

## PRODUCT Introduction EV Charger

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28 SOLAR EV CHARGING SOLUTION 26 LOAD BALANCE SOLUTION



EV Billing 34 TYPE 2 CHARGING SOCKET







# WHO WEARE

Founded in 2019, FoxESS is specialized in the R&D, production and sales of energy storage inverters, battery systems and EV charger, provides advanced distributed energy products, energy storage products , smart energy management solutions and excellent electric vehicle charging solution for residential, industrial and commercial enterprises.









# RESEARCH & DEVELOPMENT



The core of FoxESS is a number of advanced R&D centers located in Wenzhou, Shanghai, Wuxi and Wuhan. In these R&D centers, hundreds of engineers and technicians are tirelessly improving the products to ensure that FoxESS photovoltaic inverter, energy storage system, EV charger and other products always keep the leadingposition.

The R&D team of FoxESS is mainly composed of experts in inverter, energy storage and EV charger technology, including a variety of senior technical experts with rich experience in well-known enterprises of the industry.



# THE PRODUCTS QUALITY IS PRICELESS

FoxESS EV charger are precision engineered to provide high performance, efficiency, reliability; and we source our components from the leading manufacturers. FOX

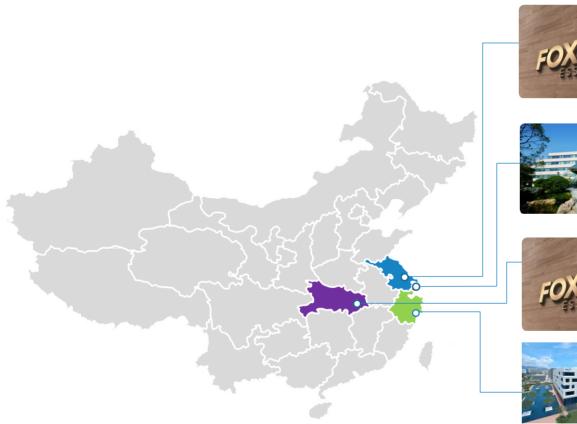
FoxESSEV charger incorporate a unique production process and quality control ensure product stability and long life.















Fox Wuxi R&D Center Wuxi

Fox Shanghai R&D Center Shanghai

Fo: Ce Wu



Fox Wuhan R&D Center Wuhan

Fox Wenzhou Factory 110,000 square meters 11Gw capacity Wenzhou

More than 2200 employees

#### **EVCHARGER**

A7300 SERIES
A011K SERIES
A022K SERIES

Small, Smart, Simply, Safety, Suitable A4 Paper size, Charging current with load balancing, Plug-in connector, Nine protections, 99% EV models





# A7300 SERIES

#### 7.3kW

- Power: 7.3kW
- Output Current: Max.32A
- Output Voltage: 230VAC
- Type 2 cable charging connector
- Compliant with OCPP 1.6 (JSON) (G2)
- App operation or RFIDauthentication or plug&play
- Protection Grade: IP65
- -25 ~50°C wide Operating Temperature





# A7300 SERIES

TECHNICAL SPECIFICATIONS 7.3kW

MODEL	A7300P1-E	A7300S1-E	
ТҮРЕ	CHARGING PLUG	CHARGING SOCKET	
INPUT			
Wiring Scheme	1P+	N+PE	
Voltage	230Vac	:, ±20%	
Maximum Current		2A	
Frequency	50/	60Hz	
OUTPUT			
Voltage	230Vac	;, ±20%	
Maximum Current	3	2A	
Rated Power	7.3	kW	
USER INTERFACE & CONTROL			
Connector Type	Type 2 cable	Type 2 socket	
RFID Reader	Mifare ISO/	IEC 14443 A	
Start Mode	Plug&Play/R	FID card/App	
Emergency Stop	Y	es	
COMMUNICATION			
WiFi, Bluetooth	Yes		
4G	Optional		
OCPP	OCPP 1.6 JSON	N, OCPP 2.0 optional	
ENVIRONMENT			
Installation	Wall-mount / Post-mount		
Operating Temperature	-25°C ~ 50°C		
Operating Humidity	5% ~ 95% No	condensation	
Operating Altitude	≤2000m		
DIMENSION AND WEIGHT			
Product Dimension	320*190*130 mm	320*190*144.5 mm	
Product Weight	3.55kg	2.0kg	
SAFETY			
IP protection rating	IP65		
IK protection rating	IK08		
Residual Current Detection	AC 30mA / DC 6mA		
	Over current protection, Residual current protection, Ground protection, Surge protection,		
Electrical Protection	Over/Under voltage protection, Over/Under frequen	cy protection, Over/Under temperature protection	
EMC	Class B		
CERTIFICATE	CE		
Certification Standard	EN/IEC 61851-1: 2019, EN/IEC 61851-21-2: 2021		
WARRANTY	3 Years standard		
	Optional		
Warranty Extension		optional	



