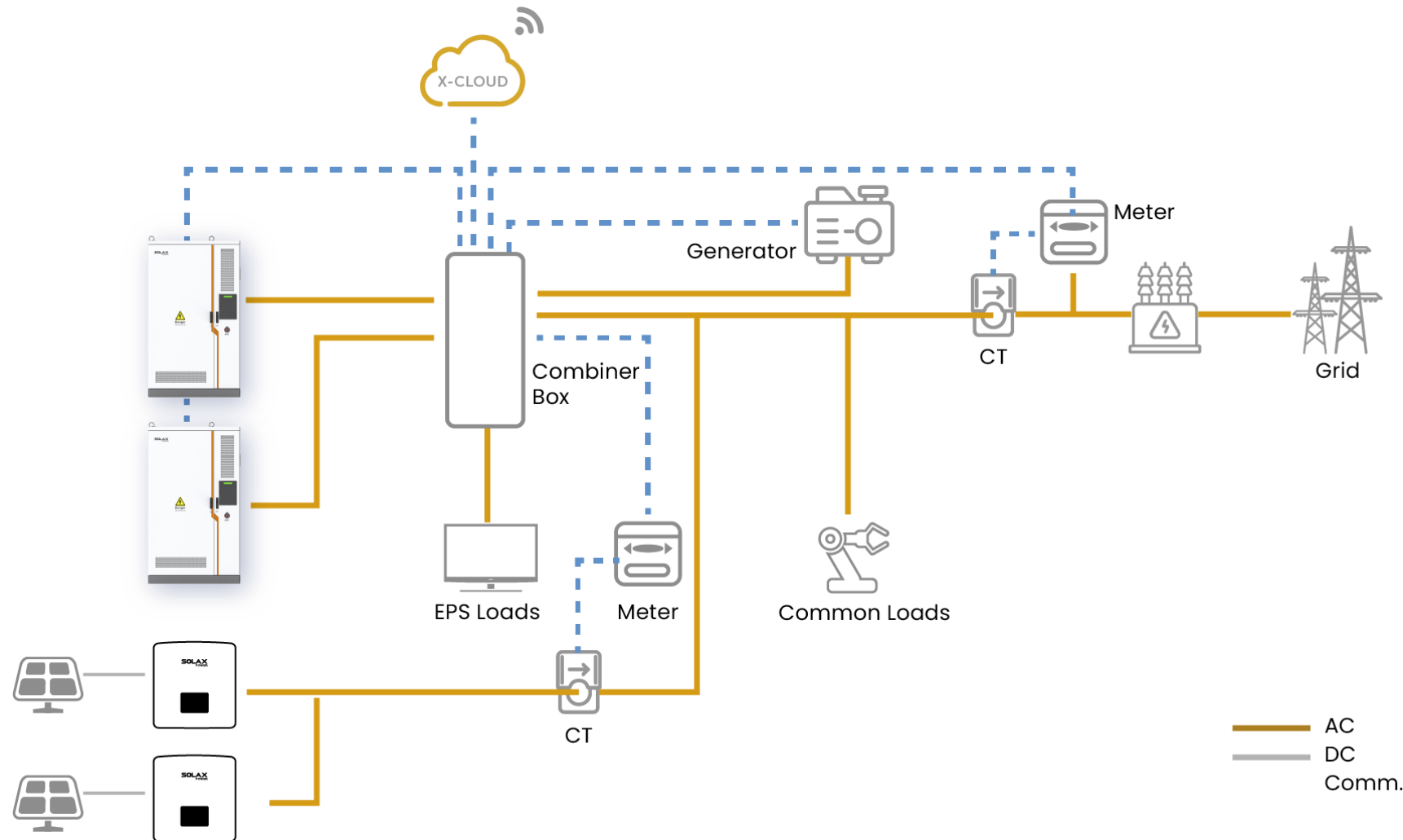
With support for API / IEEE2030.5 and Open ADR, our product can easily integrate with VPP operation platforms. This functionality is currently being utilized in certain countries.

