Deye

Smart EV Charging Solution

Smart EV Charger

SUN-EVSE11K01-AC | SUN-EVSE22K01-AC

Single-Phase	3.5kW / 230V, 16A	Single-Phase	7kW / 230V, 32A
Three-Phase	11kW / 400V, 16A	Three-Phase	22kW / 400V, 32A



Flexible Charging Options	Comprehensive Protection	Remote Control	Smart Energy Management
Type 2 Charging Gun	5-year Warranty	Plug and Play	Appointment for Charging*
Offline Operation	IP66	LoRa, Wi-Fi & Bluetooth Connectivity	Solar-only Charging

*This function is only available when used with a Deye hybrid inverter and compatible batteries.

Why Choose Us?

01

Hybrid Inverter + Battery Solution

No costly grid retrofits needed — simply connect to your hybrid inverter.



02

String Inverter / Microinverter + Wireless CT Solution

Supports connection to distribution boxes,compatible with string inverters or microinverters and wireless CTs for intelligent control.



03

Real-Time Monitoring

Track charging status and modify settings via Deye Cloud, anytime and anywhere.

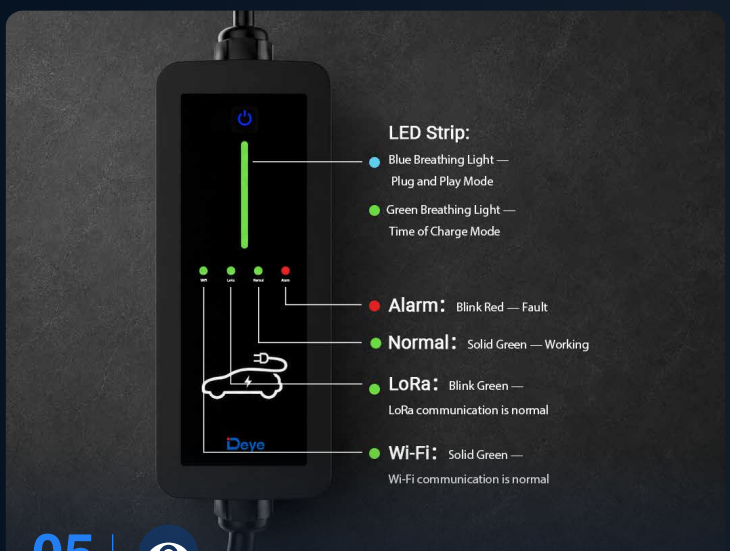


04

Maximize Solar Energy Utilization

With an integrated PV-Storage-Charging Solution, charge your EV with 100% clean solar energy, powered by the Deye energy ecosystem.

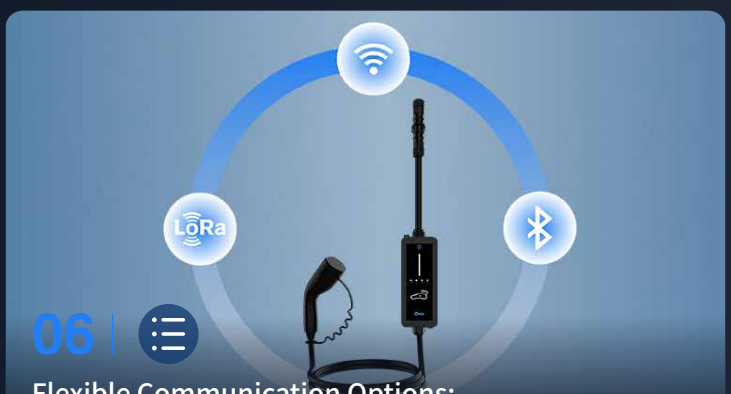




05

Status Indicators

Instant visual feedback for all operational statuses.



06

Flexible Communication Options: LoRa | Wi-Fi | Bluetooth

LoRa: Hybrid Inverter + Battery: Enables pairing with Deye hybrid inverters for unified control through the inverter display or Deye Cloud.* String Inverter / Microinverter + Wireless CT: LoRa enables communication between the EV charger and CT.

