Charge the World with X

## XCHARGE



Electrify our future together

#### Beijing X-CHARGE Technology Co., Ltd.

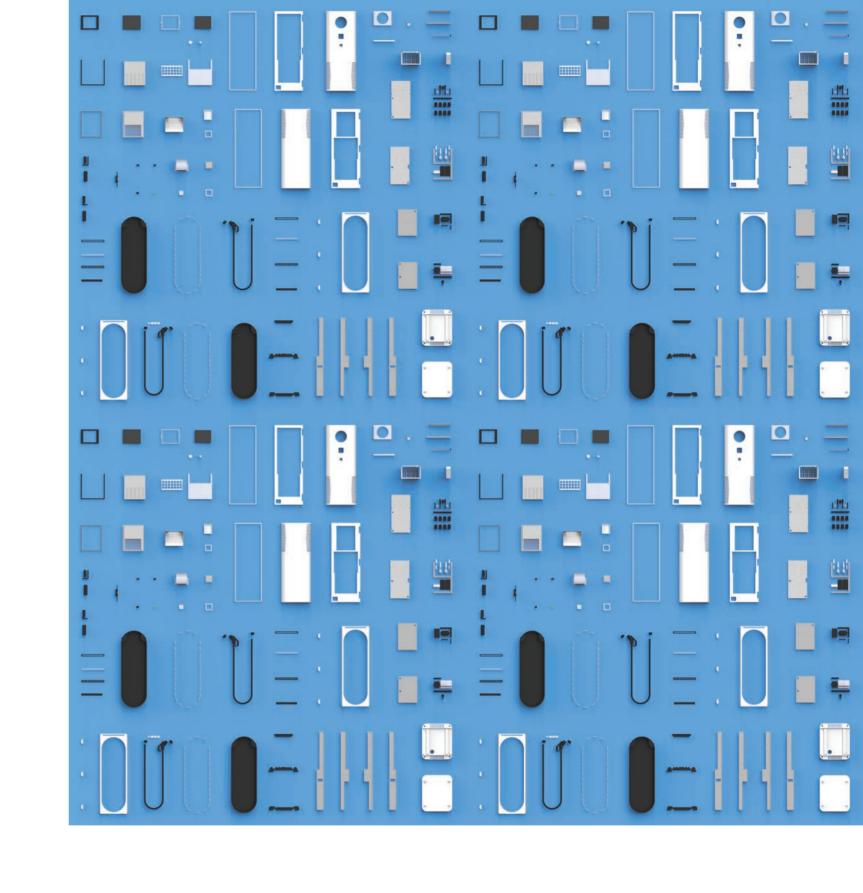
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Official Website



"We offer 'one stop' charging solutions for the upcoming e-mobility world. Charging shall no longer be a hindrance. Let the charging services accompany our march towards the electric future."

---- Ray Ding, CEO, XCharge

#### **XCHARGE**

Industry Leader of EV Charging Solution

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## Revolutionary IoT-based Charging Service

With its rich industry experience and profound insight into future energy reform, XCharge leads the new IoT charging service trend of "smart hardware + XCloud-based software" with subversive design and concept, and strives to help all kinds of charge point operators (CPOs) to optimize their operating costs, improve operational efficiency, and maximize the profit of their charging business.

Since its establishment on May 4, 2015, XCharge has been committed to providing industry-leading electric vehicle charging facilities and integrated energy solutions. The company owns a series of smart chargers, including the Red Dot Award-winning C2 and C6, and the future-proof 360 kW super charging station C9, all of which can be connected to the XCloud-based operating platform for remote station management. To date, XCharge has deployed almost 30,000 charging devices nationwide, together with strong partners, including some of the most esteemed companies in the industry, such as State Grid, Baidu, GLP and DiDi.

In 2017, by establishing its wholly owned subsidiary XCharge Europe GmbH in Hamburg, Germany, the company officially launched its overseas business. In the future, XCharge aims at sharing its advanced charging solutions with more countries and regions.

