PRODUCTS MANUAL

Xiamen Alcawa Tech Co., Ltd

Embrace Greenenergy | Empower Future

Fully charged and ready!

Smart Solutionsfor A Greener Future

The world's energy production and consumption is undeniably changing. The electrification of the mobility industry is contributing to this great change through the development and research of electric vehicles and related products at a global scale.

At ALCAWA we know that every small conscious decision builds up to an environmentally sustainable future, that's why we are proud to present our new electric vehicle charger series, carefully designed applying over 15 years of our experience in the PV industry.

Every detail of our EV Chargers aims to bring the best possible experience for customers. Our intelligent monitoring system and user-friendly app allows you to control the whole charging process on your mobile device. Our AC EV Charger is fully compatible with your photovoltaic installation, allowing you to charge your vehicle directly using the power of the sun.

You can depend on ALCAWA

ALCAWA has successfully been manufacturing high-quality and reliable products for renowned brands since 2020. Today, ALCAWA is an independent research, development and manufacturing company. A recent equity restructuring puts us on particularly strong financial footing within the industry.

By launching our versatile and reliable Alcawa EV chargers, we are taking a new step into becoming a key contributor to the global e-mobility revolution.

LOOX

Everything you expect and more!

Alcawa's new generation of AC EV chargers bring the latest technologies to your home for a safe and smart charging experience, with an elegant and easy-to-use design and adaptable functions that meet the needs of a wide range of user scenarios.

This new generation of AC EV Chargers come as a result of dedicated research, design and development based on our deep knowledge in the field of photovoltaic technology for over 15 years. The possibility of using solar energy in the charging process of your electric vehicle, comes not only with great economic benefits, but as a smart and environmentally conscious choice to living a greener life.

Our AC EV Charger Series provide several options for you to discover the best charging experience possible. Get ready, the green future is here!

Innovative design

- Elegant design with a dynamic and robust streamlined body
- By leveraging high tech paint technology, the sleek and aesthetically pleasing EV charger blends perfectly with both your EV and home
- Replaceable front cover for convenient substitution and additional color options

Easy-to-install

- Compact, lightweight and wall mountable
- Easy-to-install with standard tools
- Toolless plug in terminal blocks
- Quick set-up via APP
- Cable entry on the front or rear of the housing

Safe

- TÜV IEC 61851-1 & CE compliant
- Integrated Type A RCD, 30mA AC and 6mA DC leakage protection
- Built-in PEN fault detection without extra earth rods
- Type 2 socket with shutter (opt.)
- Dynamic load balancing (opt)

Reliable

- IP65 enclosure suitable for outdoor use
- IK10 protection rating
- Exterior & interior covers for multiple protection
- 3 years standard warranty

Smart & Eco-friendly

- Intelligent Ai-charging App for remote control and monitoring
- Scheduled charging and off-peak charging modes
- Adjustable charging power (6A to 32A)
- Lock / unlock the charger via APP
- Solar charging under Solar PV & Eco Mode (opt.)
- Recyclable packaging

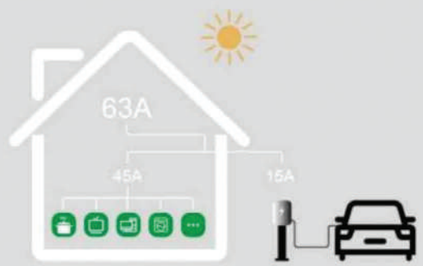
User-friendly

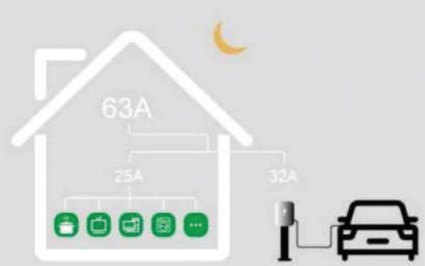
- APP & RFID & NFC for user authentication or easy set up to Plug & Play mode
- Integrated NFC technology, unique authentication via smartphone
- Cable Holster housing design
- Ergonomic plug handles
- LED status indicators
- Wireless firmware updates
- Automatic phase detection and balancing (3 phase series)

