

Battery Fire Prevention  
Electric Vehicle Charger

# KLINEX CATALOG 2024

PRODUCT, SERVICES, SOLUTIONS



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# Introduction to KLINELEX

**Klinelex Co., Ltd. is a company specializing in EV chargers leading the development of chargers and operational technologies.**  
In the fields of fast chargers, slow chargers, smart charging solutions, control systems, charging APPs, and charging information services  
We provide the highest quality chargers and excellent operation management solutions required to operate corporate and personal play charging facilities.

## KLINEX Main Business

### Slow charger

Single-phase 5-pin : 3.3, 7, 11kW / 14kW Dual, 22kW Dual, IC card type, Billing-type outlet (KEPCO authentication)  
Three-phase 7-pin : 11kW, 22kW(for export)  
Site control G/W : Zigbee communication G/W for up to 100 units, Smart charging power distribution

### Fast charger

Integrated type (CCS1, 2) : 30kW, 50kW, 100kW (Single/Dual), 200kW(Single/Dual)  
Power Bank (PB) : 200kW, 350kW, 400kW  
Dispenser (DP) : 200kW Dual, 350kW (Water cooling)

### Charging service

K-CHARGER Service : Agent of KECO for the Construction/Operation, Operation/Payment of Charging station  
L-CHARGER Service : Construction/Operation of new LH Smart charging stations (Cumulative 90 Complexes)  
KEV Service : Power Control Integrated Operation Control and Charging Service Solutions ▶Direct Charging (PnC)  
PnC (Plug & Charge) Service : Ability to charge immediately when the charging connector is connected to the vehicle

### O&M solutions

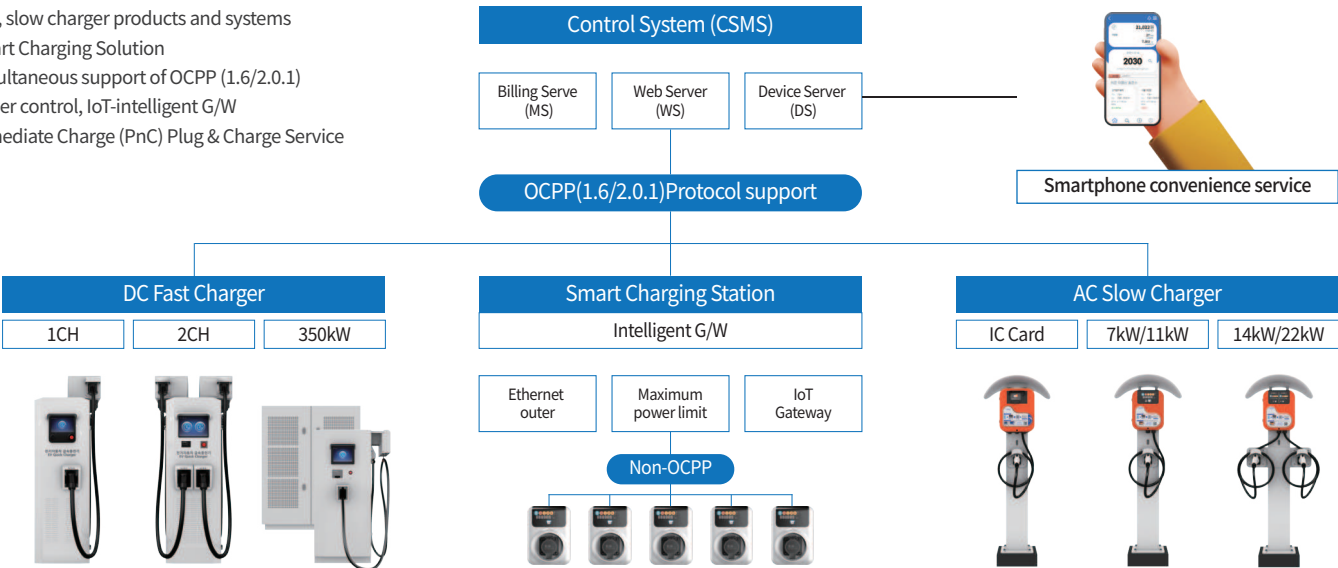
ASP type : Agency for the construction and operation of Customer cloud server  
On-Premise type : Construction of customer's local operation solutions  
S/W sales : Operational Solution S/W