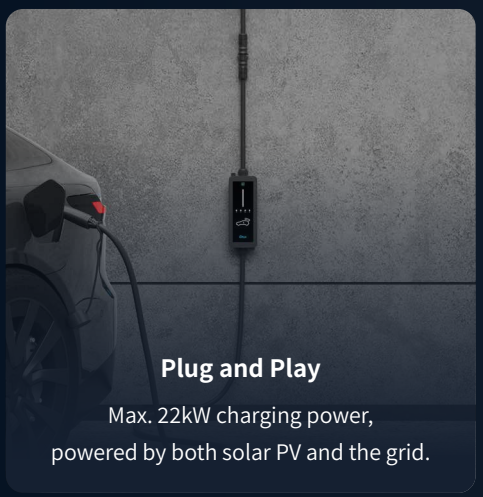
Wi-Fi: Connects to the router for remote control via Deye Cloud — no inverter required.

Bluetooth: Supports direct local pairing for quick offline operation — no network connection required.

*Requires Deye Smart TX and the latest inverter firmware update.

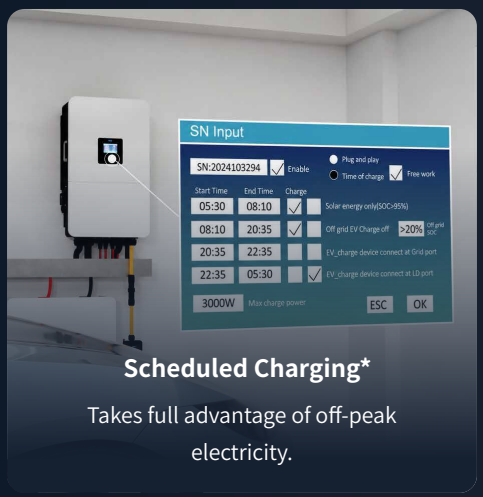
Deye Smart EV Charge

◎ Flexible Charging Modes



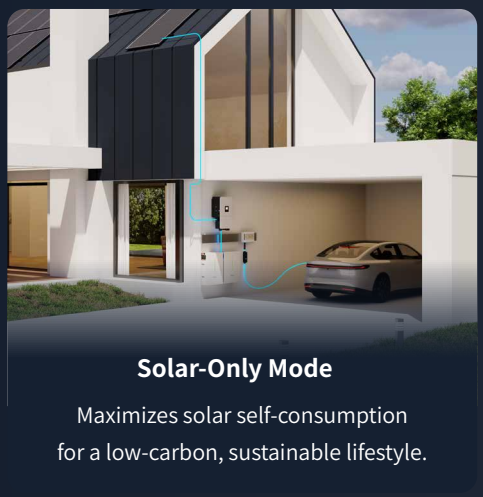
Plug and Play

Max. 22kW charging power, powered by both solar PV and the grid.



Scheduled Charging*

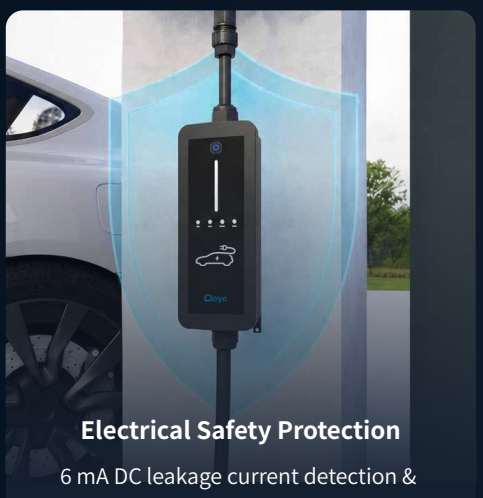
Takes full advantage of off-peak electricity.