AC EV Charger

Technical Datasheet

Temperature Protection | Auto Repair | Efficient Charging | Protection Level IP65 | 1 Years Warranty | Type B | APP Control





CHARGING BOX

- LCD screen Easy installation
- High compatibility
- Waterproof grade:IP54
- Small size,Easy to transport
- Multiple security protection
- Certified by authorities
- Real-time monitor on temperature

EV CONNECTOR

- Built in temperature monitoring
- Good conductivity
- PVC CABLE
- Durable and anticorrosion
- Easy to bend,Long service life
- High resistance to cold/high temperature

CORE ADVANTAGE

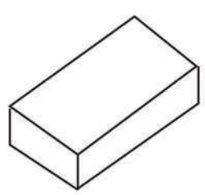
- RCD:Type B
- Directional current regulation
- Repair the disorder of capacitor units
- Full-link temperature monitoring system
- Strong Expansibility(Bluetooth,WiFi, 4G, Ethernet)

ABOUT CUSTOMIZATION

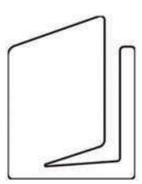
LOGO in the Display

Product Nameplate LOGO

Front Panel Customization



Packing Box Sticker Customization



Manual Customization

NOTE: The above customization has quantity requirements, please confirm with sales staff for details.

Transport Package

Dimension (W/H/D)	350/300/173mm
G.W./N.W.	3.3/4KG
Packing Quantity	1in 1 carton

Gift Package

Dimension (W/H/D)	380/360/173mm
G.W./N.W.	3.3/4KG
Packing Quantity	1in 1 carton

ELECTRICAL SPECIFICATION	
Rated voltage input/output	230V~ (single phase)
Input Voltage/Output voltage	AC175V-265V~ (single phase)
Input frequency	50Hz
Max. output power	7kW (single phase)
Max. output current	32A
WORKING ENVIRONMENT	
Protection degree	IP65
Environment temperature	-25℃~+50℃
Relative humidity	0-95%non-condensing
Maximum altitude	< 2000m
Cooling	Natural air cooling
MOUNTING ACCESSORIES	
Wall-mounting bracket/Ground-mounting pole	**Yes/Opt**
PRODUCT MODEL	**ALW-EVC001**
FUNCTION AND ACCESSORY	
Bluetooth	Yes
Ethernet	Optional Customized
4G	Optional Customized
4.3-inch color display(3.0-inch display area)	Optional Customized
Swipe Card Reader	Yes
RCD	Type B
LED Indicator light	Yes
Intelligent power adjustment	Yes
starting mode	Plug the charger/Swipe to start

Technical Datasheet

11KW

A8 | 4.3-inch LCD | EV charger | Type2

Features

Intelligent control：Swipe start、App control、
Charge by remote appointment
Ingress Protection：IP66
RCD：A+DC6mA
Optional：4G、Wifi/Bluetooth、RJ45

Parameter

- **Input Voltage**
  Single-phase AC230 50/60Hz （L+N+PE）
  Three-phase AC400 50/60Hz （L1+L2+L3+N+PE）
- **Input Current**
  AC16A / AC32A
- **The Output Voltage**
  Single-phase AC230 50/60Hz （L+N+PE）
  Three-phase AC400 50/60Hz （L1+L2+L3+N+PE）
- **Output Current**
  AC16A / AC32A
- **Start-up mode**
  Plug-and-Play、RFID Reader
- **Network**
  Optional 4G、Wifi+Bluetooth、RJ45
- **LCD LED**
  Optional LED、4.3-inch screen
- **RCD**
  A+DC6mA
- **Multi-protection**
  Overvoltage protection, undervoltage protection, grounding protection, lightning protection, leakage protection, flame retardant protection, overcurrent protection, intelligent temperature control protection, relay adhesion protection, input shutdown protection

Scenes	Height (m)	Operating Temperature	LED Screen	Wide Voltage Range
Indoor/outdoor	<2000	-30~ 50C	Power, charging, fault,three-color LED indicator	100V~275V

LOGO	Color	Cable	Package	Power Plug
Customization	Customization	Customization	Customization	Customization

