

# Teison



## Teison Portable pro

TS-PEC-002



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# The best charger for your wonderful journey



# Product features



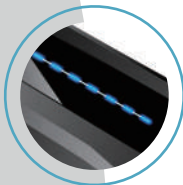
## Solid design control box

Meet IP65 & IK10 standard by lab test



## LCD Color screen

Easiest user interaction and real-time status view



## Breathing Indicator light

Showing real time charging status



## Control button

Max output current adjustment & set scheduled charging time



## Water protection gasket

30 minutes water resistance under 1 meter depth of water



## TPU cable

5 meter cable with excellent durability and top cold resistance at -40°C



## TUV approved connector

Excellent water protection and easy hold ; Silver plated terminals to minimize wear and tear on EV charging socket

## Designed for the best portable EV charging

- IEC/EN 62752 , all EMC items under IEC/EN 61000 , IP65 approved by TUV
- IK10 Solid design withstand a 2.5T car
- Max 22 kw fast charging speed
- Flexible charging/ power connector options
- Color screen displays all the charging data you want to know in real time and dynamically
- Build in metering chip measures power consumption accurately
- Max 7 levels current adjustment & 8 hours scheduled charging
- -30°C-60°C stable working
- Self-diagnosis of faults, automatic repair
- Compatible with all cars in type 2/1 connection.
- Protecting the life of car battery with the most stable charging process.

## Highest safety

- PCV0 housing with 2.0~3.0mm thick exudes robustness and protects inside components from external influences.
- The housing is made from materials specially developed for top heat dissipation and with flame retardant coating.
- Completely meets all requirements of the TUV applicable standards.
- AC + DC faults detection
- Real-time monitoring for heat and all instabilities during charging process

# Parameter

Specification	Model	TS-PEC-002-16A	TS-PEC-002-32A	TS-PEC-002-16A3P	TS-PEC-002-32A3P
Electrical Properties	Voltage	230VAC ±15%	230VAC ±15%	380VAC ±15%	380VAC ±15%
	Max Output Current	16A (6/8/10/13/16A Optional)	32A (6/8/10/13/16/20/32A Optional)	16A (6/8/10/13/16A Optional)	32A (6/8/10/13/16/20/32A Optional)
	Max Output Power	3.6kw	7kw	11kw	22kw
	Cable Specification	3*2.5mm <sup>2</sup> +2*0.5mm <sup>2</sup>	3*6mm <sup>2</sup> +2*0.5mm <sup>2</sup>	5*2.5mm <sup>2</sup> +2*0.5mm <sup>2</sup>	5*6mm <sup>2</sup> +2*0.5mm <sup>2</sup>
	Frequency	50/60 Hz			
Structure Design	Residual current protection	30mA or 30mA +DC 6mA			
	Display	1.8" LCD			
	LED Indicator	LED Light bar			
	Front Panel	PMMA			
	Installation Method	Wall-mount/carry-on Optional			
	Charging Outlet	TYPE1/2 + 5M charging cable			
	Housing Material	PC+GF 10%			
Security Protection	Safety Standard	IEC/EN 62752:2016			
	Multiple Protection	Over/Under voltage protection , Surge protection , Over temperature protection , Over current protection , Leakage Protection , Short circuit protection , EFT Protection			
	Warranty	1 year			
Environmental Performance	Working temperature	-30 C ~60 C			
	Storage temperature	-40 C ~70 C			
	Working humidity	5%~95%, No condensation			
	Protection Level (control box)	IP65			
	Altitude	≤2000m			
	Application Site	Indoor/Outdoor			
Extra Function	Cooling Method	Natural cooling			
	Temperature detection function	Yes (check the temp.of PCB and show it on the screen )			
Packing Details	Schedule charging	Yes(1-8hours )			
	Product Size	255*109*55mm			
	Product Weight (Net Weight)	≤2.7KG	≤3.3KG	≤3.5KG	≤4KG
Product Weight (Gross Weight)	≤2.9KG	≤3.6KG	≤3.8KG	≤4.4KG	