Solar-Only Mode

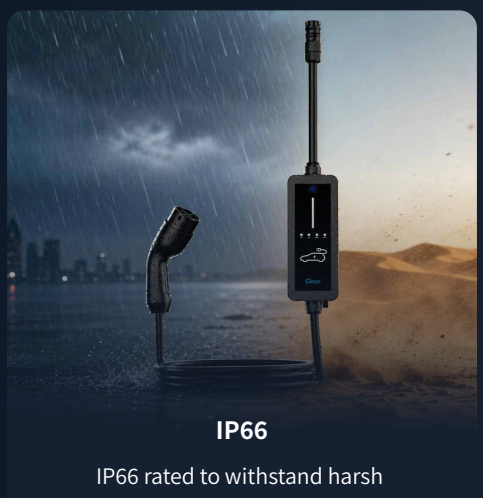
Maximizes solar self-consumption for a low-carbon, sustainable lifestyle.

◎ Multi-Layer Safety Protection



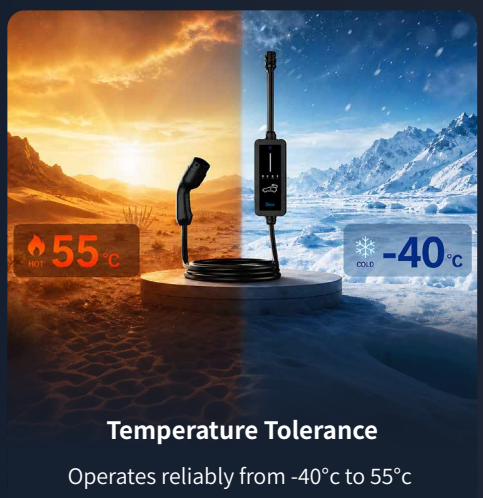
Electrical Safety Protection

6 mA DC leakage current detection & multi-layer safety protection**.



IP66

IP66 rated to withstand harsh outdoor environments.



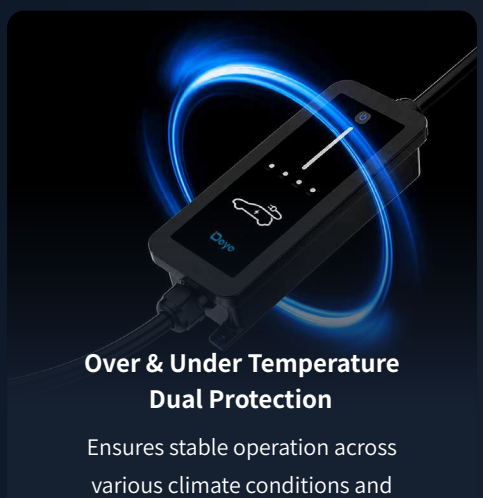
Temperature Tolerance

Operates reliably from -40°c to 55°c in extreme conditions.



Overload Protection

Dynamically adjusts EV charging power based on household consumption to prevent system overload.



Over & Under Temperature Dual Protection

Ensures stable operation across various climate conditions and extends charger lifespan.



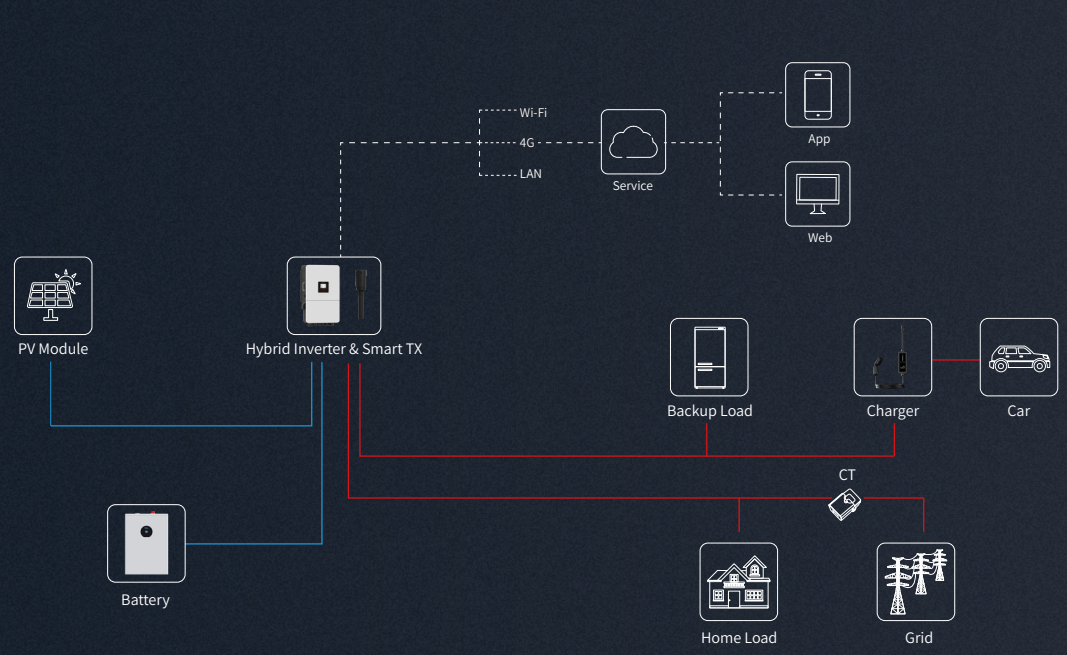
Overcurrent & Overvoltage Dual Protection:

Instant power cutoff under abnormal current or voltage to safeguard the charger and vehicle, eliminating fire risks.

*Scheduled Charging is not supported with the String Inverter / Microinverter + Wireless CT solution.
**Over temperature protection, low temperature protection, over voltage protection, under voltage protection, short circuit protection, overload protection, earth fault protection and Type II surge protection level.

System Topology

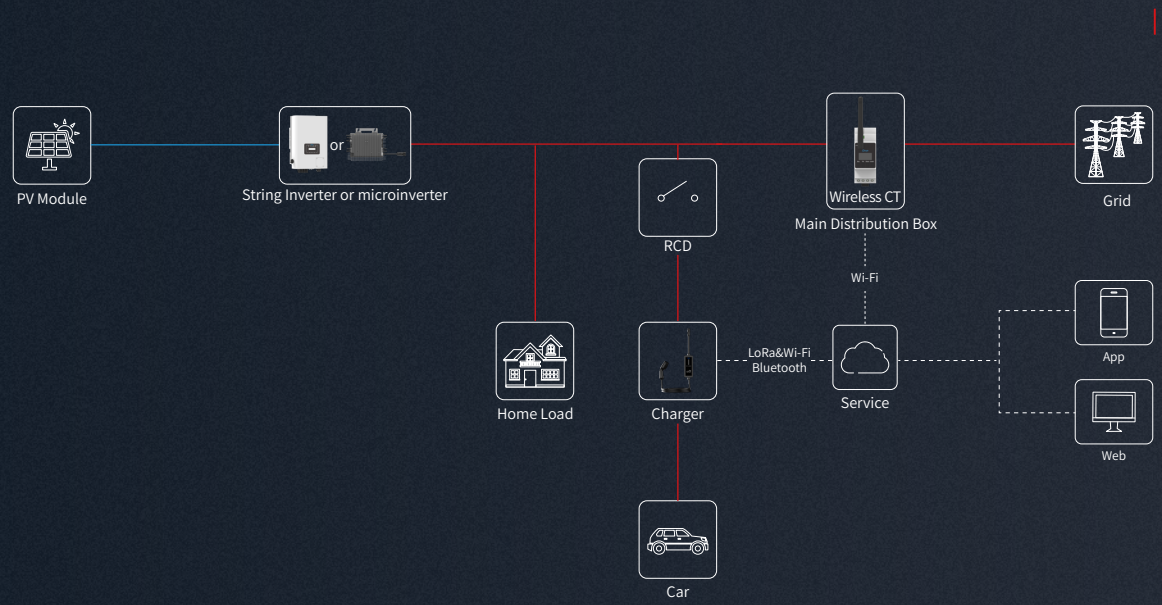
◎ With Deye Hybrid Inverter and Smart TX



*EV chargers can also be connected to the grid port of the hybrid inverter as a general load.

*When paired with a Deye hybrid inverter, the charger is controlled via LoRa communication. A Smart TX module must be installed on the inverter to enable coordinated energy management.
Note: Not all Deye hybrid inverter models support Smart TX installation. Please confirm compatibility with the Deye technical support team in advance.

