



Electric Vehicle Charging System Solutions

Pingchuang Digital Energy Technology Co., Ltd.



01 PINGALAX

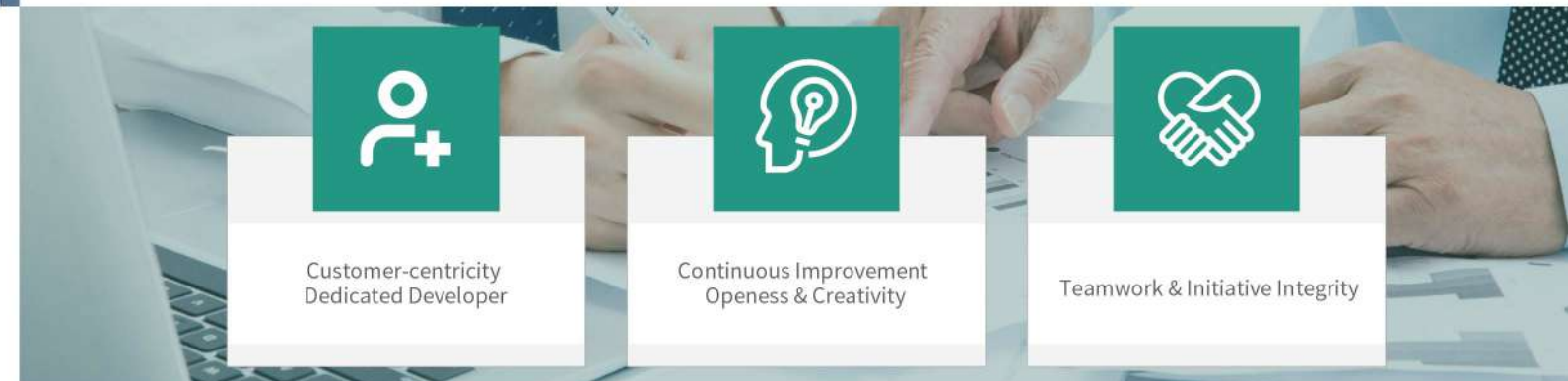
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02 ABOUT PINGALAX >>>

PINGALAX (Full name: Pingchuang Digital Energy Technology Co., Ltd.) is headquartered in Chongqing Bishan National High-tech Industrial Development Zone. We have strong R&D capabilities, over 60% of the company's employees are R&D personnels, more than 40% of whom are with master or doctor degree, they have mastered the core technologies of new EV chargers, household, industrial and commercial energy storages, outdoor power stations, etc., ensuring our competitiveness in self-development of the full link of chips, components, software and system design, and can provide one-stop service from design, R&D, production, installation, operation to after-sales including OEM&ODM customization.

We have been listed as a National High-tech Enterprise, a Specialized and Sophisticated SMEs, and a national-level Postdoctoral Programme, etc. and have successfully conformed to the IATF16949, ISO9001, ISO14001, ISO45001, QC00008, ISO/IEC 27701, ISO/IEC 27001 management systems, etc.

We have always been committed to the "customer-centric" corporate culture, to openness and cooperation. We hope to develop clean energy technologies together with people that share the same vision, to accelerate the green energy revolution and carbon neutrality, and hope to change the world with innovation and build a sustainable and beautiful future for mankind!



Mission: Continuously creating maximum value for customers and build a better world for mankind.

Partnership



Pingchuan Digital Energy Technology Co., Ltd.



04 Qualifications & Honours

We have been listed as a National High-tech Enterprise, a Specialized and Sophisticated SMEs, and a national level Postdoctoral Programme, etc., and have obtained hundreds of intellectual properties.

PINGALAX have also successfully conformed to the IATF16949 automotive industry quality management system, ISO9001 quality management system, QC080000 hazardous substance process management system, ISO14001 environmental management system, ISO45001 occupational health and safety management system, ISO/IEC 27701 privacy information management system, ISO/IEC 27001 information security management system, etc.



3.7kW

Portable EV Chargers (P1)

- Small & light, can be carried in the car
 - Equipped with a 3.5-inch digital LED screen
 - Provide 2 charging methods: App control and Plug & charge
 - Support BLE and WiFi access for App to controll charging
 - Provide 8-pronged safety protections
- IP66 ingress protection for the whole machine, ensuring reliable dustproof and waterproof performance
 - Support EV chargers customization, including customi- zations of logo, name plate, user manual, charging cable, etc.
 - Support controlling the output power by adjusting the output current with the App

●Application Scenarios



Household

●Certifications



· 3.7kW Portable EV Charger

Item	EU and the rest of markets	China
AC	 Mennekes (Type2)	 GB/T

Item	PCAC-P1-EU3.7/230
Environmental Indicators	
Output Rating	3.7kW
Output Voltage	230VAC±15%
Max Output Current	16A
Power Conversion Efficiency	≥99%
Connector Options	Type 2
Cable Length	16 feet
Electrical Input	
Input Voltage	230VAC±15%
Frequency	50/60Hz
Power Factor	>0.99
Wiring	/
Safety and Function Feature	
Display	3.5" Touch Screen
Communication	Wi-Fi
Communication Protocol	OCPP 1.6J, 2.0.1J
Bluetooth/WiFi	Bluetooth / Wi-Fi 2.4G
Safety Features	Over Current, Over Voltage, Under Voltage, Short Circuit, Over Temperature Protections, Emergency Stop
RCD	RCD Type B
Surge Protection	20kA
Power Measurement Accuracy	1%
Access Control	APP/RFID/Plug & Play
RFID	ISO/IEC 14443A/B, Mifare
Safety Compliance	CE, CB
Other Functions	OTA
Safety and Operational Ratings	
Dimensions	215mm × 90mm × 55mm
Net Weight	2kg
Protection Degrees	IP66, IK08
Operating Temperature	-30°C~50°C
Storage Temperature	-40°C~70°C
Power Cooling	Natural-air-cooled
Working/Storage Humidity	≤95%
Altitude	≤2000m
Noise	≤40dB
Mounting Options	Portable/Wall-mounted
OEM Customize Options	
OEM Customization	Logo, Nameplate, User manual, Length of charging cable