XCharge, simpler charging story makes a better electric life.



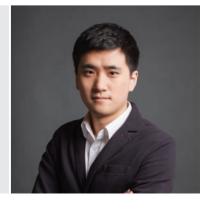
#### Ray Ding CEO & Founder

Responsible for product roadmapping and company strategy development.

Ray graduated from Beijing Jiaotong University with a bachelor's degree in Computer Science. Having worked with Tesla (China), China Automotive News, Electric Beijing, and Google (China), he has gained profound experience from the Internet, media and automotive industries, as well as the construction and operation of commercial EV charging stations.

#### Simon Hou COO & Co-Founder

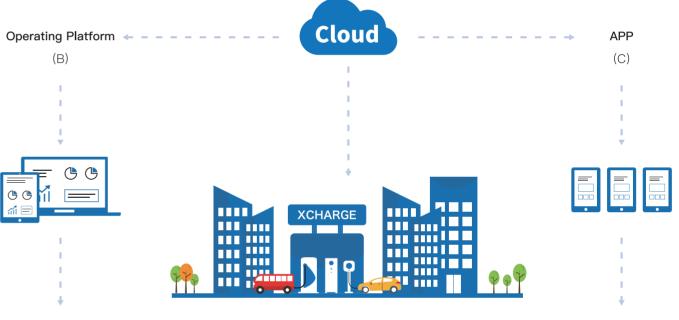
Responsible for strategic planning, global business development, and management. Simon graduated from University of Toronto with a bachelor's degree in Business Administration in Finance. Prepared with extensive experience in the automotive industry from Tesla (China) and Mercedes—Benz (Beijing), he holds a very strategic approach to distinguish XCharge from its peers in both China and abroad, and is skilled at using economic models for business analysis and management.







## Smart Hardware + XCloud-based Software "One Stop" Charging Service



Station "Unmanned" Management
Remote Diagnosis/Upgrades
User Group/Time/Price Management
Load Management
Online Marketing/Business Intelligence

Navigation
Remote Reservation and Queueing
Real-time Price
Payment Initiation (App/NFC/RFID/VIN)
Order Management

#### **Key Competitiveness**

XCharge is a provider of industry-leading smart charging solutions. Its "smart hardware + XCloud-based software" system has penetrated the entire process of EV charging and station management, responding with effective solution to every possible problem. All chargers are equipped with Cortex-A8 smart chip and Android-based operating system. By allowing real-time communication and data transfer with XCloud-based operating platform, advanced OTA functions such as remote product control and diagnosis, firmware upgrades, and unattended charging station operation can all be achieved

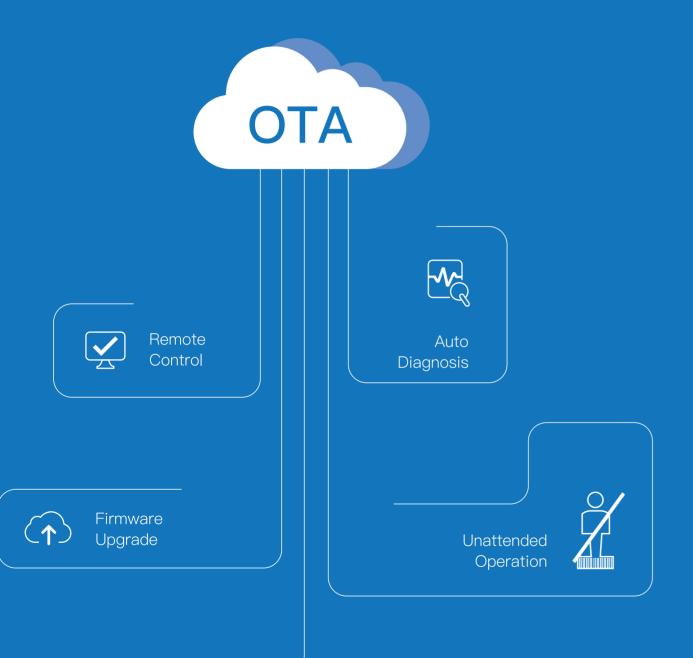
Instead of just manufacturing and selling charging stations, XCharge offers customizable "one stop" charging services to enable more profitable business models, better preparing its business clients for the exciting EV era.



