



ETЭK

Smart Electric Energy Meter & Voltage/Current Protector



Instruction manual

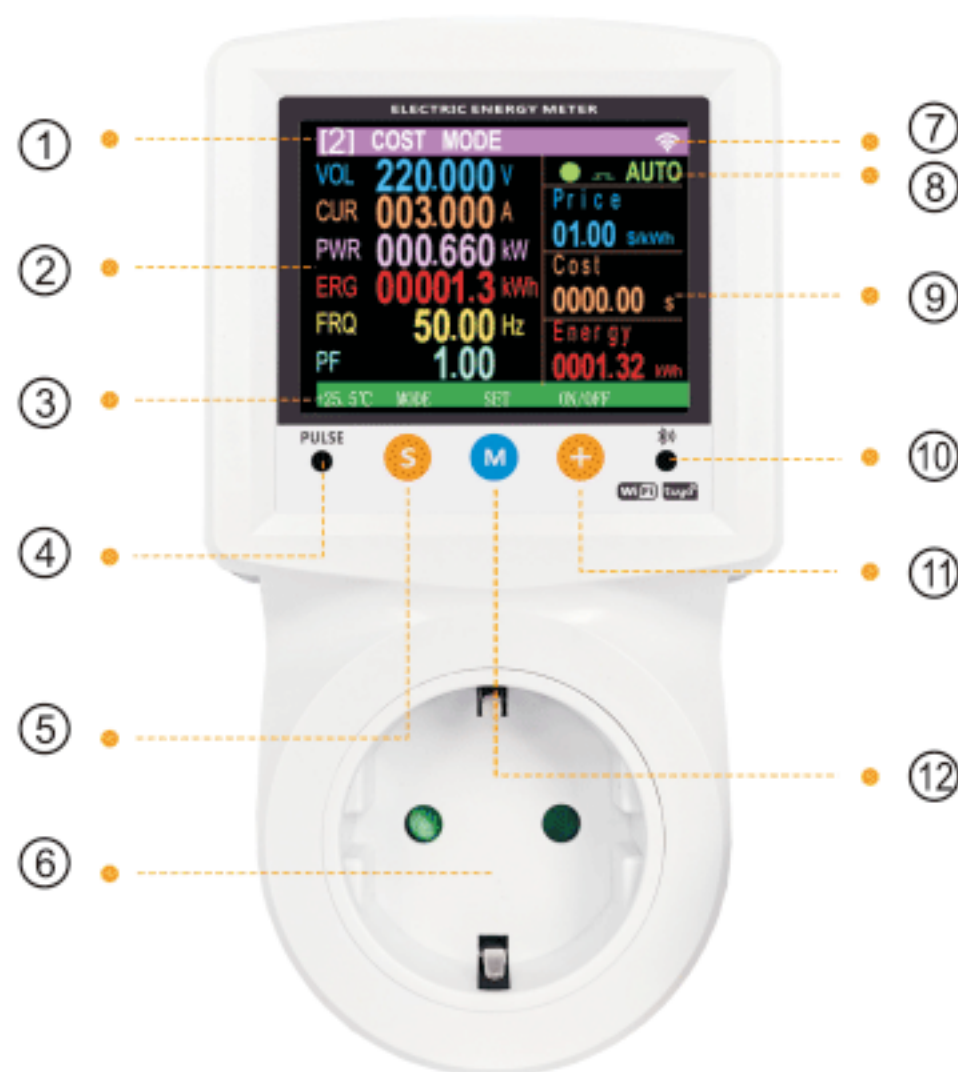
I. Application

Smart electric energy meter and protective socket is an intelligent protector integrated with over-voltage protector, under-voltage protector and over-current protector. In case of over-voltage fault, under-voltage fault or over-current fault in line, this product can instantly power off to prevent electrical equipment from being burnt. The over-voltage, under-voltage and over-current protection values of this product can all be set up by yourself and can be adjusted on the basis of local practical condition.