◎ With Deye String Inverter and Wireless CT

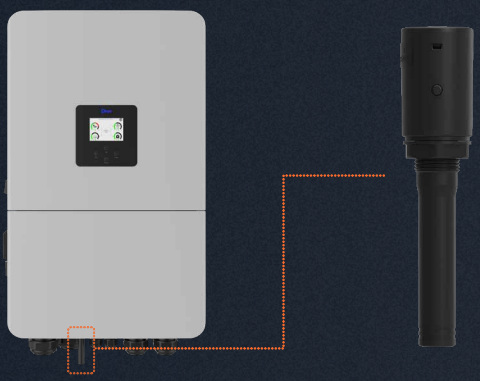


*No separate LoRa transmitter (TX) required for this charging solution.
*Supports third-party string inverters & microinverters in Solar-Only Mode and Free Work Mode (plug & play), but does not support Zero-Export Mode.

Deye Smart Devices

◎ LoRa Communication Module

The inverter functions as a local smart home hub, enabling direct control of connected smart devices from the inverter display or Deye Cloud—no additional gateway required.



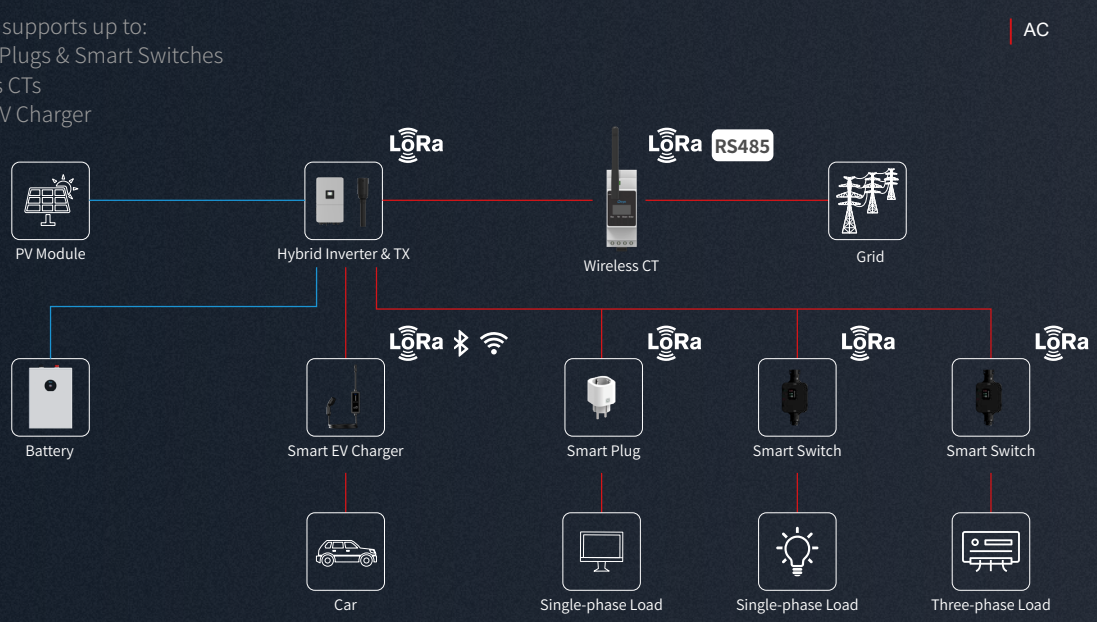
Simply plug the Deye Smart Transmitter (TX) into the Deye hybrid inverter to enable wireless LoRa communication for smart devices.

Hybrid inverter*　　Deye Smart Transmitter (TX)**

*The inverter must be updated to the latest firmware version. Please contact the Deye support team for assistance.
**Smart Transmitter (TX) is sold separately.