# Product size and packaging

**Product size:** 255\*109\*55mm

**Product net weight:**

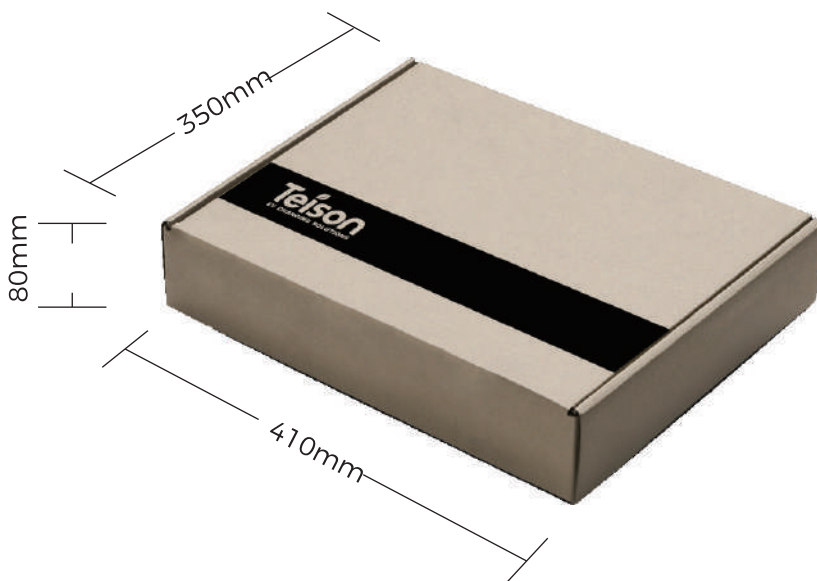
16A: ≤3.5kg    32A: ≤4kg

**Product gross weight:**

16A: ≤3.8kg    32A: ≤4.4kg



Each one is with a certificate of conformity card. Five-layer corrugated packaging is used to fit the charger measured 410mm(L)\*350mm(W)\*80mm(H) for 1 pc.



# Product installation

**Pls kindly check the manual before using.**

The operation steps are as follows:

**Step 1:** Connect with the power, the control box starts to be energized, the blue light bar is always on, and the screen will display the gear and status.

**Step 2:** Press the “Ampere button” to set charging current.

**Step 3:** Schedule charging function

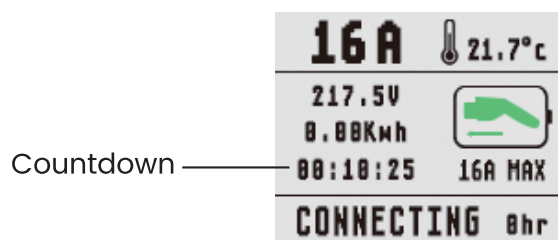
1) In standby status, press the button for 3s to enter charging time scheduling interface; to exist this interface, press the button again for 3s.

2) In charging time scheduling interface,

set for one hour by pressing the button once and Max 8h can be set. Then plug-in the connector to the vehicle to wait for charging.



Ampere button



3) Power off and then power on again if to terminate the reservation status.

**Step 4:** Plug-in the connector to the vehicle.

**Step 5:** Start charging and communication is established between the charger and vehicle. Charging process will be monitored by the charger.

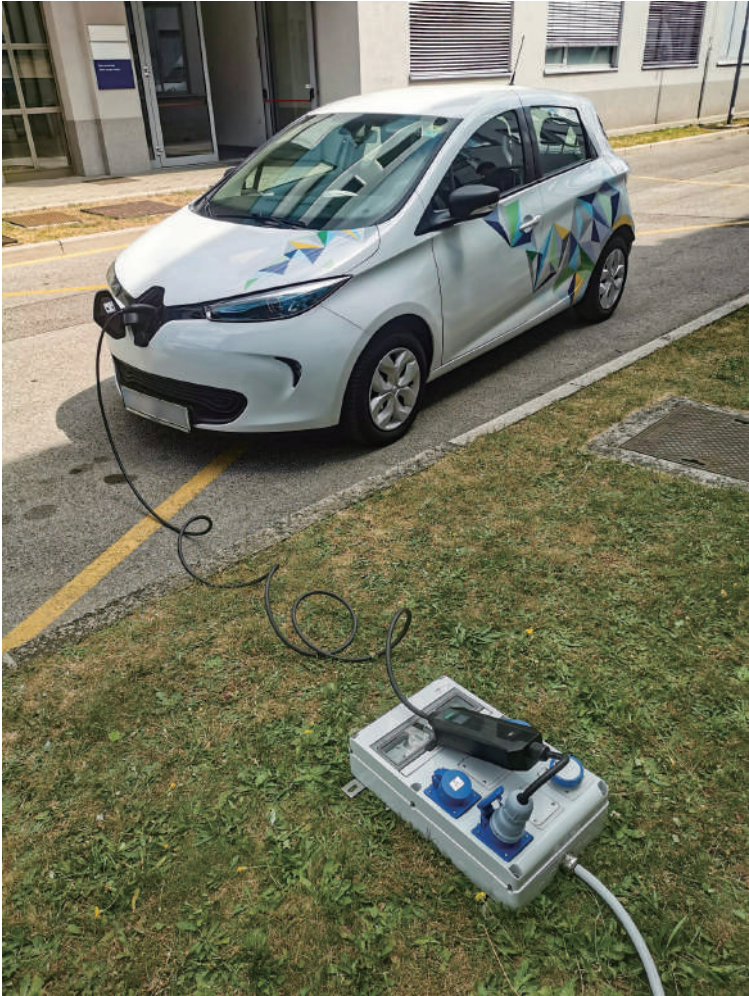
**Step 6:** Disconnect the plug from the outlet and the connector from the vehicle separately after charging finished