### Construction of centralized charging station

4-channel 200kW charging station : Supports for 4-channel dynamic power distribution and the Give-all-to-onecharging All-power-to-one-channel (MAX:240kW)  
6-channel 200kW charging station : Supports 6-channel dynamic power distribution and dynamic allocation in 30kW power units  
Bus garage charging station : Construction of charging station and operating solutions for public bus garage

## Best Solution for Business

- ✓ Fast, slow charger products and systems
- ✓ Smart Charging Solution
- ✓ Simultaneous support of OCPP (1.6/2.0.1)
- ✓ Power control, IoT-intelligent G/W
- ✓ Immediate Charge (PnC) Plug & Charge Service



# Charger Smart Charging System

We provide the most effective customized solutions and services to individuals and companies with charger manufacturing technology and operational technology know-how.

## AC slow charger smart charging system

Required Power is reduced to less than 1/4, dramatically reducing electricity bills



7kW power distribution is available per each gateway

Field installation photo

## DC slow charger smart charging system

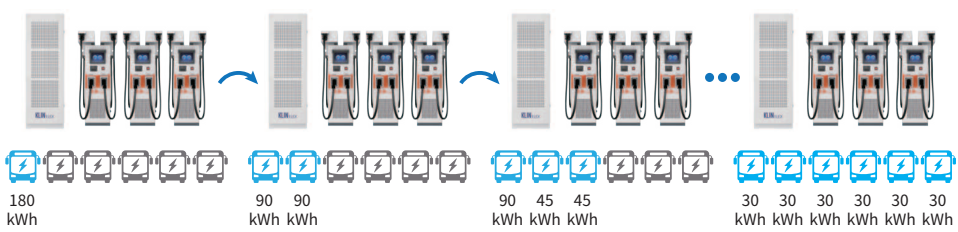
Electricity bills are drastically saved by reducing the peak time charging into 10% or less.

The following fast(DC) smart charging technology is applied to this 4MW charging

- ✓ Power Sharing & Give-all-to-One System
- ✓ PnC Authorization based on MAC address
- ✓ Electric reel type Cable/Connector auto retractor
- ✓ Open Linux OS that is easy to maintain
- ✓ OCPP base operation, cost saving management etc.

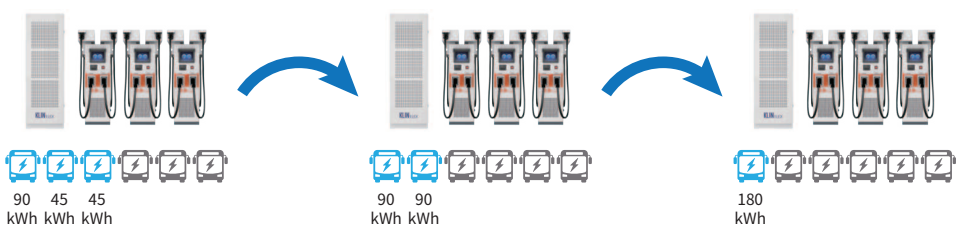
### Power Sharing (using 198kW Power Bank)

Power bank power is distributed according to the set amount.



### Give-all-to-One (using 198kW Power Bank)

If a vehicle charging is complete, power is sequentially added to the remaining charging vehicles.



## Major Customers

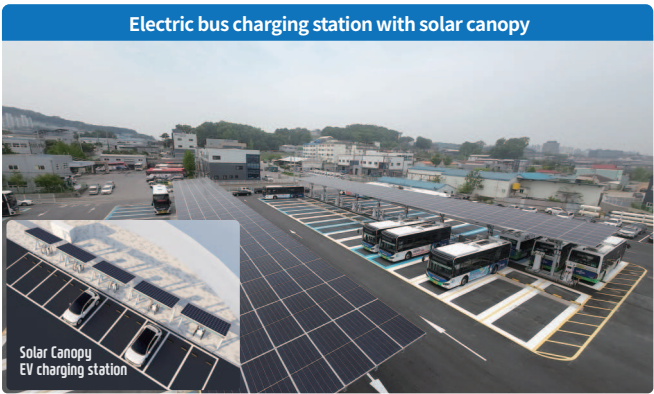
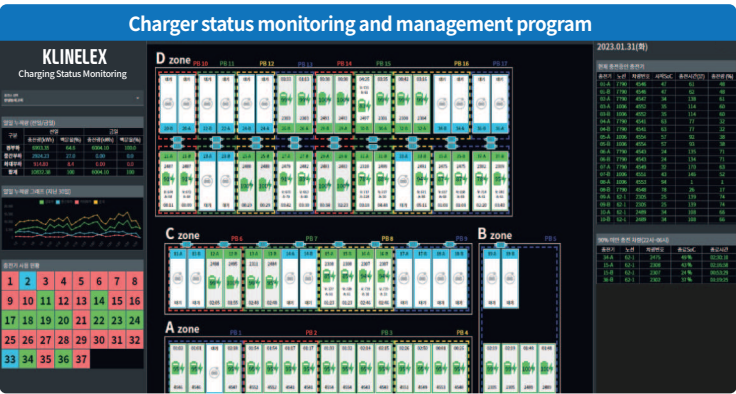