# A011K SERIES

#### 11KW

- Power:11KW/ 22kW
- Output Current: Max.32A
- Output Voltage: 400V AC
- Type 2 cable charging connector
- Compliant with OCPP 1.6 (JSON)/2.0
- App operation or RFIDauthentication or plug&play
- Protection Grade: IP65
- -25 ~50°C wide Operating Temperature





# A011K SERIES

TECHNICAL SPECIFICATIONS 11kW

MODEL	A011KP1-E-2 A011KS1-E-2		
ТҮРЕ	CHARGING PLUG	CHARGING SOCKET	
INPUT			
Wiring Scheme	3P+	N+PE	
Voltage	400Va	c, ±20%	
Maximum Current	1	6A	
Frequency		60Hz	
OUTPUT			
Voltage	400Va	c, ±20%	
Maximum Current	1	6A	
Rated Power	11	<w .<="" td=""></w>	
USER INTERFACE & CONTROL			
Connector Type	Type 2 cable	Type 2 socket	
RFID Reader	Mifare ISO	/IEC 14443 A	
Start Mode	Plug&Play/R	FID card/App	
Emergency Stop	٢	/es	
COMMUNICATION			
WiFi, Bluetooth	Yes		
4G, Ethernet	Optional		
OCPP	OCPP 1.6 JSON,	OCPP 2.0 optional	
ENVIRONMENT			
Installation	Wall-mount / Post-mount		
Operating Temperature	-25°C ~ 50°C		
Operating Humidity	5% ~ 95% No condensation		
Operating Altitude	<2000m		
DIMENSION AND WEIGHT			
Product Dimension	320*190*130 mm	320*190*144.5 mm	
Product Weight	3.55kg	2.0kg	
SAFETY			
IP protection rating	IF	265	
IK protection rating	IK08		
Residual Current Detection	AC 30mA/DC 6mA		
	Over current protection, Residual current protection, Ground protection, Surge protection,		
Electrical Protection	Over/Under voltage protection, Over/Under frequency protection, Over/Under temperature protection		
EMC	Class B		
CERTIFICATE	CE		
Certification Standard	EN/IEC 61851-1: 2019, EN/IEC 61851-21-2: 2021		
WARRANTY	3 Years standard		
Warranty Extension	Optional		
trantiny Extension		optional	



## A022K SERIES

#### 122kW

- Power:11KW/ 22kW
- Output Current: Max.32A
- Output Voltage: 400V AC
- Type 2 cable charging connector
- Compliant with OCPP 1.6 (JSON)/2.0
- App operation or RFIDauthentication or plug&play
- Protection Grade: IP65
- -25 ~50°C wide Operating Temperature





TECHNICAL SPECIFICATIONS 22kW

MODEL	A022KP1-E-2 A022KS1-E-2		
ТҮРЕ	CHARGING PLUG	CHARGING SOCKET	
INPUT			
Wiring Scheme		3P+N+PE	
Voltage	40	0Vac, ±20%	
Maximum Current		32A	
Frequency		50/60Hz	
OUTPUT			
Voltage	40	0Vac, ±20%	
Maximum Current		32A	
Rated Power		22kW	
USER INTERFACE & CONTROL			
Connector Type	Type 2 cable	Type 2 socket	
RFID Reader	Mifare	ISO/IEC 14443 A	
Start Mode	Plug&Pl	ay/RFID card/App	
Emergency Stop		Yes	
COMMUNICATION			
WiFi, Bluetooth	Yes		
4G, Ethernet	Optional		
OCPP	OCPP 1.6 JSON, OCPP 2.0 optional		
ENVIRONMENT			
Installation	Wall-mount / Post-mount		
Operating Temperature	-3	25°C ~ 50°C	
Operating Humidity	5% ~ 95% No condensation		
Operating Altitude		≤2000m	
DIMENSION AND WEIGHT			
Product Dimension	320*190*130 mm	320*190*144.5 mm	
Product Weight	3.55kg	2.0kg	
SAFETY			
IP protection rating	IP65		
IK protection rating	IK08		
Residual Current Detection	AC 30mA/DC 6mA		
	Over current protection, Residual current protection, Ground protection, Surge protection,		
Electrical Protection	Over/Under voltage protection, Over/Under frequency protection, Over/Under temperature protection		
EMC	Class B		
CERTIFICATE	CE		
Certification Standard	EN/IEC 61851-1: 2019, EN/IEC 61851-21-2: 2021		
WARRANTY	3 Years standard		
Warranty Extension	Optional		
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#### AC 7K TUV