Common Loads

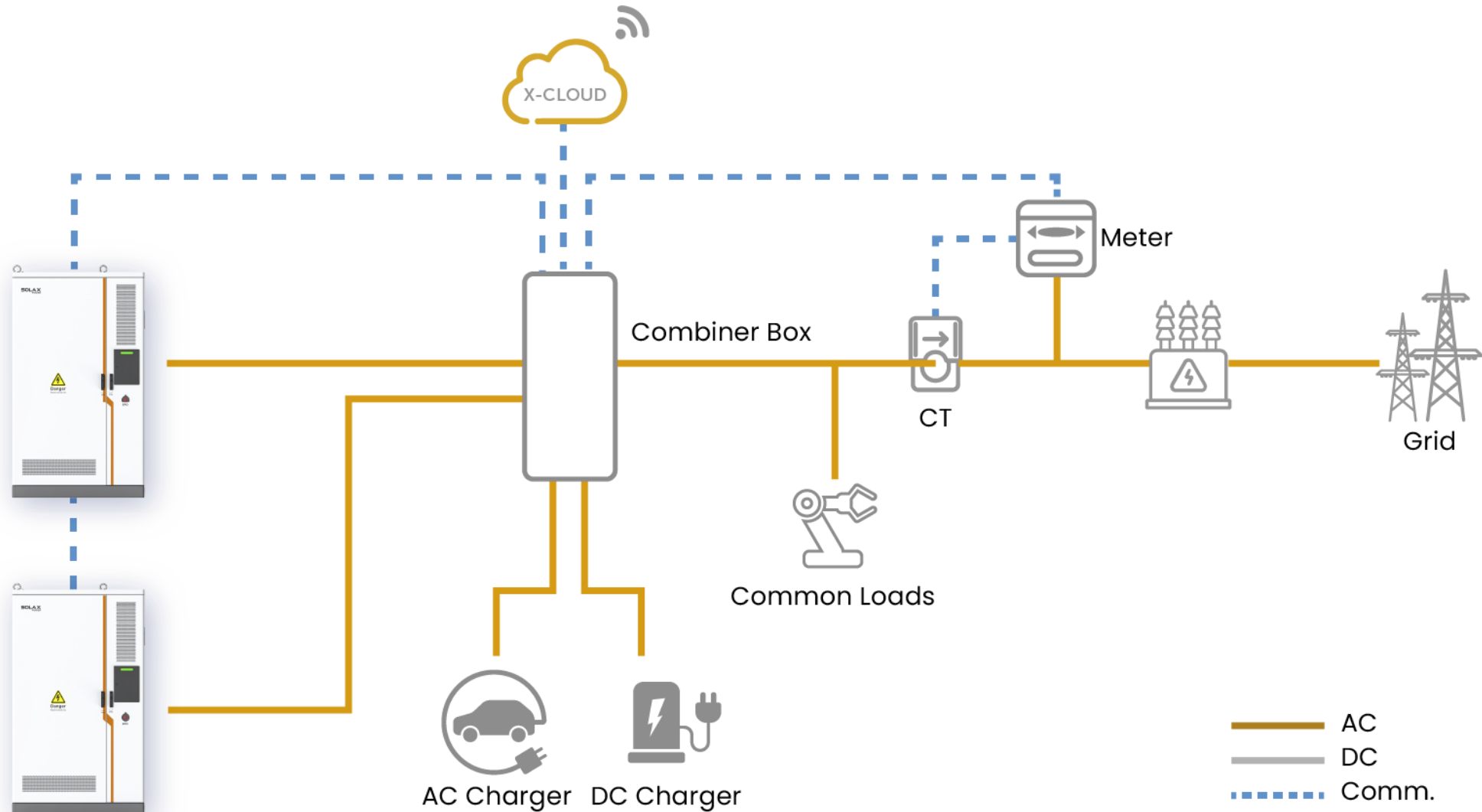


Micro Grid

Together with an on-grid inverter and a PV system, forming an independent micro-grid enables island energy self-use.