# Operation Management Solution

Klinelex Co., Ltd. solves complex EV charger selection, charging station construction and management at once.

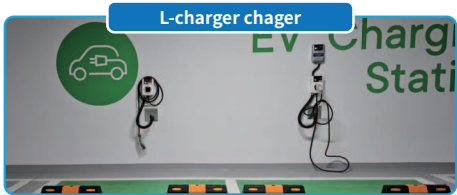
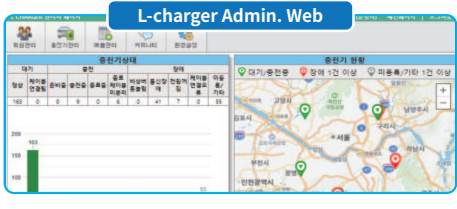
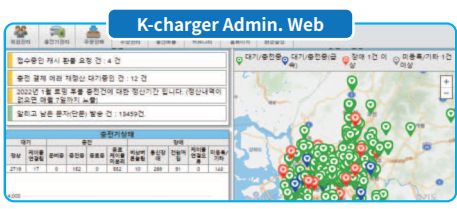
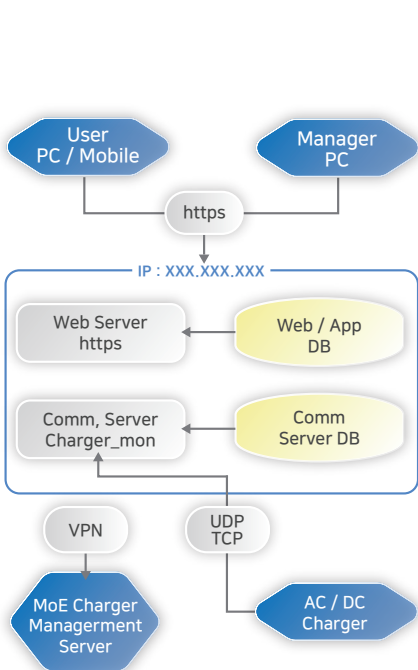
## Charging management system (CSMS)

- ☑ Provides GUI-based operation management system
- ☑ Check charging status/send change status in the future
- ☑ Administrator and non-administrator can be separated/charging start and charging end can be done remotely



## Integrated operating system - smartphone application & server

- ☑ Environment Corporation charging infrastructure construction and operation business (K-charger & KEV)
- ☑ LH new complex smart charging station construction and operation (L-charger & LEV)
- ☑ Enterprise/ government office / individual billing/control operation agency





# Fire Prevention Charger

**Klinelex Co., Ltd. leads domestic electric vehicle charger technology.**

We have developed a safe electric vehicle charging technology that will run at full speed in 2024 without worrying about electric vehicle battery fire in the charger.

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## Battery overcharge prevention PLC applied, Automatically stop charging at battery levels of 95%



### Provides a safe charging environment without battery fire (AC, DC)

Klinelex charger technology prevents overcharging of the batteries of all electric vehicles (CCS, NACS) in operation in Korea. Charging ends at 95%, providing a safe charging environment.



### Real-time SoC display to show battery charge status

The battery charge status is displayed at all times so electric vehicle owners can charge with confidence, and anyone can check the battery charge level.



### Supports safe charging without fire even in underground parking lots

The Klinelex charger limits the battery charge amount for all existing electric vehicles (CCS, NACS), so electric vehicle owners or non-users Everyone can install a charger in an underground parking lot with peace of mind.