#### AC 11K/22K TUV

			CERTIFICATE
	CERTIFICATE TÜVRheinland		IUVRheinland
	of Conformity		of Conformity
	EC Council Directive 2014/53/EU		EC Council Directive 2014/53/EU
	of Radio Equipment		of Radio Equipment
	of readio Equipment		
			Registration No.: AT 50588755 0001
	Registration No.: AT 50565216 0001		Registration No AT 50500755 0001
	Denert No. 01004 DV0/ 004		Report No.: CN23JPLX 001
	Report No.: CN224BYV 001		Report No.: OR2301 EX 001
		Holder:	FOXESS CO., LTD.
Holder:	FOXESS CO., LTD. No.939, Jinhai Third Road,	Holder.	No.939, Jinhai Third Road,
	New Airport Industry Area, Longwan District,		New Airport Industry Area, Longwan District,
	Wenzhou, 325025 Zhejiang		Wenzhou, 325025 Zhejiang
	P.R. China		P.R. China
		The second	
Product:	EV charging station	Product:	Radio Equipment
	(AC charger)		(AC charger)
		I de mateix e attend	
Identification:	A7300P1-E1-R A7300P1-E1-B A7300P1-E1-S A7300S1-E1-R A7300S1-E1-B A7300S1-E1-S	Identification:	A022KP1-E-2 A022KS1-E-2 A011KP1-E-2 A011KS1-E-2 Serial No.: Engineering Sample
	A7300S1-E1-R A7300S1-E1-B A7300S1-E1-S Serial No.: Engineering Sample		Remark : 1.Refer to test report CN23JPLX 001 for details.
	Remark : 1.Refer to test report CN224BYV 001 for details.		2.See more standards in page 0002.
	2.See more standards in page 0002.	Tested acc. to:	ETSI EN 301 489-1 V2.2.3:2019
Tested acc. to:	ETSI EN 300 328 V2.2.2:2019		ETSI EN 301 489-3 V2.3.2:2023
	ETSI EN 300 330 V2.1.1:2017		ETSI EN 301 489-17 V3.2.4:2020 ETSI EN 301 489-52 V1.2.1:2021
	ETSI EN 301 489-1 V2.2.3:2019 ETSI EN 301 489-3 V2.1.1:2019		ETSI EN 301 511 V12.5.1:2017
	ETSI EN 301 489-17 V3.2.4:2020		ETSI EN 301 908-1 V15.1.1:2021
This certificate of confor	EN IEC 62311:2020 mity is based on an evaluation of a sample of the above mentioned product.	This certificate of confo	EN 301908-13 V 13.2.1:2022 rmity is based on an evaluation of a sample of the above mentioned product.
	tested sample is in conformity with all provisions of Article 3 of Council	This is to certify that the	e tested sample is in conformity with all provisions of Article 3 of Council
	is certificate does not imply assessment of the production and does not per-		his certificate does not imply assessment of the production and does not per- einland mark of conformity. The holder of the certificate is authorized to use
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Date 16.11.2022	TUVERAL DE	Date 07.06.2023	
	G. Yin		Contingiarung Shawn Peng
TÜV Rheinland I	GA Products GmbH - Tillystraße 2 - 90431 Nürnberg	TÜV Rheinland L	GA Products GmbH - Tillystraße 2 - 90431 Nürnberg
	Fax:(+49/221)806-3935 e-mail: cert-validity@de.tuv.com http://www.tuv.com/safety		Fax:(+49/221)806-3935 e-mail: cert-validity@de.tuv.com http://www.tuv.com/safety
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## Coming Soon