Smart, Connected, Efficient, Economic

#### XCloud, Easier Shared Charging

Supported by SOA architecture, large-scale cluster technology and IoT system, XCloud develops a revolutionary yet easier shared charging concept; performing real-time communication and data transfer with the charging devices, completing remote control and management of charging services, devices and processes.





Real-time communication and data transfer between charging stations and the operating platform

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## Operating Platform (PC/Mobile)



#### **Delicacy Management**

- Bind to XCharge's WeChat service account, define and set up privilege levels
- Manage chargers by site, model, or device
- Supportive financial management tools



#### Flexible Operation

- · Control opening hours, service prices, and user accessibility
- Connect to the mainstream navigation platforms to increase traffic
- Parking management and delay fee mechanism to improve turnover and profitability
- Ad push and online marketing



#### Real-time Monitoring & Protection

- Omnidirectional device monitoring and control over the air
- 24/7 alert system, automatic fault handling
- Real-time diagnosis and log backup



#### Data Insight

- · Multidimensional management and statistical analysis of operational data
- Resource optimization and revenue forecasting, supporting business decisions



#### **Openness**

- Provide Open API
- Support interconnection standards
- Third-party accessibility is allowed

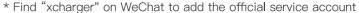






## APP/WeChat Services

- Charger availability checking and navigation
- Real-time price checking
- Reservation and queueing
- Order management
- Payment and charging process initiation (App/NFC/RFID/VIN)



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Red Dot Award-winning Designs



**10**<sub>min</sub>

Ultra-fast Charging



360<sub>kw</sub>

Massive Power Output



Product Portfolio

C1/C2/C4/C6/C6S/C9/CEIC

Red Dot Award-winning Designs
Polished Design, Reliable Performance



# C1

## AC Wallbox

• Economic AC charging for large-scale deployment by EV manufacturers and real estate developers



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## Features



#### Simple Design

- User–friendly design of plug holder keeps the cable from kinking
- Wirings are concealed for safety
- Combine functionality and aesthetics



#### Cost-effective Choice

• Low cost with high performance



#### **High Compatibility**

- Compatible with most EVs on the road
- 2G/LAN enabled



Model	Dimensions	Installation	Post	Input Voltage	Supported Connector Type	Output Power	Screen
C115	220x126x400 mm	Wall-mounted	Optional	220 Vac ±20%	GB/T Case C	7 kW	4.3-inch Capacitive Touchscreen

Communication Standard	Operating System	Operating Temperature	Protection Level	Safety Protection
2G/LAN	RTOS	−20 ~ 55°C	IP54	Type A leakage protection; over/undervoltage, overload, short circuit, reverse connection, ground- ing, over-temperature protection

# **C2**

## AC Wallbox

• Smart AC fast charging for assigned and shared parking in residential and commercial areas

in residential and commercial areas

• Red Dot Award 2016: "best of the best"

• C2EU (Type 2) is available for the European market

reddot award 200 hest of the best



### Features









#### Android OS

- Incorporated ARM processor ensures smooth user experience
- Scan QR code, swipe NFC card or use mobile App to initiate or stop a charging session
- Advanced OTA functions include remote software upgrades, auto diagnosis and push advertising



#### **Smart Parking Management**

- Built-in radar detects and reads parking status
- Delay fee mechanism increases parking turnover



#### **Customizable Appearance**

• IML technology-supported customization available upon request

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## Specifications

Model	Dimensions	Installation	Post	Input Voltage	Cable Length	Supported Connector Type	Output Power	Screen
C202	290x290x60	Wall/Post-	Optional	220 Vac ±20%	5 m	CP/T	7 kW	9.7-inch
C204	mm	mounted	Орнона	380 Vac ±15%	5 111	GB/T	21 kW	HD Screen