AC EV Charger

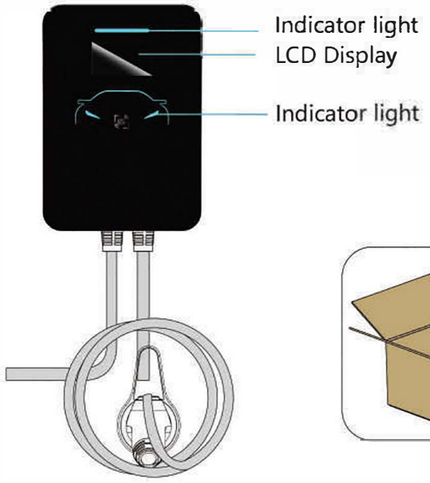
Product characteristics

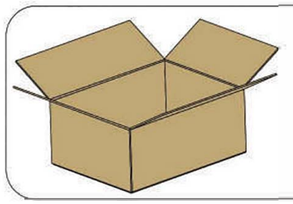
① Size: 355mm * 250mm * 93mm
② Maximum output current: 50A
③ The module has built-in high-performance MCU and stable product performance. Multiple protection: high temperature, overvoltage, undervoltage, grounding, overcurrent, leakage current and other protection functions
④ The three-color Led light indicates the working status, and the display screen displays the working status information in real time.
⑤ Support swipe card start, scan code start, Bluetooth start multiple start methods
⑥ Supports multiple communication methods: Bluetooth, Ethernet, 4G
⑦ Support communication with remote management platform to realize remote monitoring

Application field

① Suitable for large, medium and small electric vehicle charging stations
② Urban residential areas, shopping squares
③ Various public places with electric vehicle parking spaces, such as electric power business places
④ High-speed service areas, station terminals and other transportation hub areas
⑤ Application of Private Charging Pile

PRODUCT PARAMETERS AND INSTALLATION STEPS





Transport Package

Dimension (W/H/D)	535/310/190mm
G.W./N.W.	10/12KG
Packing Quantity	1in 1 carton

ELECTRICAL SPECIFICATION	
Rated voltage input/output	400V (three-phase)
Input Voltage/Output voltage	AC400V (L1+L2+L3+N+PE)
Input frequency	50Hz
Max. output power	22kW (three-phase)
Max. output current	32A
WORKING ENVIRONMENT	
Protection degree	IP65
Environment temperature	-25℃~+45℃
Relative humidity	0-95%non-condensing
Maximum altitude	< 2000m
Cooling	Natural air cooling
MOUNTING ACCESSORIES	
Wall-mounting bracket/Ground-mounting pole	**Yes/Opt**
FUNCTION AND ACCESSORY	**GD4502-053**
FUNCTION AND ACCESSORY	
Bluetooth	Yes
Ethernet	Yes
4G	Yes
4.3-inch color display	Yes
Swipe Card Reader	Yes
RCD	Type B
LED Indicator light	Yes
Intelligent power adjustment	Yes
starting mode	The app launched/Swipe the card to start