#### Dual output design Space saving, dual charging A022/044K SERIES

#### 22kW/44kW

- Power: 22kW/44kW
- Output Current: Max.32A
- Output Voltage: 400V AC
- Type 2 cable charging connector
- Compliant with OCPP 1.6 (JSON)/2.0
- App operation or RFIDauthentication or plug&play
- Static load balancing
- Protection Grade: IP65
- -25 ~50°C wide Operating Temperature





A022K SERIES

TECHNICAL SPECIFICATIONS 22kW

MODEL	A022KP2-E	A022KS2-E	
ТҮРЕ	DOUBLE CHARGING PLUG	DOUBLE CHARGING SOCKET	
INPUT			
Wiring Scheme	3P+N	N+PE	
Voltage	400Vac	, ±20%	
Maximum Current	32		
Frequency	50/6		
OUTPUT			
Voltage	400Vac	, ±20%	
Maximum Current	32A or	16A*2	
Rated Power	22kW or	11kW*2	
USER INTERFACE & CONTROL			
Connector Type	Type 2 cable	Type 2 socket	
RFID Reader	Mifare ISO/	IEC 14443 A	
Start Mode	Plug&Play/RF	FID card/App	
Emergency Stop	Ye	es	
COMMUNICATION			
WiFi, Bluetooth	Yes		
4G, Ethernet	Optional		
OCPP	OCPP 1.6 JSON, O	CPP 2.0 optional	
ENVIRONMENT			
Installation	Wall-mount / Post-mount		
Operating Temperature	-25°C ~ 50°C		
Operating Humidity	5% ~ 95% No condensation		
Operating Altitude	≤200	00m	
DIMENSION AND WEIGHT			
Product Dimension	480*275*	180 mm	
Product Weight	11.6kg	8kg	
SAFETY			
IP protection rating	IPE	55	
IK protection rating	IK08		
Residual Current Detection	AC 30mA/DC 6mA		
	Over current protection, Residual current protection	ection, Ground protection, Surge protection,	
Electrical Protection	Over/Under voltage protection, Over/Under frequent	cy protection, Over/Under temperature protection	
EMC	Class B		
CERTIFICATE	CE		
Certification Standard	EN/IEC 61851-1: 2019, EN/IEC 61851-21-2: 2021		
WARRANTY	3 Years standard		
Warranty Extension		Optional	
Warrancy Extension		17	



A044K SERIES

TECHNICAL SPECIFICATIONS 44kW

MODEL	A044KP2-E	A044KS2-E
ТҮРЕ	DOUBLE CHARGING PLUG	DOUBLE CHARGING SOCKET
INPUT		
Wiring Scheme	3P+N+I	DE
Voltage	400Vac, :	
Maximum Current		-20/0
Frequency	50/60H	47
OUTPUT	30/001	12
Voltage	400Vac, :	±20%
Maximum Current	32A *:	
Rated Power	22kW*	2
USER INTERFACE & CONTROL		
Connector Type	Type 2 cable	Type 2 socket
RFID Reader	Mifare ISO/IEC	C 14443 A
Start Mode	Plug&Play/RFID	) card/App
Emergency Stop	Yes	
COMMUNICATION		
WiFi	Yes	
4G, Ethernet	Option	al
OCPP	OCPP 1.6 JSON, OCP	PP 2.0 optional
ENVIRONMENT		
Installation	Wall-mount / Post-mount	
Operating Temperature	-25°C ~ 50°C	
Operating Humidity	5% ~ 95% No condensation	
Operating Altitude	≤2000r	n
DIMENSION AND WEIGHT		
Product Dimension	480*315*18	30 mm
Product Weight	16.6kg	13kg
SAFETY		
IP protection rating	IP65	
IK protection rating	IK08	
Residual Current Detection	AC 30mA/D	C 6mA
	Over current protection, Residual current protect	tion, Ground protection, Surge protection,
Electrical Protection	Over/Under voltage protection, Over/Under frequency	protection, Over/Under temperature protection
EMC	Class E	3
Certificate	CE	
Certification Standard	EN/IEC 61851-1: 2019, EN/IEC 61851-21-2: 2021	
WARRANTY	3 Ye	ars standard
Warranty Extension		ional
		47



# AC TYPE2 CHARGING CABLE

European Standard AC Type2 Double Plug Charging Cable is a reliable connection device used between electric vehicles and EV charger.

High strength ABS material, which has better quality and can be used for longer; IP65 waterproof could be safer during charging.

Thanks to the Silver plating on the standard J1772 inlet, our charger have better conductivity and could prevent overheating.