Communication Standard	Operating System	Timer	Operating Temperature	Protection Level	Safety Protection	Payment Method
3G/4G /LAN	Android	Online Setting	−20 ~ 50°C	IP54	Over/undervoltage, overload, short circuit, reverse connection, grounding, over-temperature protection	NFC/RFID/ Mobile Payment

### C2EU

Model	Installation	Post	Cable Length	Supported Connector Type	Output Power	Screen	Communication Protocol	Communication Standard
C2EU Standard C2EU Advanced	Wall/Post– mounted	Optional	3~5 m	Type 2	7 kW 22 kW	9.7-inch HD Screen	OCPP 1.6 Jason/ OCPP 2.0/ XCharge Protocol	2G/3G/4G/ LAN/WiFi

Operating System	Timer	Operating Temperature	Protection Level	Safety Protection	Payment Method	Standards
Android	Online Setting	−25 ~ 50°C	IP54	Over/undervoltage, overload, short circuit, grounding, over-temperature protection	NFC/RFID/ Mobile Payment	IEC 61851, EN 301489, EN 300330, EN 301908, EN 301511, EN 50385,

**C4** 

## Dual-plug AC Charger

• AC fast charging for electric passenger cars and logistics vehicles



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### Features



#### **High Power Output**

- 84 kW massive power output
- Max. power output/plug up to 42 kW, close to that of normal DC chargers



#### Safe and Reliable

- Real-time monitoring of cabinet temperature, and terminate charging session when overheated
- RTC, leakage protection and door open alarm ensure the safety



#### **Delicate Design**

- Anodized aluminum alloy surface
- 10.1-inch HD anti-glare touchscreen
- Creative technology with Android OS offers a unique interactive experience



Model	Dimensions	Installation	Input Voltage	Power Allocation	Cable Length	Supported Connector Type	Output Power	Screen
C403	400X360X1550 mm	Floor- mounted		Dual-plug, Smart Distribution		GB/T	84 kW	10.1-inch HD Anti-glare Touchscreen

Communication Standard	Operating System	Operating Temperature	Protection Level	Safety Protection	Payment Method
4G/LAN	Android	−20 ~ 50°C	IP54	Type A leakage protection, over/undervoltage, overload, short circuit, reverse connection, grounding, over-temperature protection	NFC/RFID/ Mobile Payment

## C4EU

## AC Dual-Charger

- 2 Type 2 & 1 Schuko sockets
- Ideal charging solution for intercity travels







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### Features



#### High Compatibility for Intercity Travels

- Type 2 sockets for electric cars
- Schuko socket for three wheelers and scooters



#### Improve User Experience from the Details

- Socket height of 0.8/1.2m, handicap accessible
- Day & night modes and night illumination



#### **Smart & Efficient**

- Load management system
- Smart power distribution among sockets
- RCD and AC meter with MID certificate



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Model	Dimensions	Installation	Input Voltage	Power Allocation	Supported Connector Type	Output Power	Screen	Communication Standard
C4EU	490x360x1565 mm		230 V <sub>AC±</sub> 10% 50 Hz 400 V <sub>AC±</sub> 10% 50 Hz	Smart	Type 2 Schuko	44 kW	10.1-inch HD Touchscreen	2G/3G/4G/ LAN/WIFI

Communication Protocol	Operating System	Operating Temperature	Protection Level	Safety Protection	Payment Method
OCPP 1.6 Jason/ OCPP 2.0/ XCharge Protocol	Android	−25 ~ 50°C	IP54	Over/undervoltage, overload, short circuit, anti-access, earth leakage, lightning, overheat protection	NFC/RFID/ Mobile Payment

# **C6**

## Smart DC Charger

- Superfast DC charging for commercial and public charging stations
- Red Dot Award 2016