7/11/22kW AC EV Chargers (J4)

- H-tech appearance, ultra-simple streamline design, coming with sensor ambient light and logo projector
 - Easy to install, can be wall-mounted or post-mounted
 - Flexible configuration, home/operation versions optional
 - Provide 8 safety protections and one-button emergency stop
- IP55 ingress protection for the whole machine, ensuring reliable dustproof and waterproof performance and enabling indoor & outdoor installation
 - Provide three charging methods: Charging by code scanning/RFID/Plug & Play
 - Support BLE, WiFi and 4G access
 - Support EV chargers customization, including customizations of logo project, user manual, charging cable, etc.

●Application Scenarios

Household

Intelligent transportation

Public organizations

Commercial real estates

●Certifications

CE GB

7/11/22kW AC EV Chargers

Item	N.America	EU and the rest of markets	China
AC	J1772 (Type1)	Mennekes (Type2)	GB/T

Item	PCAC-J4-EU7/230	PCAC-J4-EU11/400	PCAC-J4-EU22/400
Environmental Indicators			
Output Rating	7kW	11kW	22kW
Output Voltage	3-phase 400VAC±10%		
Max Output Current	32A	16A	32A
Power Conversion Efficiency	≥99%		
Connector Options	IEC62196-2, Type 2		
Cable Length	16 feet (5m)		
Electrical Input			
Input Voltage	230VAC±15%	3-phase 400VAC±10%	
Frequency	50/60Hz		
Power Factor	>0.99		
Wiring	L+N+PE	3P+N+PE	
Safety and Function Feature			
Display	LED		
Communication	RJ45, 4G, Wi-Fi		
Communication Protocol	OCPP 1.6J, 2.0.1J		
Bluetooth/WiFi	Bluetooth / Wi-Fi 2.4G		
Safety Features	Over Current, Over Voltage, Under Voltage, Short Circuit, Over Temperature Protections, Emergency Stop		
RCD	RCD Type B		
Surge Protection	20kA		
Power Measurement Accuracy	±1%		
Access Control	APP/RFID/Plug & Play		
RFID	ISO/IEC 14443A/B, Mifare		
Safety Compliance	CE, CB		
Other Functions	OTA		
Safety and Operational Ratings			
Dimensions	208mm × 153mm × 418mm		
Net Weight	4.12kg		
Protection Degrees	IP55		
Operating Temperature	-30℃~50℃		
Storage Temperature	-40℃~70℃		
Power Cooling	Natural-air-cooled		
Working/Storage Humidity	≤95%		
Altitude	≤2000m		
Noise	≤40dB		
Mounting Options	Bracket-mounted\Wall-mounted		
OEM Customize Options			
OEM Customization	Logo, Nameplate, Color, User manual, Length of charging cable		



7/11/22kW AC EV Chargers (J5)

- H-tech appearance, ultra-simple streamline design.
 - Easy to install, can be wall-mounted or post-mounted
 - Flexible configuration, home/operation versions optional
 - IP65 ingress protection for the whole machine, ensuring reliable dustproof and waterproof performance and enabling indoor & outdoor installation
- Support BLE, WiFi and 4G access
 - Provide three charging methods: Charging by code scanning /RFID/Plug & Play
 - Provide 8 safety protections and one-button emergency stop
 - Support EV chargers customization, including customizations of logo, name plate, user manual, charging cable, etc. Support scheduled charging and remote control with the App