EV Charger



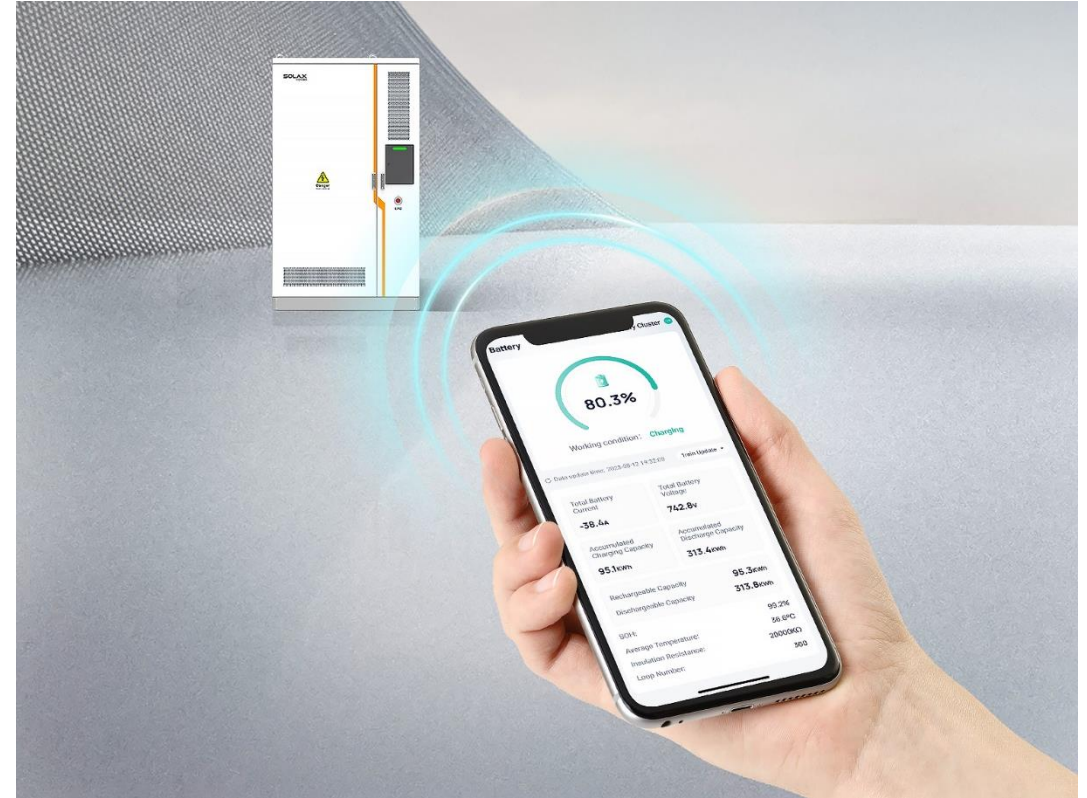
04. **Effortless O&M**

Remote control and upgrade ensures convenience

OTA upgrade



Wireless control



SolaX Cloud – One-Stop Power Management Platform



- 10 sec Real-time data refresh
- Consumption monitoring
- Intuitive interface
- dashboard supports customization
- Apps are available on Google Play & App Store