### Eliminate the inconvenience of payment with PnC (Plug and Charge)

The 2024 Klinelex charger allows you to charge your electric vehicle by simply connecting it to the charger without the inconvenience of payment.



### Designing a safe future with continuous research and cutting-edge technology

Klinelex Co., Ltd. provides cutting-edge technology through continuous research and development, and through scientific innovation. We are making the electric vehicle charging industry a safe and sustainable means of transportation for the future.

# AC slow charger

Klinelex 's slow charger is compatible with all vehicle models and is IP45 rated and dustproof. It also supports economical use by maintaining standby power, and allows you to recharge with confidence for a long time without waiting time.

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	7kW Ultra-compact charger KL60-C	7kW slow charger KL46-C	14kW slow charger KL4214-CC
Installation Type	Wall mount type (excl. Stand)	Wall mount type (excl. Stand)	Wall mount type (excl. Stand)
Size/Weight	175(W)×250(H)×92(D) mm, 3.6kg	270(W)×340(H)×140(D) mm, 6kg	300(W)×365(H)×174(D) mm, 10kg
Input	220V/60Hz	220V/60Hz	220V/60Hz
Output	220V/32A (7kW)	220V/32A (7kW)	7kW+7kW Simultaneous Charging
Screen	LED Display	LED Display	LED Display
Features	<ul style="list-style-type: none"><li>· Automatic detection of charging plugconnection</li><li>· Display of charging progress status information</li><li>· Convenient to use with the charging gun located on the front</li><li>· Low standby power</li><li>· Charging safety functions such as overcurrent and leakage blocking</li><li>· Excellent durability design ensures long-term safe charging</li><li>· 95% blocking of SoC (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>	<ul style="list-style-type: none"><li>· Automatic detection of charging plugconnection</li><li>· Display of charging progress status information</li><li>· Convenient to use with the charging gun located on the front</li><li>· Low standby power</li><li>· Charging safety functions such as overcurrent and leakage blocking</li><li>· Excellent durability design ensures long-term safe charging</li><li>· 95% blocking of SoC (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>	<ul style="list-style-type: none"><li>· Automatic detection of charging plugconnection</li><li>· Display of charging progress status information</li><li>· Convenient to use with the charging gun located on the front</li><li>· Low standby power</li><li>· Charging safety functions such as overcurrent and leakage blocking</li><li>· Excellent durability design ensures long-term safe charging</li><li>· 95% blocking of SoC (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>

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### 11kW slow charger

KL4311-C

### 22kW slow charger

KL4322-CC

Installation Type	Wall mount type (excl. Stand)	Wall mount type (excl. Stand)
Size/Weight	270(W) × 340(H) × 140(D) mm, 8.5kg	300(W) × 365(H) × 174(D) mm, 13.5kg
Input	220V/60Hz	220V/60Hz
Output	220V/50A (11kW)	11kW(50A) + 11kW(50A) Simultaneous Charging
Screen	LED Display	LED Display

#### Features

- Automatic detection of charging plugconnection
- Display of charging progress status information
- Convenient to use with the charging gun located on the front
- Low standby power
- Charging safety functions such as overcurrent and leakage blocking
- Excellent durability design ensures long-term safe charging
- 95% blocking of SoC (fire prevention function)
- Solving the inconvenience of payment by charging PnC right away

- Automatic detection of charging plugconnection
- Display of charging progress status information
- Convenient to use with the charging gun located on the front
- Low standby power
- Charging safety functions such as overcurrent and leakage blocking
- Excellent durability design ensures long-term safe charging
- 95% blocking of SoC (fire prevention function)
- Solving the inconvenience of payment by charging PnC right away

# Integrated DC Fast Charger

Klinelex's fast charger is compatible with all domestic and foreign models and is IP45 grade water and dustproof. It also supports safe and efficient charging by applying PLC communication stability and electric reel patents.