●Application Scenarios

 Household

 Intelligent transportation

 Public organizations

 Commercial real estates

●Certifications

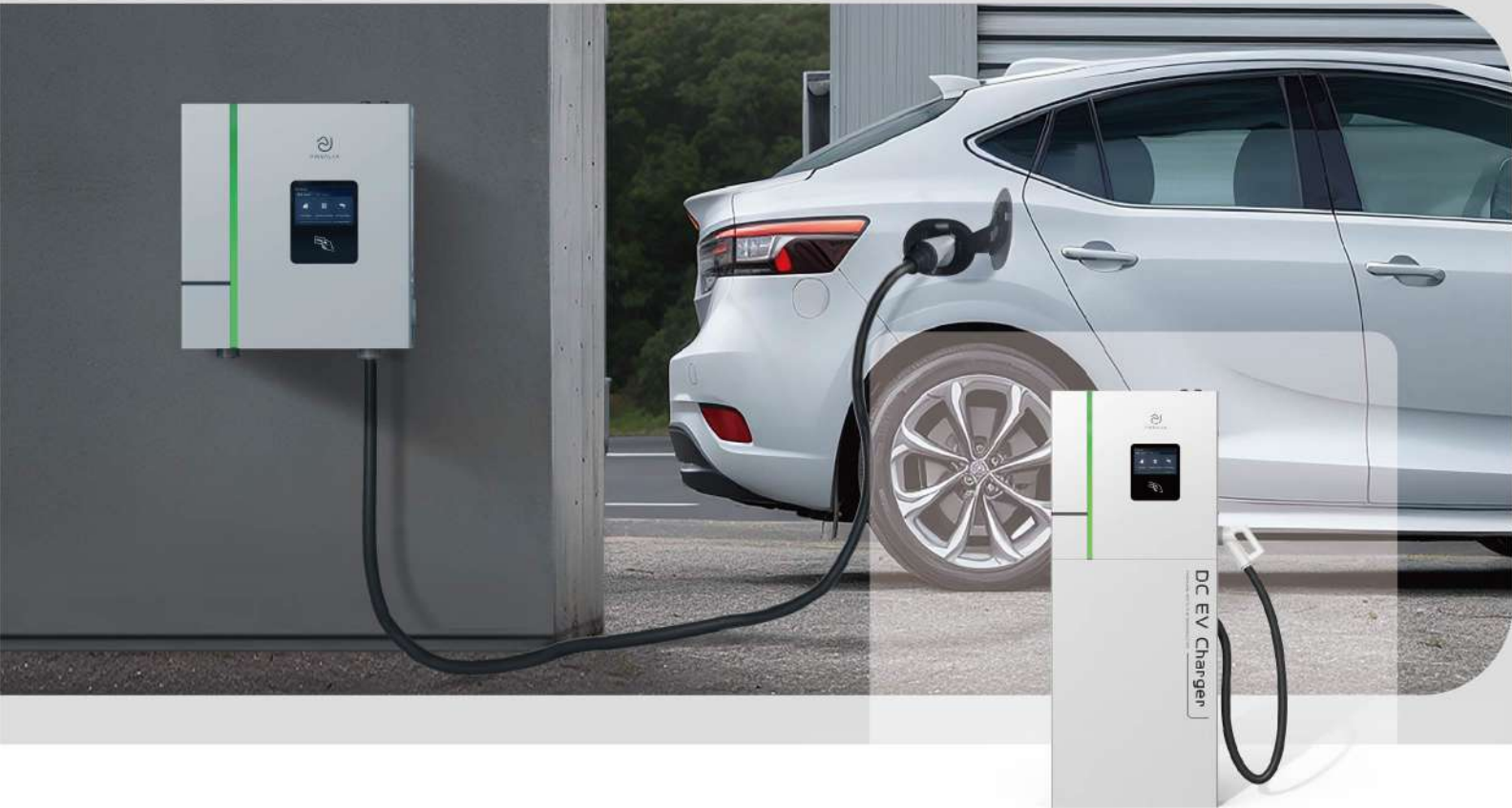
 CE

 GB

7/11/22kW AC EV Chargers

Item	N.America	EU and the rest of markets	China
AC	 J1772 (Type1)	 Mennekes (Type2)	 GB/T

Item	PCAC-J5-EU7/230	PCAC-J5-EU11/400	PCAC-J5-EU22/400
Environmental Indicators			
Output Rating	7kW	11kW	22kW
Output Voltage	230VAC±15%	3-phase 400VAC±10%	
Max Output Current	32A	16A	32A
Power Conversion Efficiency	≥99%		
Connector Options	IEC62196-2, Type 2		
Cable Length	16 feet (5m)		
Electrical Input			
Input Voltage	230VAC±15%	3-phase 400VAC±10%	
Frequency	50/60Hz		
Power Factor	>0.99		
Wiring	L+N+PE	3P+N+PE	
Safety and Function Feature			
Display	LED		
Communication	RJ45, 4G, Wi-Fi		
Communication Protocol	OCPP 1.6J, 2.0.1J		
Bluetooth/WiFi	Bluetooth / Wi-Fi 2.4G		
Safety Features	Over Current, Over Voltage, Under Voltage, Short Circuit, Over Temperature Protections, Emergency Stop		
RCD	RCD Type B		
Surge Protection	20kA		
Power Measurement Accuracy	±1%		
Access Control	App/RFID/Plug & Play		
RFID	ISO/IEC 14443A/B, Mifare		
Safety Compliance	CE, CB		
Other Functions	OTA		
Safety and Operational Ratings			
Dimensions	224mm × 128mm × 310mm		
Net Weight	3.8kg		
Protection Degrees	IP65		
Operating Temperature	-30℃~50℃		
Storage Temperature	-40℃~70℃		
Power Cooling	Natural-air-cooled		
Working/Storage Humidity	≤95%		
Altitude	≤2000m		
Noise	≤40dB		
Mounting Options	Bracket-mounted\Wall-mounted		
OEM Customize Options			
OEM Customization	Logo, Nameplate, Color, User manual, Length of charging cable		



30/40kW DC EV Chargers (WZ2)

- 7-inch LCD touch screen
 - Compared with the AC chargers, it charges faster; It can be wall-mounted or post-mounted/High compatibility, suitable for more than 99% of domestic new energy vehicles
 - Support BLE, WiFi and 4G access for App control charging control
 - IP54 ingress protection for the whole machine, ensuring reliable dustproof and waterproof performance and enabling indoor & outdoor installation
- Support remote billing and payment, and provide charging by code scanning/RFID/Plug & Play three charging methods
 - Provide 8 safety protections and one-button emergency stop
 - Support EV chargers customization, including customizations of logo, name plate, user manual, charging cable, etc.