Smart EV Charger monitoring system

Charging App

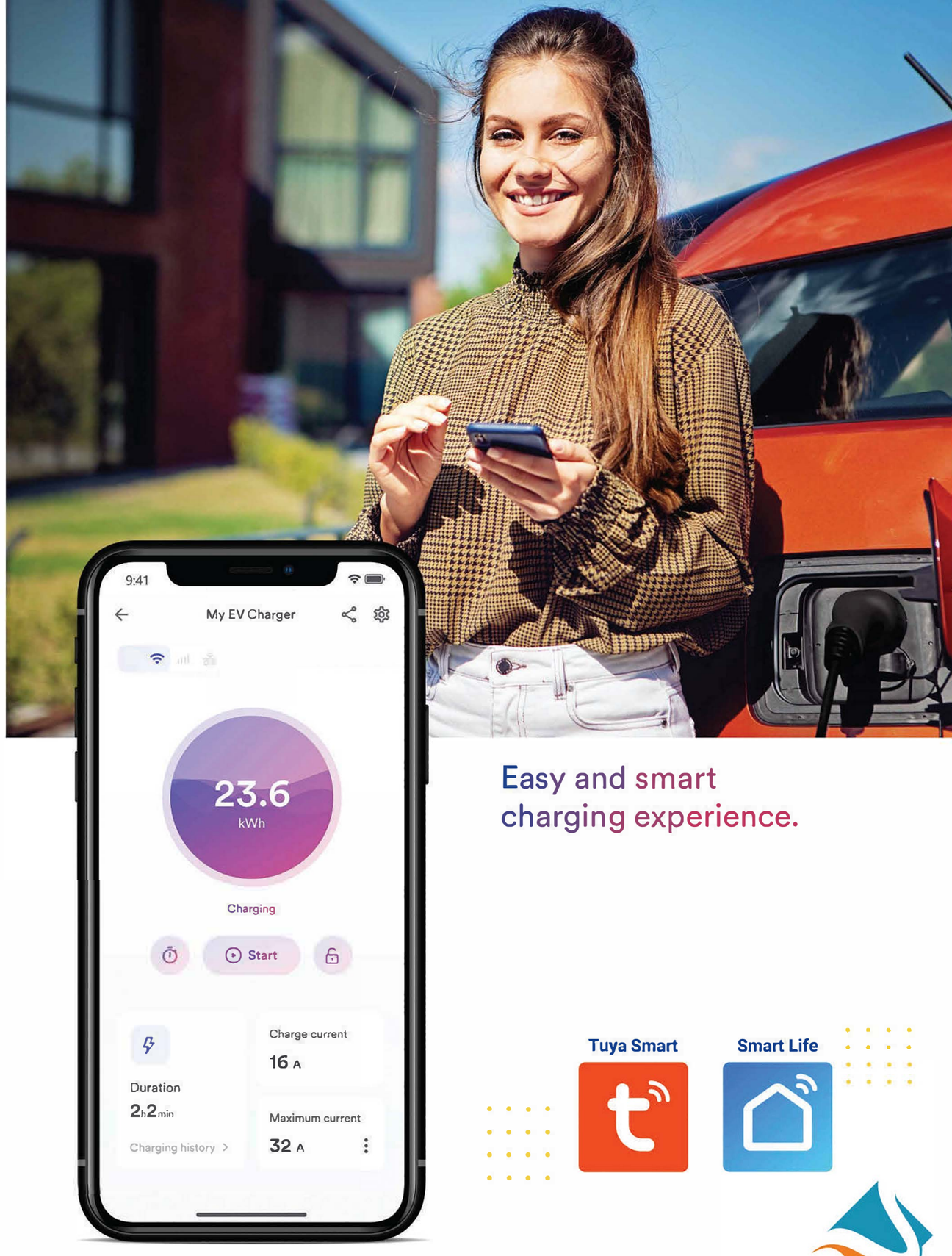
Our state-of-the-art charging App allows you to manage, configure and control your charger remotely from your mobile device. Full controlin the palm of your hand!

With an elegant and user-friendly interface. We, at Alcawa are drivenby the idea of making things easy for installers and end-users alike, we'vedeveloped this App after thoroughly researching the habits and needs of ourusers.

Join us for a fully charged drive towards a green future!

Features

- **Multiple wireless control solutions:** Standard wireless communication via WIFI / BLE / 4G (opt.)
- **Charging history:** Understand your personal charging habits through a graphical interface, to optimize your experience
- **Scheduled charging sessions:** Manage your charging times and save costs by using off-peak electricity rates or your own solar energy production.
- **Security:** Instantly lock and unlock your charger through your mobile device
- **Shared management:** Easy-to-use configuration to grant shared management access to your family or community
- **Upgrade service:** Compatible with an energy meter, allowing you to take advantage of solar charging and dynamic load balancing feature



Easy and smart charging experience.

Tuya Smart

Smart Life

LOOX

Harness the power of the sun

At Alcawa we strive to create the best possible experience for distributors, installers and end users. That's why our products are easy-to-install, reliable and user-friendly.

Easy-to-install

- Quick & easy-to-install with standard tools
- Quick setup and commissioning with Solplanet apps
- Compact wall mount design

Reliable

- International quality standards
- Integrated DC switch
- IP65 rated design for outdoor use

User-friendly

- User-friendly app interface
- Online monitoring via Wi-Fi and Solplanet apps
- Award winning inverter design

Explore our product catalogue

We offer a variety of high-quality products designed to cover your needs, no matter the size of your installation. Our deep experience in the PV industry and the manufacturing of solar inverters allows us to provide highly reliable interconnectable equipment. With this new EV Charger series, we give a new step to a greener future.