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### Features





#### Visualized Communication

- 15-inch full-color HD screen displays the respective charging status for each EV plugged in
- 2x150 RGB-LED lights allow users to view charging process from a distance or in a dark environment



#### **Smart Power Distribution**

- Dual power switching modules optimize the real-time output power from either plug
- Smart and efficient power distribution to meet dynamic charging demand according to the number of vehicles, connection time, priority level, battery status, and other information



#### 96% Power Conversion Efficiency

- Equipped with built-in power conversion module
- Close to the physical limit and highest in the industry



#### Low Energy Consumption vs. High Stability

- Low standby power consumption at 1/3 of industry average
- High stability with abnormal order rate lower than 5%

## Specifications

Model	Dimensions	Installation	Input Voltage	Power Allocation	Cable Length	Supported Connector Type	Output Power	Screen
C6	600x720x1750 mm	Floor- mounted	380 Vac ±15%	Dual–plug, Smart Distribution	5 m	GB/T	60/120 kW	15-inch HD Screen

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	nunication andard	Operating System	Operating Temperature	Cooling System	Protection Level	Safety Protection	Payment Method
40	B/LAN	Android	−20 ~ 50°C	Advanced Centrifugal Ventilator	IP54	Over/undervoltage, overload, short circuit, reverse connection, grounding, over-temperature protection	NFC/RFID/ Mobile Payment

### C6EU

Model	Dimensions	Input Voltage	Cable Length	Output Power	Supported Connector Type	Screen	Communication Protocol	Communication Standard
C6EU	720x600x1750 mm	400 Vac ±10% 50 Hz	3.5/5/7 m	80/120/160 kW	CCS CHAdeMO	15-inch HD Screen/ 15-inch HD Touchscreen	OCPP 1.6 Jason/ OCPP 2.0/ XCharge Protocol	2G/3G/ 4G/LAN

Operating System	Protection Level	Operating Temperature	Cooling System	Safety Protection	Payment Method	Standards
Android	IP54	−25 ~ 50°C	Advanced Centrifugal Ventilator	Over/undervoltage, overload, short circuit, anti-access, earth leakage, lightning, over-temperature protection	NFC/RFID/ Mobile Payment	IEC 61841, IEC 61851, IEC 62196, ISO 15118, DIN 70121

# C<sub>6</sub>S

## Smart DC Charger

• Superfast DC charging for commercial and public charging areas with compact space







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### Features



#### Modern Design

- Slim body integrated with large touchscreen and embedded cable collection system
- Improved product quality and user experience



#### **Visualized Communication**

- 10.1-inch HD touchscreen shows real-time charging status
- LED indicators on the side allow user to monitor charging process even from a distance



#### Powerful but Slimmer

- Equipped with high-conversion-rate module
- Single plug output up to 160 kW
- 68% of the size of C6, more space-saving



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Model	Dimensions	Installation	Input Voltage	Supported Connector Type	Cable Length	Output Power	Screen
C6S	425x720x1680 mm	Floor- mounted	380 Vac ±15%	GB/T	5 m	60/120/160 kW	10.1-inch Touchscreen

Communication Standard	Operating System	Operating Temperature	Cooling System	Protection Level	Safety Protection	Payment Method
4G/LAN	Android	−20 ~ 50°C	Advanced Centrifugal Ventilator	IP54	Over/undervoltage, overload, short circuit, anti-access, earth leakage, lightning, over-temperature protection	NFC/RFID/ Mobile Payment

**C9** 

## Satellite DC Supercharger

- Ultra-fast DC charging station designed to meet future high power charging demand
- Charge for 10 min and you're good to go!
- · Ideal for dealerships, central business and public charging areas



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### Features



#### Innovative Conjoined Design

- Space-saving, stable, convenient
- 1 PowerBOX connects up to 6 Satellites



#### Ultra-fast Charging

- Modular design allows a maximum power output of 360 kW, 37% higher than other advanced super charging stations in the market.
- Smart power distribution among satellite chargers to meet the real-time charging demand according to the number of vehicles, connection time, priority level, battery status, and other information