●Application Scenarios

- Household
- Public organizations
- Commercial real estates

●Certifications

CE GB

30/40kW DC EV Chargers

Item	N.America	EU and the rest of markets	China
DC	 CCS1	 CCS2	 GB/T

Item	PCDC-WZ2-EU30/1k	PCDC-WZ2-EU40/1k
Environmental Indicators		
Output Rating	30kW	40kW
Output Voltage	DC200-1000V	
Max Output Current	0-100A	0-125A
Power Conversion Efficiency	≥95%	
Connector Options	1×CCS2 Cable	
Cable Length	5m	
Electrical Input		
Input Voltage	3-phase 400VAC±10%	
Frequency	50/60Hz	
Power Factor	>0.99	
Wiring	3P+N+PE	
Safety and Function Feature		
Display	7" Touch Screen	
Communication	RJ45, 4G, Wi-Fi	
Communication Protocol	OCPP 1.6J, 2.0.1J	
Bluetooth/WiFi	Wi-Fi 2.4G	
Safety Features	Over Current, Over Voltage, Under Voltage, Short Circuit, Over Temperature Protections, Missing Diode, Emergency Stop	
RCD	RCD Type A	
Surge Protection	20kA	
Power Measurement Accuracy	±1%	
Access Control	APP/RFID	
RFID	ISO/IEC 14443A/B, Mifare	
Safety Compliance	CE, CB	
Other Functions	OTA	
Safety and Operational Ratings		
Dimensions	670mm × 217mm × 670mm	
Net Weight	60kg	
Protection Degrees	IP54, IK10	
Operating Temperature	-30°C~55°C(full power)/55°C~75°C(limit power)	
Storage Temperature	-40°C~70°C	
Power Cooling	Forced-air-cooled	
Working/Storage Humidity	≤95%	
Altitude	≤2000m	
Noise	≤65dB	
Mounting Options	Mounting Bracket\Wall Mount	
OEM Customize Options		
OEM Customization	Logo, Nameplate, User manual, Length of charging cable	



60kW-240kW DC EV Chargers (YZ4/YZ5)

- 7-inch LCD touch screen
 - Support APP remote billing, payment and intelligent control, suitable for regional chargers management/High compatibility, suitable for more than 99% of domestic new energy vehicles
 - With advanced digital current balancing technology, single/double-connector charging modes can be chosen
 - Support Ethernet, 4G access and App charging control
- IP54 protection for the whole machine, ensuring reliable dustproof and waterproof performance for outdoor & indoor installation
 - Support charging by code scanning /RFID/VIN Code three charging methods
 - Provide 8 safety protections and one-button emergency stop
 - Support EV chargers customization, including customizations of logo, name plate, user manual, charging cable, etc.

•Application Scenarios

 Fleets

 Intelligent transportation

 Public organizations

 Commercial real estates

•Certifications

60-240kW DC EV Chargers

Item	N.America	EU and the rest of markets	China
DC	 CCS1	 CCS2	 GB/T

Item	PCDC-YZ4-EU60/1k	PCDC-YZ4-EU80/1k	PCDC-YZ5-EU120/1k	PCDC-YZ5-EU160/1k	PCDC-YZ5-EU200/1k	PCDC-YZ5-EU240/1k
Environmental Indicators						
Output Rating	60kW	80kW	120kW	160kW	200kW	240kW
Output Voltage	DC200-1000V					
Max Output Current	0-200A	0-250A				
Power Conversion Efficiency	≥95%					
Connector Options	2×CCS2 Cable					
Cable Length	5m					
Electrical Input						
Input Voltage	3-phase 400VAC±10%					
Frequency	50/60Hz					
Power Factor	>0.99					
Wiring	3P+N+PE					
Safety and Function Feature						
Display	7" Touch Screen					
Communication	RJ45, 4G					
Communication Protocol	OCPP 1.6J, 2.0.1J					
Bluetooth/WiFi	No Support					
Safety Features	Over Current, Over Voltage, Under Voltage, Short Circuit, Over Temperature Protections, Missing Diode, Emergency Stop					
RCD	RCD Type A					
Surge Protection	20kA					
Power Measurement Accuracy	±1%					
Access Control	App/RFID					
RFID	ISO/IEC 14443A/B、Mifare					
Safety Compliance	CE, CB					
Other Functions	OTA					
Safety and Operational Ratings						
Dimensions	700mm × 400mm × 1600mm		700mm × 550mm × 1800mm			
Net Weight	240kg		260kg	280kg	300kg	
Protection Degrees	IP54, IK10					
Operating Temperature	-30°C~55°C(full power)/55°C~75°C(limit power)					
Storage Temperature	-40°C~70°C					
Power Cooling	Forced-air-cooled					
Working/Storage Humidity	≤95%					
Altitude	≤2000m					
Noise	≤65dB					
Mounting Options	Pedestal Type					



320kW-640kW Split DC EV Chargers (FZ1)

- With split design, the host can be kept away from the charging terminals to reduce noise
 - IP54 protection for the whole machine, ensuring reliable dustproof and waterproof performance
 - Support remote billing and payment and intelligent control, suitable for regional chargers management
 - Support three charging methods: App scanning QR code, RFID, VIN code
- Through the smart power distribution strategy, 2-4 terminals (4-8 charging connectors) can be configured
 - Provide 8 safety protections and one-button emergency stop, etc.
 - Support EV chargers customization, including customizations of logo, name plate, user manual, charging cable, etc.
 - Support Ethernet and 4G access

●Application Scenarios



Fleets



Intelligent transportation

●Certifications



320-640kW Split DC EV Chargers

Item	N.America	EU and the rest of markets	China
DC	 CCS1	 CCS2	 GB/T

Item	PCDC-FZ1-EU320/1k	PCDC-FZ1-EU480/1k	PCDC-FZ1-EU640/1k
Environmental Indicators			
Output Rating	320kW	480kW	640kW
Output Voltage	DC200-1000V		
Max Output Current	0-250A		
Power Conversion Efficiency	≥95%		
Connector Options	4/6/8×CCS2 Cable		
Cable Length	5m		
Electrical Input			
Input Voltage	3-phase 400VAC±10%		
Frequency	50/60Hz		
Power Factor	>0.99		
Wiring	3P+N+PE		
Safety and Function Feature			
Display	7" Touch Screen		
Communication	RJ45, 4G		
Communication Protocol	OCPP 1.6J, 2.0.1J		
Bluetooth/WiFi	No Support		
Safety Features	Over Current, Over Voltage, Under Voltage, Short Circuit, Over Temperature Protections, Missing Diode, Emergency Stop		
RCD	RCD Type A		
Surge Protection	20kA		
Power Measurement Accuracy	±1%		
Access Control	APP/RFID		
RFID	ISO/IEC 14443A/B, Mifare		
Safety Compliance	CE, CB		
Other Functions	OTA		
Safety and Operational Ratings			
Dimensions	1230mm × 870mm × 2000mm (host)/ 420mm × 220mm × 1300mm (terminal)		
Net Weight	750kg	840kg	930kg
Protection Degrees	IP54, IK10		
Operating Temperature	-30℃~-55℃(full power)/55℃~75℃(limit power)		
Storage Temperature	-40℃~70℃		
Power Cooling	Forced-air-cooled		
Working/Storage Humidity	≤95%		
Altitude	≤2000m		
Noise	(host)≤65dB/(terminal)≤55dB		
Mounting Options	Pedestal Type		
OEM Customize Options			
OEM customization	Logo, name plate, user manual, charging cable		