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	50kW Fast Charger	100kW charger for the transportation vulnerable	100kW Fast Charger
Installation Type	Electric Reel or Spring Balance	Electric Reel or Spring Balance	Electric Reel or Spring Balance
Size/Weight	500(W)×1,500(H)×700(D) mm, 180kg	510(W)×1,650(H)×700(D) mm, 230kg	510(W)×1,650(H)×700(D) mm, 230kg
DC Output	50kW(MAX: 500 Vdc, 125 Adc)	MAX 1000Vdc, 200Adc(2ch)	MAX 1000Vdc, 200Adc(2ch)
Output power	50kW (95%) Features	100kW (95%) Features	100kW (95%) Features
Screen	LCD Touch Screen	LCD Touch Screen	LCD Touch Screen
Features	<ul style="list-style-type: none"><li>· Safety funtion (Temperature/Short-circuit detection and blocking)</li><li>· Prevention of Charger ↔ EV communication error</li><li>· Available by sea with sea breeze</li><li>· Charging cable automatic alignment device convenient for the elderly</li><li>· Safe charging for a long time with internal temperature control</li><li>· SoC control overcharge prevention (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>	<ul style="list-style-type: none"><li>· Safety funtion (Temperature/Short-circuit detection and blocking)</li><li>· Prevention of Charger ↔ EV communication error</li><li>· Available by sea with sea breeze</li><li>· Charging cable automatic alignment device convenient for the elderly</li><li>· Safe charging for a long time with internal temperature control</li><li>· SoC control overcharge prevention (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>	<ul style="list-style-type: none"><li>· Safety funtion (Temperature/Short-circuit detection and blocking)</li><li>· Prevention of Charger ↔ EV communication error</li><li>· Available by sea with sea breeze</li><li>· Charging cable automatic alignment device convenient for the elderly</li><li>· Safe charging for a long time with internal temperature control</li><li>· SoC control overcharge prevention (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>



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### 200kW Fast Charger

### 200kW Fast Charger (new 24-year-old model)

### 350kW Fast Dispenser

	200kW Fast Charger	200kW Fast Charger (new 24-year-old model)	350kW Fast Dispenser
<b>Installation Type</b>	Electric Reel or Spring Balance	Stand type (Spring Balance)	Stand type (Spring Balance)
<b>Size/Weight</b>	900(W)×2,035(H)×700(D) mm, 400kg	800(W)×2,000(H)×700(D) mm, 400kg	750(W)×1750(H)×300(D) mm, 200kg
<b>DC Output</b>	MAX 1000Vdc, 200Adc(2ch)	MAX 1000Vdc, 250Adc(2ch)	1000V, 400Adc
<b>Output power</b>	200kW Features	200kW	350kW (Refrigerator Circulating DP)
<b>Screen</b>	LCD Touch Screen	LCD Touch Screen	LCD Touch Screen
<b>Features</b>	<ul style="list-style-type: none"> <li>· Safety funtion (Temperature/Short-circuit detection and blocking)</li> <li>· Prevention of Charger ↔ EV communication error</li> <li>· Available by sea with sea breeze</li> <li>· Charging cable automatic alignment device convenient for the elderly</li> <li>· Safe charging for a long time with internal temperature control</li> <li>· SoC control overcharge prevention (fire prevention function)</li> <li>· Solving the inconvenience of payment by charging PnC right away</li> </ul>	<ul style="list-style-type: none"> <li>· Safety funtion (Temperature/Short-circuit detection and blocking)</li> <li>· Prevention of Charger ↔ EV communication error</li> <li>· Available by sea with sea breeze</li> <li>· Safe charging for a long time with internal temperature control</li> <li>· SoC control overcharge prevention (fire prevention function)</li> <li>· Solving the inconvenience of payment by charging PnC right away</li> </ul>	<ul style="list-style-type: none"> <li>· Safety funtion (Temperature/Short-circuit detection and blocking)</li> <li>· Prevention of Charger ↔ EV communication error</li> <li>· Available by sea with sea breeze</li> <li>· Safe charging for a long time with internal temperature control</li> <li>· SoC control overcharge prevention (fire prevention function)</li> <li>· Solving the inconvenience of payment by charging PnC right away</li> </ul>