#### AC TYPE2 CHARGING CABLE

TECHNICAL SPECIFICATIONS

ТҮРЕ	MEAC-S-032A	MEAC-T-032A
CABLE		
Cable type	3 x 6 mm <sup>2</sup> + 1 x 0.75 mm <sup>2</sup>	5 x 6 mm <sup>2</sup> + 1 x 0.75 mm <sup>2</sup>
Cable length		5.0 m
ELECTRICAL PARAMETERS		
Rated Voltage	250V	480V
Rated Current		32A
Insulation resistance	≥100N	IΩ 500V DC
Withstandvoltage	L、 N and PE >2500	V AC L and N >2500V AC
MECHANICAL PARAMETERS		
Mated cycles	2	10000
Mated force	•	< 100N
ENVIRONMENTAL PARAMETERS		
Operate Temperature	-30	°C ~ 55°C
Ingress Protection		IP54
Flame Rating	U	L94-V0
STANDARD		
Certification	C	E/TUV



## POST OF EV CHARGER

- Base: 200\*150 m m
- Main part: 60\*120\*1600 mm







## ENERGY METER

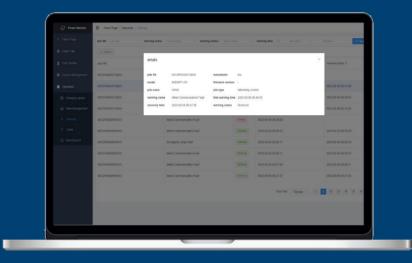
NAME	SINGLE PHASE	THREE PHASE	
MODEL	DDSU666	DTSU666	
Rated voltage [V]	220	220 380	
Rated current [A]	5(60)/5(80) 5(80)		
Temperature [°C]	-25 ~ +55		
Display mode	Segment code LCD		
Expertise rating	Level 1		
Installation method	Distribution box type/rail type		





# EXTREMELY EASY TOINSTALL

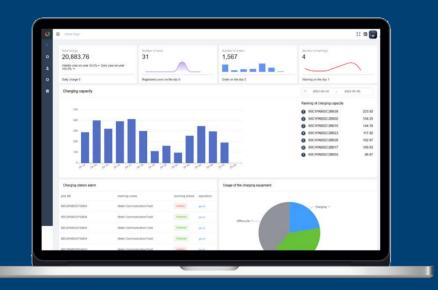
The installation process is fast and easy. we design the EV charger for easy installation, which can be completed in a few simple steps.



#### EXTREMELY EASY TOREMOTE DIAGNOSIS AND MAINTENANCE

User can read and check the EV charger's fault info by the management system without onsite.

Intelligent, Simply, Faster, Efficient.



#### MANAGEMENT SYSTEM

The management system is designed for operators to manage the EV charger and the charging service to all users.

The future of charging is smart, and our management system is equipped with future-proof features.

The system works on the cloud, which enables us to update new features rapidly.

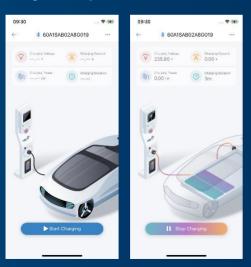
# FoxSwitch APP

#### 01

Cnotrol your charger with FoxSwitch app, Find the FoxSwitch APP on the Apple stores & Google Play stores.

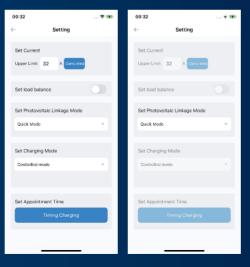
#### 02

Start or stop charging, Monitor the status of your charger and control it remotely on the go, View your statistics in realtime.



03

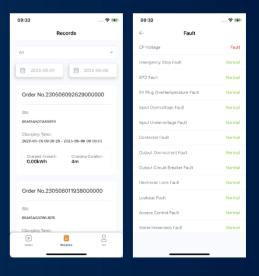
Schedule charging when the electric power is economical, your charger to protect it from unwanted use.