600kW Super Charger (SD1)

- H-tech appearance, ultra-simple streamline design without main screen
 - Ultra charging experience and charging speed; 10 minutes charge can supply the power for about 800km driving
 - Support App remote billing, payment and intelligent control, suitable for regional chargers management
- Support Ethernet, 4G access
 - IP54 protection for the whole machine, ensuring reliable dustproof and waterproof performance for outdoor & indoor installation
 - Support App/RFID/VIN code three charging methods

●Application Scenarios



Fleets



Intelligent transportation

●Certifications



600kW Super Charger

Item	EU and the rest of markets	China
DC	CCS2	GB/T

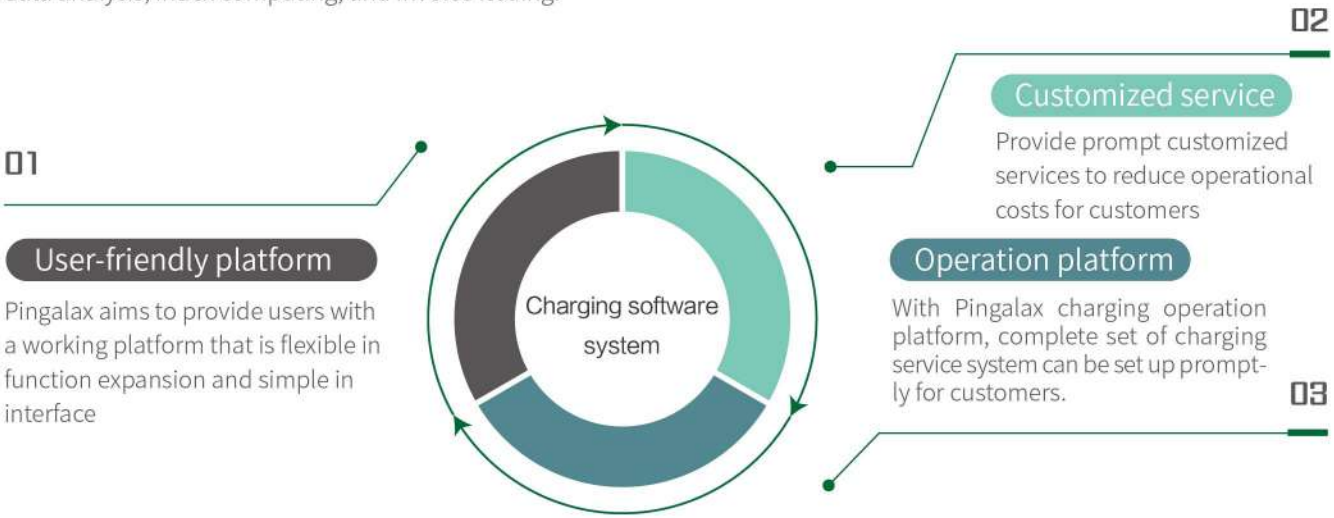
Item	PCDC-SD1-EU600/1k
Environmental Indicators	
Output Rating	600kW
Output Voltage	DC200-1000V
Max Output Current	0-600A
Power Conversion Efficiency	≥95%
Connector Options	CCS2 Cable
Cable Length	3m
Electrical Input	
Input Voltage	3-phase 400VAC±10%
Frequency	50/60Hz
Power Factor	>0.99
Wiring	3P+N+PE
Safety and Function Feature	
Display	/
Communication	RJ45, 4G
Communication Protocol	OCPP 1.6J, 2.0.1J
Bluetooth/WiFi	No Support
Safety Features	Over Current, Over Voltage, Under Voltage, Short Circuit, Over Temperature Protections, Missing Diode, Emergency Stop
RCD	RCD Type A
Surge Protection	20kA
Power Measurement Accuracy	1%
Access Control	App/RFID
RFID	ISO/IEC 14443A/B, Mifare
Safety Compliance	CE, CB
Other Functions	OTA
Safety and Operational Ratings	
Dimensions	500mm*280mm*1430mm
Weight	/
Protection Degrees	IP54, IK10
Operating Temperature	-30°C~55°C(full power)/55°C~75°C(limit power)
Storage Temperature	-40°C~70°C
Power Cooling	Forced-liquid-cooled
Working/Storage Humidity	≤95%
Altitude	≤2000m
Noise	≤60dB
Mounting Options	Pedestal Type
OEM Customize Options	
OEM customization	Logo, name plate, user manual, charging cable