# PowerBank · Dispenser

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	200kW Power Bank	200kW Dispenser	60kW or 120kW Slim type Dispenser
Installation Type	Stand type	Electric Reel or Spring Balance	Wall mount type or Stand type
Size/Weight	700(W)×2,000(H)×900(D) mm, 500kg	510(W)×1,650(H)×700(D) mm, 230kg	412(W)×1,630(H)×200(D) mm, 60kg
DC Output	MAX 1000 Vdc, 240 Adc	MAX 1000Vdc, 200Adc(2ch)	MAX 150~1000Vdc, 150Adc × 1port
Output power	240kW	200kW	60kW or 120kW
Screen	-	LCD Touch Screen	8 inch LCD Touch Screen
Features	<ul style="list-style-type: none"><li>· Safety funtion (Temperature/Short-circuit detection and blocking)</li><li>· Prevention of Charger ↔ EV communication error</li><li>· Available by sea with sea breeze</li><li>· Smart power distribution function</li><li>· Economical power usage operation</li><li>· Supports all dispensers simultaneous charging</li></ul>	<ul style="list-style-type: none"><li>· Safety funtion (Temperature/Short-circuit detection and blocking)</li><li>· Prevention of Charger ↔ EV communication error</li><li>· Available by sea with sea breeze</li><li>· Safe charging for a long time with internal temperature control</li><li>· SoC control overcharge prevention (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>	<ul style="list-style-type: none"><li>· Safety funtion (Temperature/Short-circuit detection and blocking)</li><li>· Prevention of Charger ↔ EV communication error</li><li>· Available by sea with sea breeze</li><li>· Safe charging for a long time with internal temperature control</li><li>· SoC control overcharge prevention (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>

# DC Dispenser

## Power sharing and give-all-to-one

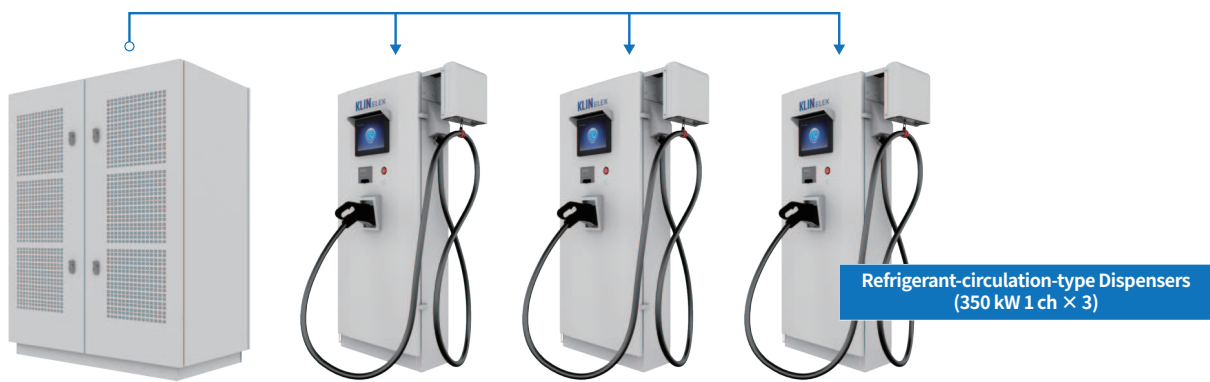
1:4 Power sharing and give-all-to-one



200kW power bank + 200kW dispenser 4 channels

Installation Type	1:4 Smart Charging Power Distribution Type
Size	700(W)×2,000(H)×900(D) mm / 750(W)×1,900(H)×510(D) mm
Weight	Approx. 500kg / Approx. 180kg
DC Output	200kW(1000Vdc, 200A dc × 4ch)
Features	Monitoring the status of a multiple chargers   Safety function (Detection and blocking of temperature/short-circuit) Prevention of Charger ↔ EV communication error   Blocking of salt and dust   Give-all- to-one charging function

1:3 Power sharing and give-all-to-one



400kW power bank + 350 kW dispenser 3 channels

Installation Type	1:3 Smart Charging Power Distribution Type
Size	900W × 2,000H × 900D / 750W × 1,750H × 300D mm (Refrigerant-circulation type DP)
Weight	Approx. 1,100 kg / Approx. 200 kg (Refrigerant-circulation type DP)
DC Output	400 kW/1000 V, 350 kW (Refrigerant-circulation type DP)
Features	Monitoring the status of a multiple chargers   Safety function (Detection and blocking of temperature/short-circuit) Prevention of Charger ↔ EV communication error   Blocking of salt and dust   Give-all- to-one charging function