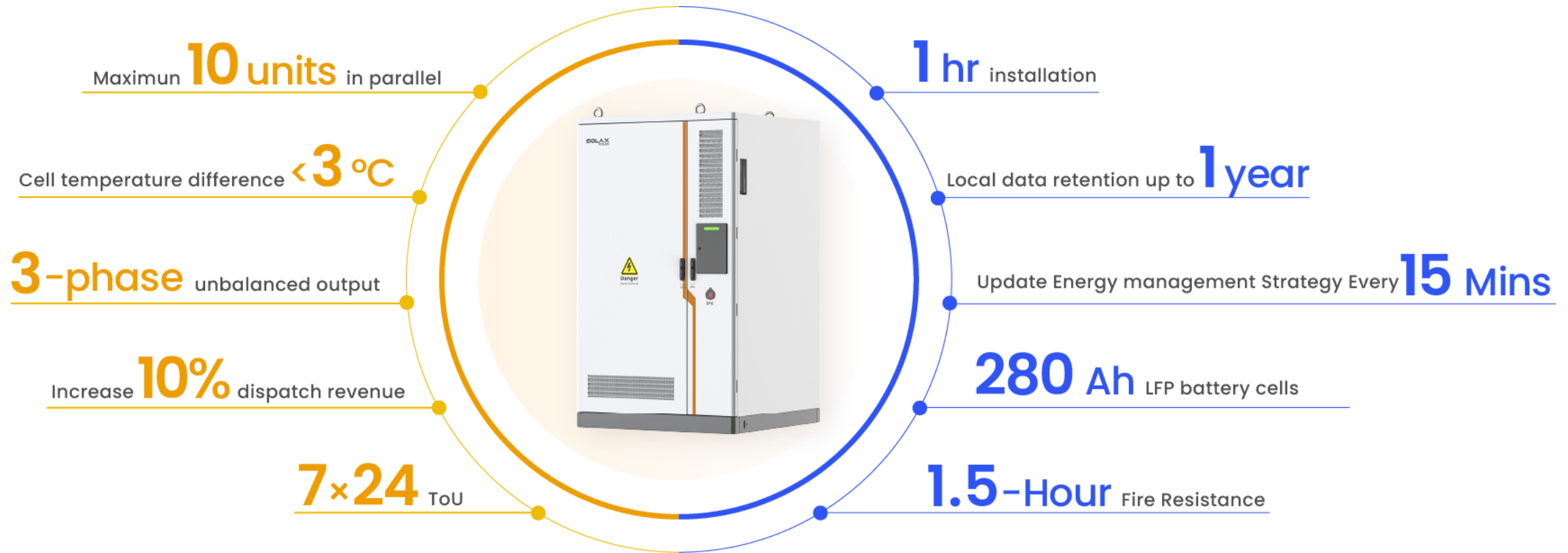
Global Service Support

- All products are solely-developed and self-manufactured by SolaX, including hybrid inverters, storage batteries, BMS.
- From R&D to manufacturing, from sales to after-sales support, you can trust us for high-quality products and services.



05. **Technical Parameter**

233 kWh stand-alone capacity



Technical Parameter

System model	trene-P100B233L
Basic Parameter	
Protection class	IP54
Operating temperature range [°C]	-30 ~ 55
Max. operation altitude [m]	< 3000
Relative Humidity(non-condensing) [%]	0 ~ 95
Dimensions (WxHxD) [mm]	1350 × 2300 × 1350
Weight (kg)	3000
Cooling Concept	Liquid cooling
Fire Suppression system	Optional: Aerosol / Novec1230 / Water
Display	7 inch LCD
Communication Interface	Ethernet / 4G / CAN / USB
Topology	Non-isolated type
Certification	IEC621619, IEC63056:2000, IEC61000-6-2&-6-4, IEC62477-1, UN38.3

Technical Parameter

System model	trene-P100B233L
OUTPUT AC	
Nominal output power [kW]	100
Max. apparent AC power [kVA]	110
Max. AC current [A]	167.2
Nominal grid voltage [V]	400 / 230V, 380 / 220V
Nominal grid frequency [Hz]	50 / 60
Maximum charge / discharge current [A]	140
Adjustable range of power factor	1 leading ~ 1 lagging
THD[%]	< 3

Technical Parameter

System model	trene-P100B233L
BATTERY	
Cell type	LFP / 280Ah
System configuration	1P260S
Nominal voltage [d.c.V]	832
Battery voltage range [d.c.V]	650 ~ 936
Nominal capacity [kWh]	233
Nominal power [kW]	100
PROTECTION	
Anti-islanding protection	Yes
AC overcurrent protection	Yes
DC reverse-polarity protection	Yes
Insulation resistance detection	Yes
Over/under voltage protection	Yes
Over temperature protection	Yes
SPD (AC side)	Type II

THANKS

Powering a Green Future

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