Intelligent Charging Management Platform

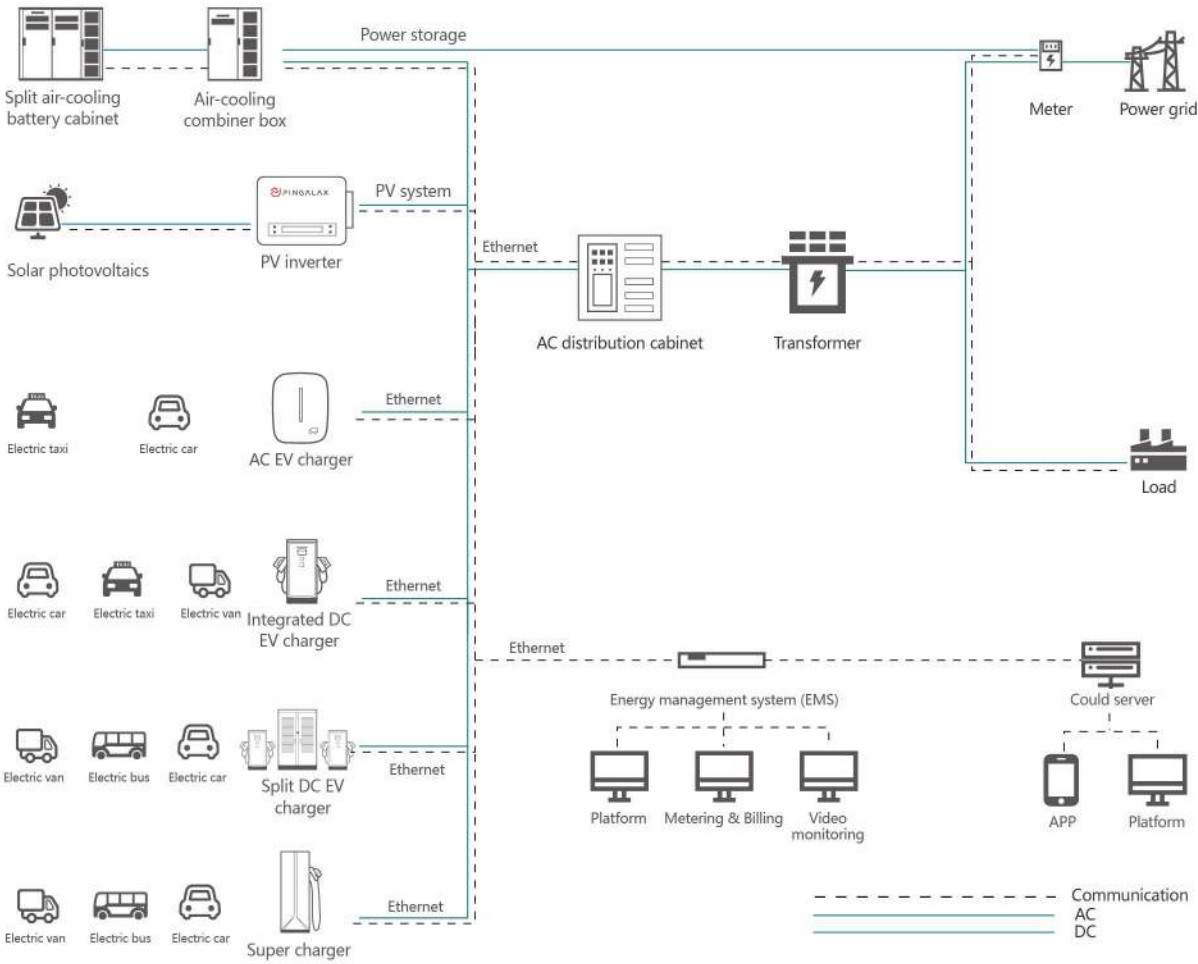
Mobile+Web operation management system

The **mobile charging system** supports functions such as charging station information query, EV charger status query, charging information query, and billing information submitting. Users can use the APP to search for nearby charging stations, and quickly locate the nearest station through the positioning and navigation function of cell phone.

The **web operation management system** not only has common functions such as equipment monitoring, operation and maintenance, remote upgrade and real-time operational data collection, but also has operational functions such as business data analysis, index computing, and invoice issuing.



Charging System Solutions



Solution Introduction

"Photovoltaic Charging and Energy Storage" is a comprehensive power station that integrates solar power, energy storage and EV charger. It has following advantages such as photovoltaic power generation for self-consumption, storage of electricity at valley electricity price, and utilization of energy storage to make profits from peak-valley electricity price.

PV, Energy Storage and Charging Solution

Energy Value Optimization

Shift peak loads by discharging the energy storage system during peak electricity prices and charging during off-peak periods.

Supporting Microgrid Operations

In standalone microgrid systems, especially when combined with renewable energy sources, energy storage ensures continuous operation when disconnected from the main grid.

Promoting the Integration of Renewable Energy

Energy storage systems can store the excess energy produced during overproduction periods of renewable sources and release it when needed, enhancing the utilization of renewable energy.

Extending the Lifespan of Electrical Equipment

When users increase their power consumption, the original distribution capacity may be insufficient. The energy storage system can reduce the stress on power equipment (such as transformers), thereby prolonging their lifespan.

Home Charging Solution

Solution Introduction

This solution is associated with 7kW AC and 30kW/40kW DC EV chargers, which are mostly installed in residential parking spaces or garages. Users can charge electric vehicles at home and make efficient use of idle time for charging to ensure the vehicle is fully charged and ready to go at any time.