◎ Wireless Energy Management System Topology

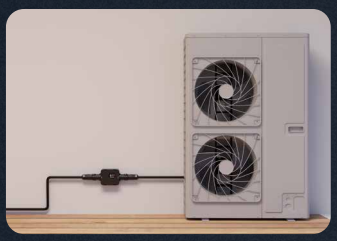
One Smart TX supports up to:
- 10 × Smart Plugs & Smart Switches
- 2 × Wireless CTs
- 1 × Smart EV Charger



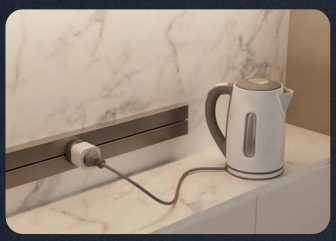
Wireless CT: Pairs with inverters via LoRa for wireless bi-directional energy metering and zero-export control.
Smart Plug: Intelligently controls single-phase loads based on time, SOC, and grid status to maximize solar self-consumption.
Smart Switch: Supports high-power outdoor loads in single- and three-phase systems with the same intelligent control as Smart Plug.



Wireless CT



Smart Switch



Smart Plug



Smart EV Charger

Technical Data

Model	SUN-EVSE11K01-AC	SUN-EVSE22K01-AC
Product Parameters		
Rated Voltage/Range (V)	230(single phase), 230/400(three phase)	230(single phase), 230/400(three phase)
Connection Mode	L+N+PE, 3L+N+PE	L+N+PE, 3L+N+PE
Rated Current (A)	16	32
Rated Frequency/Range	50Hz (45Hz-55Hz)/60Hz (55Hz-65Hz)	
Maximum Output Power (kW)	3.5(single phase)/ 11(three phase)	7(single phase)/ 22(three phase)
Starting Methods	Plug & Play / Scheduled Charging	
Equipment Protection		
Over Temperature Protection	Yes	
Low Temperature Protection	Yes	
Over Voltage Protection	Yes	
Under Voltage Protection	Yes	
Short Circuit Protection	Yes	
Over Load Protection	Yes	
Earth Fault Protection	Yes	
Leakage Current Protection	DC 6mA	
Surge Protection Level	TYPE II	
General Specifications		
Operating Temperature Range (°C)	-40 to +55°C	
Permissible Ambient Humidity	5%~95% No condensation	
Permissible Altitude (m)	≤3000	
Noise (dB)	<25	
Ingress Protection(IP) Rating	IP 66	
Cabinet Size (WxHxD mm)	104x264x58	
Weight (kg)	3.7	
Gun Cable Length (m)	4.2	
Number of Charging Guns	1	
Safety EMC/Standard	RCM , CE, FCC, EN IEC 61851-1:2019, IEC 61851-1:2017, EN 300 220-2 V3.1.1:2017, EN 300 328 V2.2.2:2019, EN IEC 62311:2020, EN 301 489-1 V2.2.3:2019, EN 301 489-3 V2.3.2:2023, EN 301 489-17 V3.3.1:2024, EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021, EN IEC 61851-21-2:2021	
Interface		
Communication Modes	LoRa/Wi-Fi/BLE	

Deye Cloud

All-in-one Energy & Device Management Platform

- Unlock significant savings
- Individual Add-on for dynamic tariff
- Intelligent charging/discharging strategies
- Tailored solution to deye devices
- Real-time equipment monitoring
- Best energy scheduling solutions by Deye Copilot algorithm
- 24/7 AI Assistant support



Smarten Up Your Home Energy

Download Deye Cloud APP to join us!
Embrace a seamless, effortless energy experience that's both eco-friendly and budget-friendly with our intelligent assistant