**04** Update firmware remotely Query fault and charging order



# FoxSwitch SMART CONTROL

#### **01** CHARGER CONTROL SET UP

09:32	🕈 🗰
← Setting	
Set Current Upper Limit 32 A Completed	
Set load balance	
Set Photovoltaic Linkage Mode	
Quick Mode	•
Set Charging Mode	
Controlled mode	*
Set Appointment Time	
Timing Charging	

#### 02 CHARGING TIME SET UP



#### **03** LOAD BALANCING SET UP

09:43		🕈 🛤
÷	Setting	
Set Current	32 A Complet	led
Set Load Balance Load Balance	A Comp	leted
Set Photovoli	taic Linkage Mod	e
Quick Mode		
		Done
1	2 ABC	3 DEF
4 6H1	5 JKL	6 MN0
7 PORS	8 TUV	9 ****z
	0	$\otimes$

#### **04** SOLAR MODE STET UP

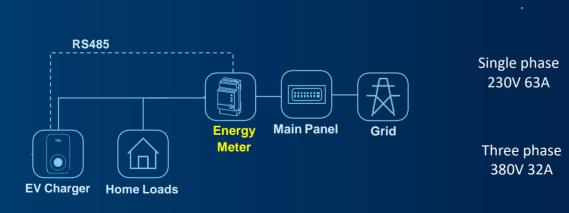


#### Dynamic Load Balance SOLUTION(APP Setup)

Adjustable the Max charging current Avoid Home Overload(Break Off)

#### DLB for Residential charging system

DLB is a smart solution that allows you to safely balance the power consumption between your electric vehicle and your other electrical home appliances. This ensures that the network is not overloaded **Priority**: electrical home appliances Then: others power for charging system. In Short : Total power minus power of electrical home appliances equals charging system The best way to avoid exceeding the power capacity is by using Dynamic Load Balancing.



# Static Load Balance SOLUTION

Adjustable the Max charging current Avoid Charging Station Power Overload

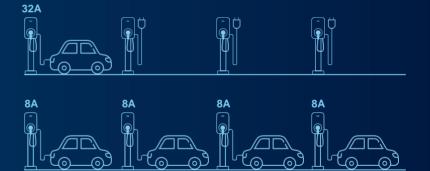
#### SLB for Public charging system

SLB is a feature available on charging stations to distribute the available power to all connected chargers and other loads. Every electric vehicle can charge optimally and it prevents charging stations consume too much current or exceed the maximum available power of the parking facility.

Fixed: the setup power out of charging

In Short: total power divide output using quantities equals each output power (EV charger is single outlput) Static Load Balancing (SLB) relies on a predefined, static, site power allocation. It does take into account changes to prevent overloads.





Total Output power is divide with using quantities

Dual Outlets charger Self-SLB

# Solar Linkage Priority SOLUTION

There are three Work Modes designed for the Smart EV Charger:

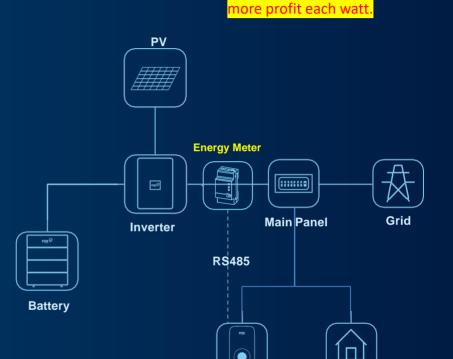
#### **GREEN** mode

In the state of spontaneous self-use, the inverter gives priority to charging the battery, and the remaining energy is supplied to the EVcharger

#### ECO mode

In the state of spontaneous self-use, the inverter gives priority to power the EV charger and the battery can also power the EV charger.

#### FASTmode



When the inverter is not in the self-use state, the EV charger will charge at the set maximum current.

EV Charger

**Home Loads** 

Smart control solar electric power to be

used of EV, low cost per kilometer ,

# Phase-Aware Load Balancing Coming Soon

Keep the same power output for each phase, avoid phase overload (break off)

A great benefit of a phase-aware and a phase-shifted setup is when certain cars can only charge on phase 1 or phases 1+2, a system without phase-awareness would quickly fill up in capacity, a lot of capacity unused on phases 2 and 3



# EVOPERATING PLATFORM

FoxEss EVcharger OCPP1.6 connect with the third party who is EV charging management platform, such as Monta, E-flux, beagleplug etc.

# MONICA BUESINESS COVER EU/AU/IN/MEMA E-Flux BUESINESS COVER EURO INCLUDE UK

BUSINESS COVER ITALY

# TYPE2 CHARGING SOCKET WITH SHUTTER

TYPE2 CHARGING SOCKET WITH SHUTTER is based on the proven charging socket type 2 with an additional shutter module, with additional protection against contact of electrical parts.











Wenzhou, China





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