II. Product features

1. In case of over-voltage fault, under-voltage fault or over-current fault in single phase line, the product can power off the line and can automatically restore connecting the line over a time delay after voltage or current of the line is recovered to normal condition.
2. In case of transient over voltage in line, the product can protect the equipment from false operation.
3. In case that the line subjects to unstable voltage or sudden power-off and power-on due to loosened connection and other fault, the product will disconnect the line.
4. When fault voltage of the line reaches the peak, the product itself will not be damaged.
5. The protector can display voltage, current, kilowatt, power factor, frequency and kilowatt-hour.

III. Panel introduction

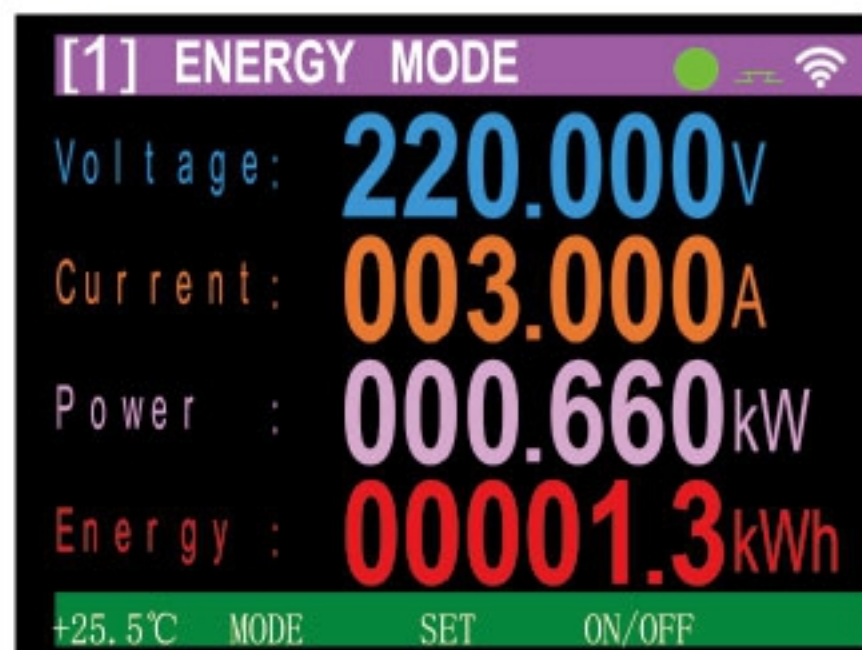


- ① Function mode selection
- ② Various measurement parameters
- ③ Time ,date, CPU temperature
- ④ Power indicator light
- ⑤ S: Setting key/menu key, one click to switch modes, long press to enter background menu settings
- ⑥ Output socket
- ⑦ WIFI network status
- ⑧ Output socket switch status indication
- ⑨ Multifunctional variable function display
(different content will be displayed according to mode selection)
- ⑩ WIFI networking indicator light
- ⑪ +: One click is to control the output socket power on/ off. When press M to enter manual setting then "+" becomes the adjustment key.
- ⑫ M: Manual operation key, one click to enter the current page settings, long press to enter the network configuration state