APP & Web
Manage your energy effortlessly

Cloud-edge Collaboration
Faster and more efficient

Accelerated Connection
Optimized for speed and performance

Localized Data Centers
Ensure data sovereignty and compliance in EU & US

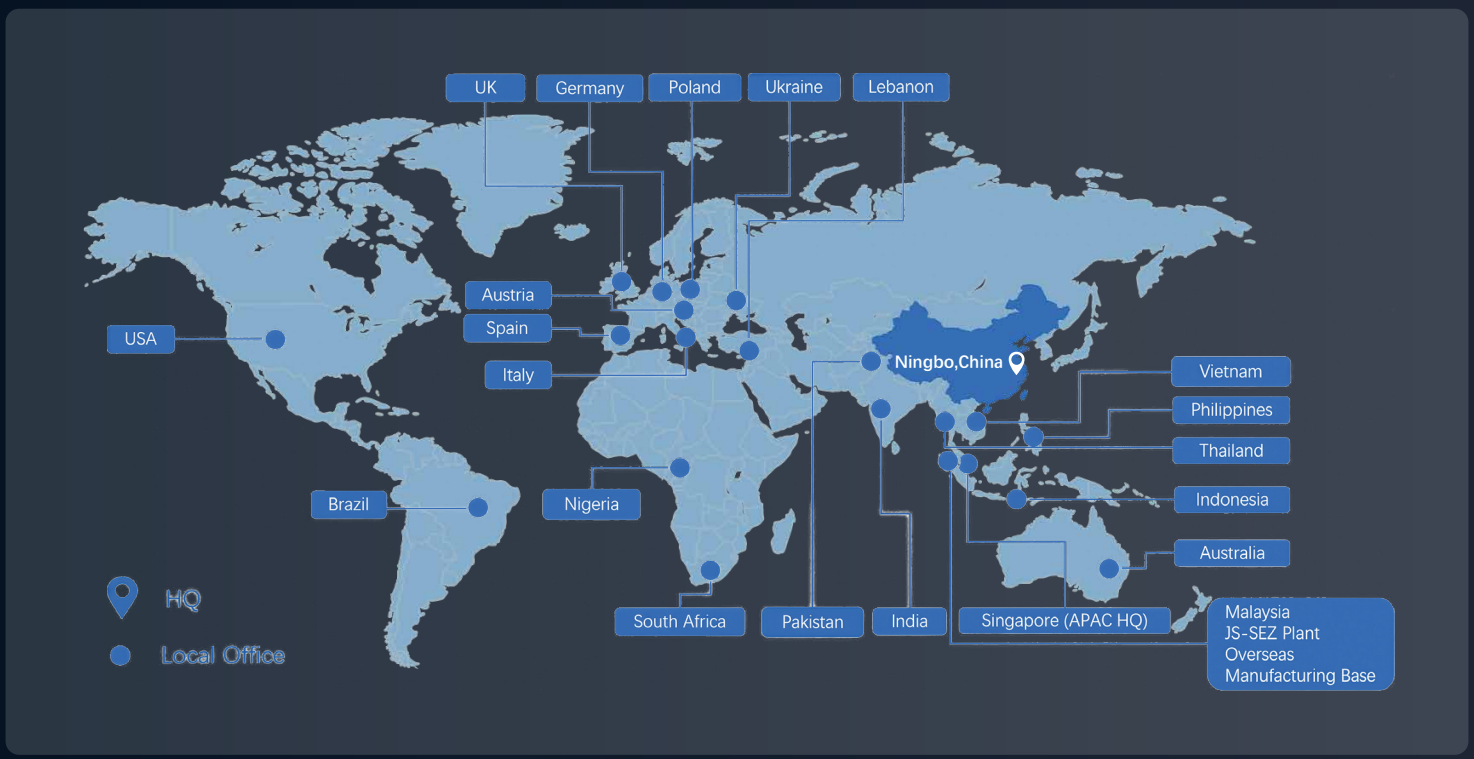
Deye Copilot
AI-powered energy analysis and control

AI Assistant
24/7 support, fast, efficient, in your language

About Deye

Founded in 2000 (Stock Code: 605117.SH), Deye is a globally leading provider of photovoltaic (PV) inverter and energy storage system solutions. Deye has built an integrated value chain spanning R&D, design, production, sales and service, supported by modern intelligent manufacturing bases in Ningbo, Jiaxing and Johor, Malaysia, equipped with comprehensive production and testing facilities.

Through years of dedicated innovation, Deye has developed industry-leading R&D capabilities and scale advantages, delivering integrated solar PV and energy storage solutions for residential, commercial, industrial and utility-scale applications. Recognized for outstanding performance and reliability, Deye has established a global sales network covering over 160 countries and regions.



Information is subject to change without notice. Please scan the QR code or contact Deye representative for the latest updates.

Scan for More Information

Official Website

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