Exclusive equipment



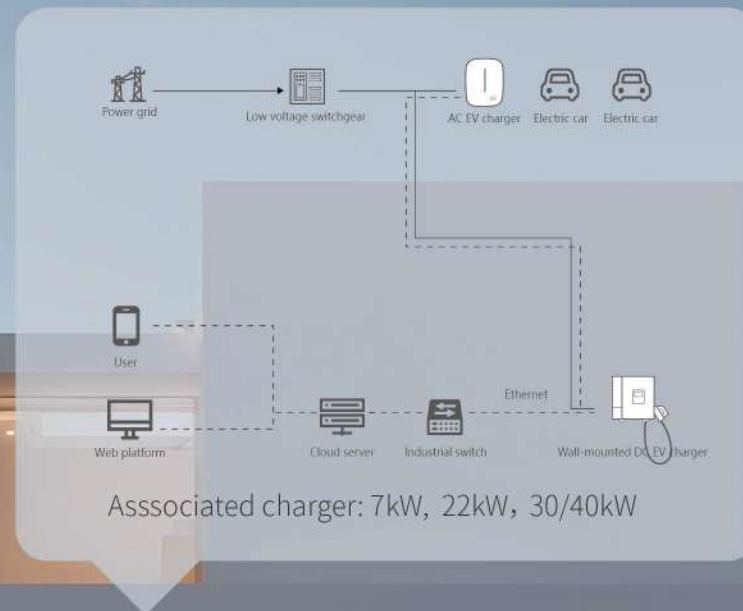
Affordable and low cost



Safe and secured



Shared charging and efficient use

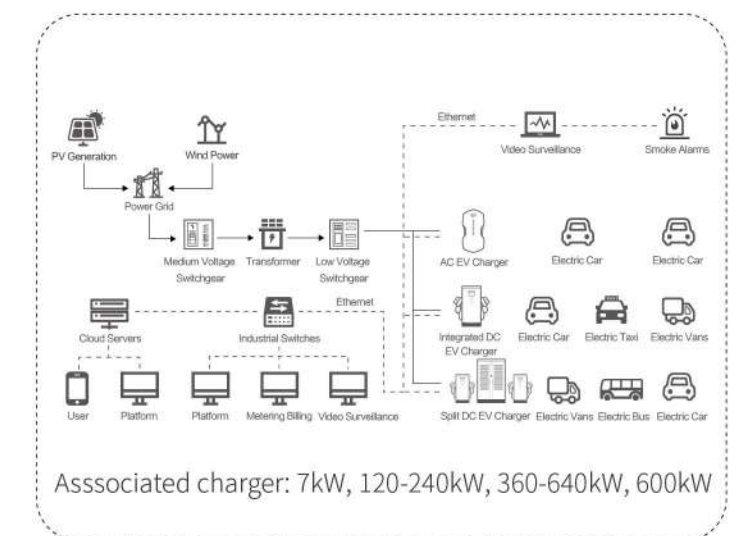


Smart Transportation Charging Solution

Solution Introduction

This solution can customize and develop a charging solution according to the station needs. It is suitable for transportation net, airports, train stations, and expressway service areas. It provides a one-stop charging solution to manage the charging stations.

- Intelligent management to reduce operational cost
- Reasonable billing to enhance the competitiveness of the station
- Customization to provide exclusive charging solutions
- Easy operation to start charging with simple steps



Fleet Charging Solution

Solution Introduction

This solution mostly uses high-power fast chargers, it is suitable for centralized vehicle charging such as urban buses, taxis, and logistics fleets. The charging modes can be set according to the type of vehicle. Operation cost can be reduced by charging vehicles during the electricity price valley, and an intelligent management system can be provided to facilitate centralized vehicles management.

- On-demand configuration of charging modes
- Cost-saving
- High adaptability, optimal charging methods
- Centralized monitoring, real-time viewing of charging data