#### **Upgraded Charging Experience**

- Plug & Charge, automatic queuing system, integrated LED indicators on the side
- Shorten charging time to around 10 min
- Improved charging experience and operational efficiency of the whole station



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Model	Dimensions	Combination Style	Installation	Input Voltage	Power Allocation	Supported Connector Type	Maximum Output Power
C9 PowerBOX	720x720x1860 mm	4.5	Floor- mounted	380 Vac ±15%	Smart Distribution		360 kW
C9 Satellite	980x370x1800 mm	1 PowerBOX + 2/6 Sate <b>ll</b> ites				GB/T	180 kW
C9 Mini Satellite	360x207x1600 mm					GD/ I	100 KW

LED Indicator	Communication Standard	Operating System	Operating Temperature	Cooling System	Protection Level	Safety Protection	Payment Method
Operating Status				Advanced Centrifugal Ventilator		Over/undervoltage,	N 4 - I- 11 -
Power and Charging Status	4G/LAN	Android	-20 ~ 50°C		IP54	overload, short circuit, anti-access, current leakage, lightning, over-temperature protection	Mobile Payment/ VIN

# CEIC

## Charger Energy Internet Controller

Make "one-stop" operation possible to every charging station
 No requirement for R&D input, up to 80% cost savings



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#### Features



## Standardized Interface & Modular Structure

- Design your own charger in 1 day with provided interface standards and component catalogs
- Flexible choice of sizes can fit into either a single body or satellite



## Localized Service & Reliable Maintenance

- XCloud-based operating platform realizes "unattended" management, lowers the demand for maintenance staff and component storage
- Nationwide maintenance services provided by XCharge are accessible at extra cost



## High Compatibility & Real-time Demand Response

- Meet the upgraded requirements of charging power, motherboard, as well as XCloud-based operating platform
- Provide a variety of service interfaces including App, WeChat, NFC, etc., supporting secondary develop ment on customer—end



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Model	Dimensions	Installation	Key Configuration	Multimedia	Input Voltage	Input/Output	Fieldbus
CEIC	192x124x63 mm	Fastened/ Guideway	800 000 600	24-bit full color touchscreen, max resolution 1024x768, external stereo speaker, built-in buzzer	12 VDC with reverse connection protection	Multiple Optocoupler Input, Relay Output	RS232 RS485 CAN

Rated Power	Data Security	Communication Standard	Extensions	Humidity		orage perature
≤ 30 W, power down hold time ≥15 s, 5 V power supply for card reader	ESAM & PSAM	4G, Dual SIM Single Standby 2–Port 100 Mbps Ethernet	Dual mode GPS, Bluetooth 4.1, WiFi, RTC SD card (64 GB)	5% ~ 95%	−20°C ~ 70°C -20°C	~ 85℃



# Operating Revenue

Revenue Forecast + Additional Income
Industry-record Return on Investment (ROI)
Industry-leading Performance



25 3000 kWh

Smart DC Charger C6 Power Dispensed per Hour

hrs
Power Dispensed per Day

0.8 RMB/kWh Service Fee



Electric Passenger Vehicles

 ${\color{red} 60_{\text{kWh}}}$  Battery Capacity per Vehicle



Assuming all chargers at the station are smart DC charger C6 (120 kW) with dual plug serving two EVs at the same time.



Exemplar EV model requires 60 kW of power input.