Single phase string inverters

AC EV Chargers

Three phase string inverters

Connect & monitor Systems

Hybrid inverters

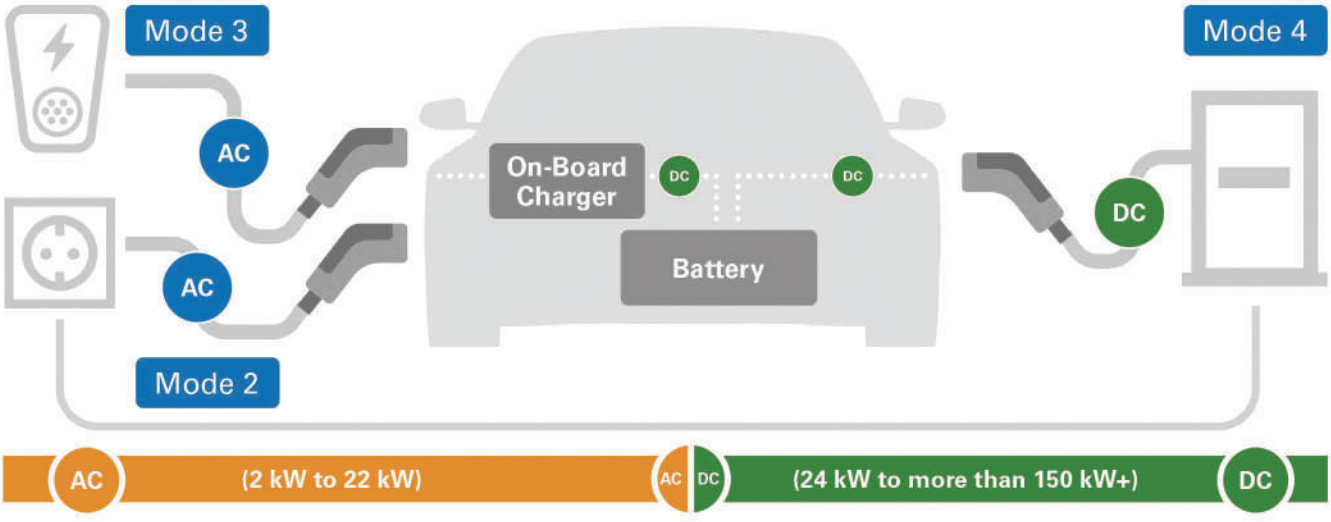
Visit our website and discover the Solplanet product family.

EV charging infrastructure (EVCI)

Supply type	AC/DC	Rated power*	Time to charge 10 kWh	Time to charge 30 kWh
Single phase 16 A	AC	3.7 kW	2 h 40 min	8 hours
Single phase 32 A or 3 phase, 16 per phase**	AC	7.4 kW	1 h 20 min	4 hours
3 phase, 16 A per phase**	AC	11 kW	55 min	2 hours 45 min
3 phase, 32 A per phase	AC	22 kW	27 min	1 hour 22 min
3 phase, DC	DC	50 kW	12 min	36 min
3 phase, DC	DC	120 kW	5 min	15 min

*Simplistically (ignoring Power Factor correction):
- For single phase 230 V connections, Power (kW) = **Amps (A) x 230 V*0.001**
- For 3 phase 400 V connections, Power (kW) = **1.732*Amps per phase (A) x 400 V*0.001**

**depending on countries



Expected Dwell Time	Regular Home Plug	Type 1 American	Type 2 Mennekes European	CCS	CHAdeMO Japanese
BMW i3 (2018)	19 h 30 m	-	4 h 15 m	36 min	-
Tesla Model 3 (2019)	20 h 30 m	-	4 h 30 m	39 min	-
Renault Zoe (2020)	26 h 45 m	-	3 hours	56 min	-

The above dwelling times are estimations regarding the time required to charge the different models from empty to full considering the limitations of the on-board charger. For DC charging, the time indicates to charge the battery from 10 % - 80 %, as charging tends to slow outside this range to protect the battery.
Source: https://ev-database.uk/car