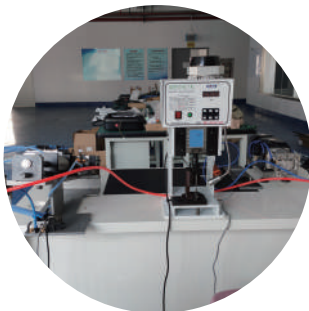
# Fault handling

Condition	LCD display	Status indicator light	Solution
Leakage Protection	Creepage	Red on	The relay automatically disconnects within 20 milliseconds, cuts off the power, and stops charging. The charger will need to be manually powered back on.
Over voltage protection	OverVoltage		Charging automatically stops if the voltage exceeds the over voltage threshold of 280V (±5V). Charging automatically resumes when the voltage returns to below 280V (±5V).
Less voltage protection	UnderVoltage		Charging automatically stops if the voltage decreases below the low voltage threshold of 80V (±5V). Charging automatically resumes when the voltage returns to above 80V (±5V).
Over current protection	OverCurrent		Charging automatically stops if the real time current is higher than 10% of the rated output current, and will automatically resume when it returns to less than 10%. If the real time current increases to more than 20% of the rated output current, charging automatically stops but the charger will need to be manually turned off and powered back on to resume charging.
Over temperature protection	Over Temperature		Charging automatically stops if the temperature exceeds the over temperature threshold of 85 C. Charging automatically resumes when the temperature returns to below 85 C.
NTC brake	Temp Brake		When the temperature sensor is open circuit, the relay will automatically cut off and charging will stop. The charger will enter a fault state and will need to be returned to the factory for repair.
NTC short	Temp Short		When the temperature sensor is short circuit, the relay will automatically cut off and charging will stop. The charger will enter a fault state and will need to be returned to the factory for repair.
CP communication	CP Fault		When the communication part of the charging cable has short circuited, the relay will automatically cut off and charging will stop. The car connector gun will need to be removed and reinserted until the gun clicks into place. If the LCD Screen still displays 'CP Fault', the charger has entered a fault state and will need to be returned to the factory for repair.
Meter Fault	Meter Fault		Contact sales for inspection.
Gun Fault	Gun Fault		Contact sales for inspection.
CP Duty Error	CP Duty Error		Contact sales for inspection.

# Our case







## Teison Profile

Teison is a professional EV charging products manufacturer located in Yangzhou city, China. Our products including ev charging station, mode 2 portable ev charger, mode 3 ev charging cable and other accessories, have been applied to more than 32 countries in Europe, North America, Asia and Oceania. Covers an area of 2500 square meters, 50 workers and specialized R&D engineers' team and 4 production lines. Besides, we have our own QC and test department to control the quality.

Teison passed the ISO9001 quality management system certification, ISO14001 environmental management system certification. Products passed the TUV test, widely used in different occasions all over the world.

Teison always insists on quality & service first. We sincerely welcome clients around the world to our factory for quality and production line check.

# Factory history

2017

Teison brand established, committed to creating the most reliable charging solution for global customers.

2018

1. Fast growing in EU market on Home Wallbox market share.  
2. Won good reputation in the European market by Quality and Service.

2019

1. Developed the first LVD+EMC TUV approved IP67 portable ev charger in China for European market.  
2. R&D team established for OCPP smart charging solution both on hardware&software.

2020

1. New production base established.  
2. Developed OCPP full function Pro wallbox and OCPP platform.  
3. Fast growing in EU market on Smart wallbox market share.  
4. R&D team established for DC charging station.

2021

1. Developed the first LVD+EMC TUV approved OCPP full function Mini wallbox in China.  
2. Developed OCPP DC charging station from 30-360kw.  
3. Started to providing customization service for customers.  
4. Continue to increase investment in R&D.

2022

1. Production base expended.  
2. Fast growing on market share in EU, Asian and South America.  
3. Developed dynamic load balance and solar surplus charging solution.  
4. Fast growing on DC charging station market share.