Item	Electricity Price	Service Fee	Share of Revenue by XCharge	Share of Revenue by CPO	Average Power Output
Unit	RMB/kWh	RMB/kWh	%	%	kW
Value	1.0	0.8	0	100	120

#### Operating Revenue (RMB)

Charging Hours/	Operating		No. of Chargers/Station	
Charger/Day	Period	5	10	25
	1 Day	480	960	2,400
1	1 Month	14,400	28,800	72,000
	1 Year	172,800	345,600	864,000
	1 Day	1,920	3,840	9,600
4	1 Month	57,600	115,200	288,000
	1 Year	691,200	1,382,400	3,456,000
	1 Day	3,840	6,680	19,200
8	1 Month	115,200	230,400	576,000
	1 Year	1,382,400	2,764,800	6,912,000

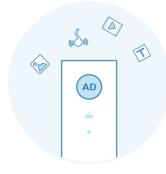
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#### **Energy saving**

96.6% of AC/DC conversion rate 4% higher than industry average



Additional Income





15-inch full-screen ads display after unlocking



#### Delay Fee

Delay fee will be charged by the minute after a charging session is completed

#### Additional Income (RMB)

Operating Period	Power Saving (RMB)	Advertising Income (RMB)	Delay Fee (RMB)	Total (RMB)
1 Day	38.4	24	108	170.4
1 Month	1,152	720	3,240	5,112
1 Year	13,824	8,640	38,880	61,344

<sup>\*</sup> Assuming the daily service time is 8 hours per charger; income per ad display is RMB 1, and a charger 24 ads per day; an average delay fee of RMB 4.5 is charged per EV, and 24 EVs pay the fee per day.



Self-service Charging Station, U-Town Plaza, Beijing

Large Centralized Charging Station, Qianhai, Shenzhen

Fast Public Charging Station, Baifuhui, Shenzhen

City Charging Partner Program

Client Portfolio

#### Self-service Charging Station, U-Town Plaza, Beijing

Model	No. of Chargers	Power Dispensed	Turnover (order/charger/day)
C2	3	97	3
C6	2	385	10





## Large Centralized Charging Station, Qianhai, Shenzhen

Model	No. of Chargers	Power Dispensed	Turnover (order/charger/day)
C2	12	4229	10
C4	5	2180	17
C6	11	8714	32

## Fast Public Charging Station, Baifuhui, Shenzhen

Model	No. of Chargers	Power Dispensed	Turnover (order/charger/day
C2	10	1100	19
C4	8	1657	8
C6	15	8557	24

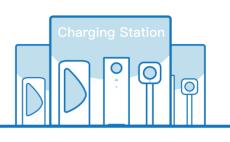




uted according to the share ratio after the deduction of the operation costs.

#### Full-circle Charging Service

XCharge provides "one-stop" charging service for commercial fleets, including priority charging, company discount, VIP privilege, battery health management, atc.

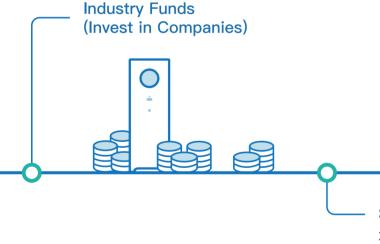






#### Financial Leasing

XCharge constructs the standard station. When completed, it will be sold and transferred or leased to a third party.







#### Standard Station Construction+ Operation Service

XCharge constructs the standard station. After the power-on test, it is be transferred to the operator and XCharge provides the operation and maintenance service.

#### Standard Station Construction +Self-operation

XCharge constructs the standard station. After the power-on test, it is transferred to the operator for operation and management.

## City Charging Partner Program

"City Charging Partner Program" aims at fostering charge point operators (CPO) and establish a nationwide charging service network, which provides high-quality and intelligent "one-stop" charging services for the upcoming electric transportation era. Initiated by XCharge, the program was launched in collaboration with the National Development and Reform Commission of China, State Grid, DiDi, Baidu Map, GLP, JD Logistics, and Prime Union in Beijing, May 5, 2018.



EV Fleet



Electricity



Financial Resource Potential operators only need to have one of the following: EV fleet, electricity, site and financial resource; then they are qualified to become "city charging partners". XCharge helps to match customers, financial solutions, professional operators, or investment channels, as well as intelligent charging devices and cloud solutions, to promote the development of charging infrastructure.

## Client Portfolio

#### **OEMs**

























#### **Charge Point Operators**





















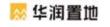


#### Real Estate & Property Management























#### **Fleets**



















#### **Others**