# Global Charger



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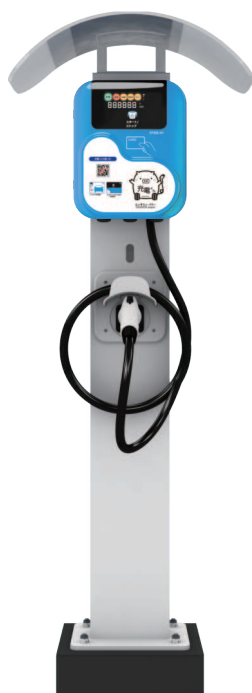
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	7kW Ultra-compact charger	11kW slow charger	22kW slow charger
Installation Type	Wall mount type (excl. Stand)	Wall mount type (excl. Stand)	Wall mount type (excl. Stand)
Size/Weight	175(W)×250(H)×92(D) mm, 3.6kg	300(W)×365(H)×174(D) mm, 9kg	300(W)×365(H)×174(D) mm, 9.3kg
Input	220V/60Hz	400V/16A	400V/32A
Output	220V/32A (7kW)	11kW	22kW
Screen	LED Display	LED Display	LED Display
Features	<ul style="list-style-type: none"><li>· Automatic detection of charging plugconnection</li><li>· Display of charging progress status information</li><li>· Convenient to use with the charging gun located on the front</li><li>· Low standby power</li><li>· Charging safety functions such as overcurrent and leakage blocking</li><li>· Excellent durability design ensures long-term safe charging</li><li>· 95% blocking of SoC (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>	<ul style="list-style-type: none"><li>· Automatic detection of charging plugconnection</li><li>· Display of charging progress status information</li><li>· Convenient to use with the charging gun located on the front</li><li>· Low standby power</li><li>· Charging safety functions such as overcurrent and leakage blocking</li><li>· Excellent durability design ensures long-term safe charging</li><li>· 95% blocking of SoC (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>	<ul style="list-style-type: none"><li>· Automatic detection of charging plugconnection</li><li>· Display of charging progress status information</li><li>· Convenient to use with the charging gun located on the front</li><li>· Low standby power</li><li>· Charging safety functions such as overcurrent and leakage blocking</li><li>· Excellent durability design ensures long-term safe charging</li><li>· 95% blocking of SoC (fire prevention function)</li><li>· Solving the inconvenience of payment by charging PnC right away</li></ul>

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## 6kW slow charger

## 10kW slow charger

Installation Type	Wall mount type (excl. Stand)	Wall mount type (excl. Stand)
Size/Weight	275(W)×340(H)×140(D) mm, 8.5kg	275(W)×340(H)×140(D) mm, 8.5kg
Input	MAX 200V, 30A	MAX 200Vdc, 50A
Output	6kW	10kW
Screen	LED Display	LED Display

### Features

- Automatic detection of charging plugconnection
- Display of charging progress status imformation
- Convenient to use with the charging gun located on the front
- Low standby power
- Charging safety functions such as overcurrent and leakage blocking
- Excellent durability design ensures long-term safe charging
- 95% blocking of SoC (fire prevention function)
- Solving the inconvenience of payment by charging PnC right away

- Automatic detection of charging plugconnection
- Display of charging progress status imformation
- Convenient to use with the charging gun located on the front
- Low standby power
- Charging safety functions such as overcurrent and leakage blocking
- Excellent durability design ensures long-term safe charging
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- Solving the inconvenience of payment by charging PnC right away



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## 100kW Fast Charger

## 120kW Fast Charger

Installation Type	Stand type	Stand type
Size/Weight	830(W)×1,700(H)×300(D) mm, 200kg	500(W)×700(H)×1,500(D) mm, 220kg
DC Output	150~1,000Vdc, 200Adc × 1port	100Vdc
Output power	100kW	120kW
Screen	LCD Touch Screen	LCD Touch Screen

### Features

- Safety function (Temperature/Short-circuit detection and blocking)
- Prevention of Charger ↔ EV communication error
- Available by sea with sea breeze
- Charging cable automatic alignment device convenient for the elderly
- Safe charging for a long time with internal temperature control
- SoC control overcharge prevention (fire prevention function)
- Solving the inconvenience of payment by charging PnC right away

- Safety function (Temperature/Short-circuit detection and blocking)
- Prevention of Charger ↔ EV communication error
- Available by sea with sea breeze
- Charging cable automatic alignment device convenient for the elderly
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- SoC control overcharge prevention (fire prevention function)
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