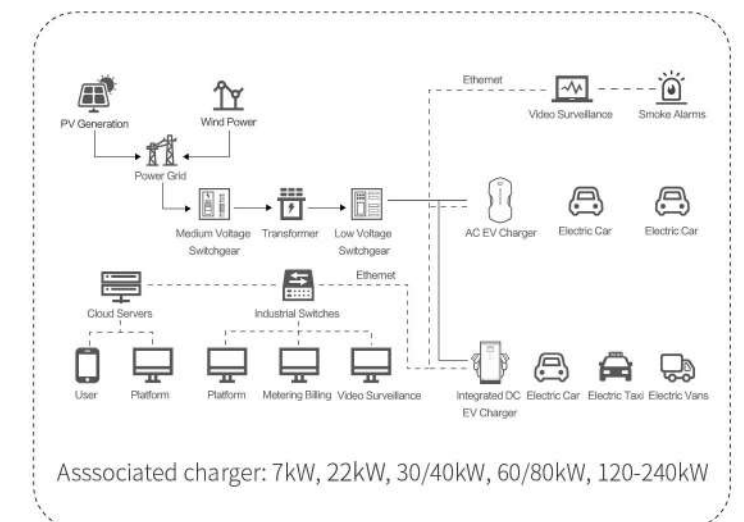


Public Organizations and Schools Charging Solution

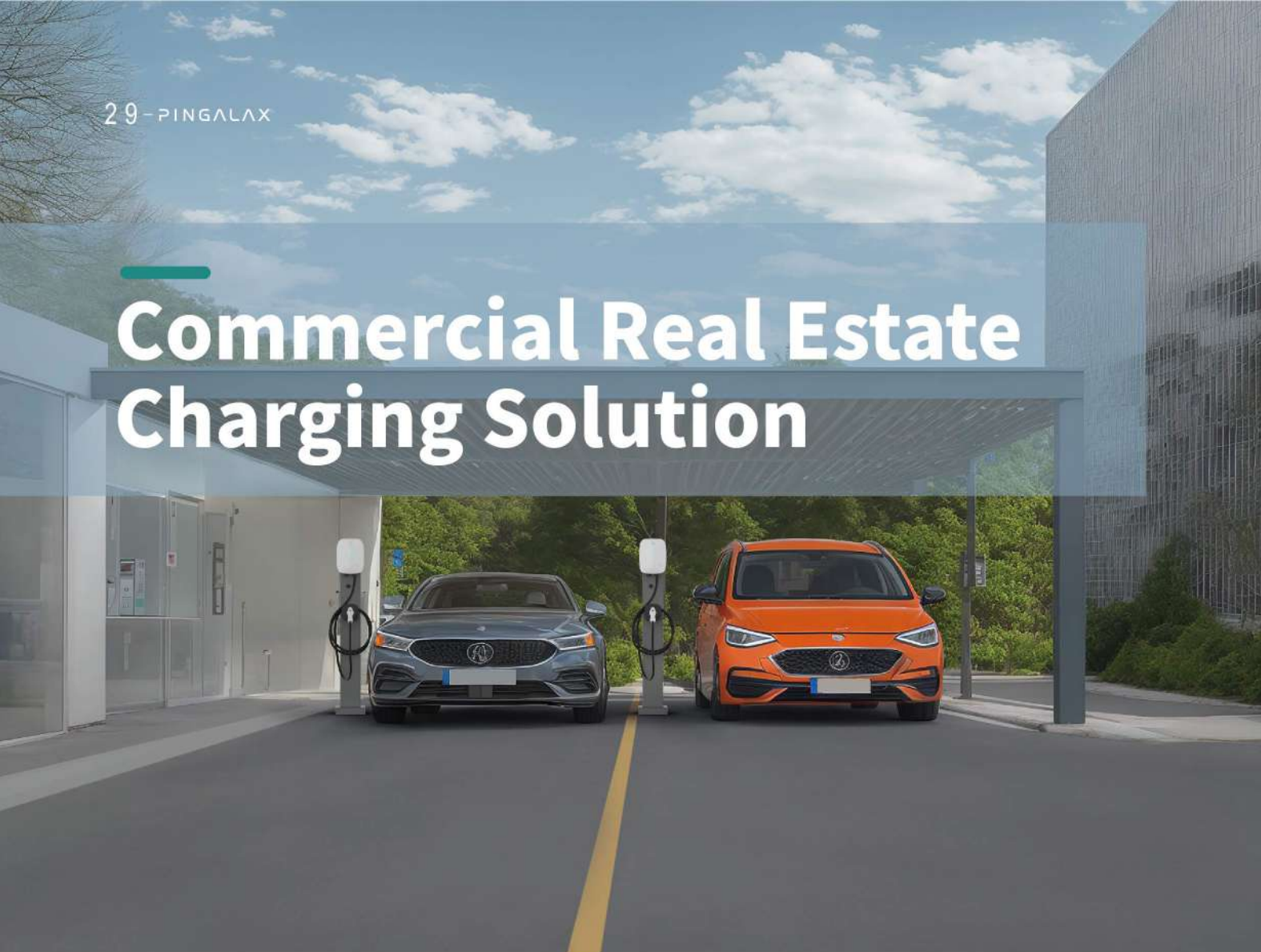
Solution Introduction

This solution is suitable for parking spaces owned by enterprises, institutions, schools, etc.. Different charging facilities and billing standards can be configured according to the needs of the owners; thus the parking lots can be efficiently utilized.

- Exclusive charging stations customization
- Combined fast and slow charging to improve charging efficiency
- Safety for car owners and stations
- Easy operating, start charging with simple steps



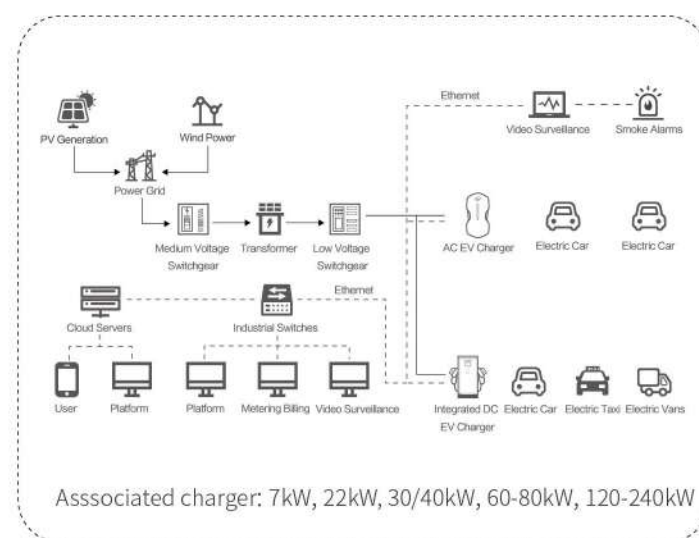
Commercial Real Estate Charging Solution



Solution Introduction

This solution helps consumers, visitors, tourists alleviate mileage anxiety by enabling charging while parked, thereby increasing user satisfaction in commercial places. It is compatible with existing operation systems to provide one-stop charging management services, suitable for commercial districts, hotels, communities, scenic areas, etc..

- Value-added services to improve user satisfaction
- Reasonable billing and rich business models to increase profit
- Planning for the whole area, and customized solutions adaptable to more commercial facilities
- Easy operating, start charging with simple steps



Service, Operation and Maintenance

- Connect, test and maintain the connection of operation platform with charging equipment and EV chargers operational status.
- Provide charging station operators with full-process support, such as site selection and construction, platform connection and operational improvement, maintenance, and supporting solutions, etc.

01

Strict Product Testing

Apply strict test regulations for all products, including salt spray test, electrical performance test, waterproof test, dustproof test, radiation disturbance test, transportation test, etc., to ensure the quality of EV chargers from the source.

02

Efficient Troubleshooting

Accumulate the data of problems that arise in daily operations and combine with daily inspections to prevent the charging stations from any predictable failures. Provide 24-hour after-sales service to efficiently handle product failures.

02

Charging Station Operation Support

Support connections to not only the exclusive intelligent management platform, but also other charging management platforms, thus provide effective operational data support for stations management.



Regular Product Iteration

The tech-department summarizes the problems of EV chargers and keeps updating the record and carry out regular product iterations.

Professional Technical Team

Pingalax has a stable core technical team, accounting for more than 60% of the company's total staff.

04

05

Better innovation Better world

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