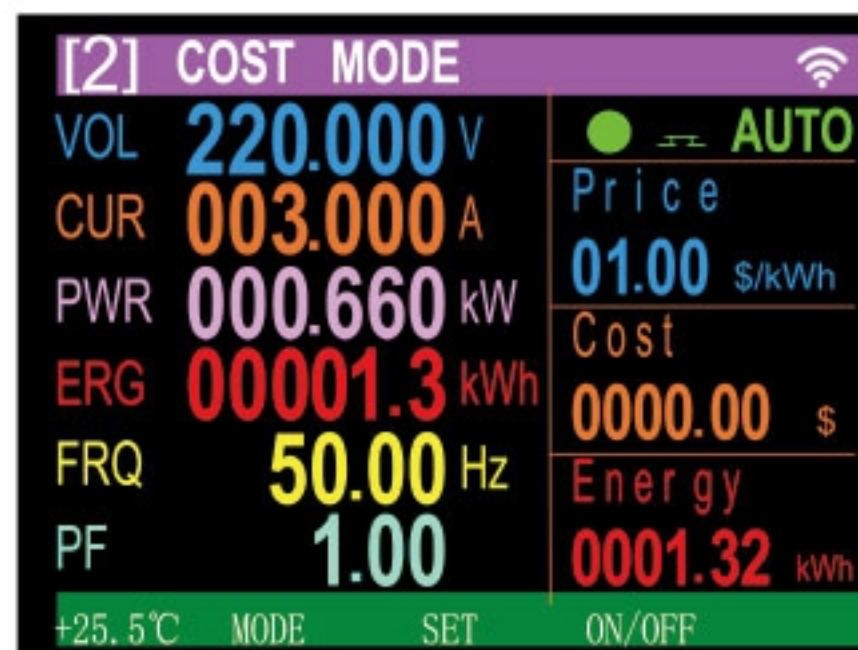
IV.Intelligent socket parameters and setting instructions

Code	Technical Parameter	Setting Range	Default	Step	Function Description
01	Language	Chinese/English	English	/	Select the system language.
02	Over-voltage protection value	230V-300V-OFF	270V	1V	When the voltage is higher than the set value, the protector will cut off the line. When the setting over-voltage protection value exceeds 300V, the over-voltage protection function will be closed.
03	Over-voltage recovery value	225V-295V	265V	1V	When the voltage is lower than the set value, the protector will automatically reset, and the set value must be less than the over-voltage protection value by more than 5V.
04	Over-voltage protection action	1S-30S	1S	1S	The time needed for protection action when over-voltage.
05	Over-voltage recovery delay time	1S-500S	30S	1S	The time needed for automatic reset when voltage recovery.
06	Under-voltage protection value	OFF-140V-210V	170V	1V	When the voltage is lower than the set value, the protector will cut off the line. When the setting under-voltage protection value is lower than 140V, the under-voltage protection function will be closed.
07	Under-voltage recovery value	145V-215V	175V	1V	When the voltage is lower the set value, the protector will cut off the line.
08	Under-voltage protection action	1S-30S	1S	1S	The time needed for protection action when under-voltage.
09	Under-voltage recovery delay	1S-500S	30S	1S	The time needed for automatic reset when voltage recovery.
10	Over-current protection value	1A-16A-OFF	16A	0.1A	When the current is higher than the set value, the protector will cut off the line. When setting OFF, the protector will turn off over-current protection function.
11	Over-current protection action	1S-30S	1S	1S	The time needed for protection action when over-current.
12	Over-current recovery delay	1S-500S	30S	1S	The time needed for automatic reset when current recovery.
13	Times of continuous over current protection	OFF-1-20	OFF	1	When the times of continuous over-current protection exceeds the set value, the protector will cut off the line, then it needs to be opened manually.
14	Power limiting protection	0.22KW-3.52KW-OFF	3.52KW	0.01KW	When the power is higher than the set value, the protector will cut off the line. When the setting over-power protection value exceeds 3.52KW, the over-power protection function will be closed.
15	Power limiting protection action	1S-30S	1S	1S	The time needed for protection action when over-power.
16	Power limiting recovery delay	1S-500S	30S	1S	The time needed for automatic reset when power recovery.
17	Times of continuous power limiting protection	OFF-1-20	OFF	1	When the times of continuous over-power protection exceeds the set value, the protector will cut off the line, then it needs to be opened manually.
18	Accumulated electric power reset	YES	YES	/	Long press the S key to reset and exit the settings.
19	Restore factory settings	YES	YES	/	Long press the S key to restore and exit settings.
20	Display screen flipping	YES	YES	/	Long press the S key to flip the display screen up and down.

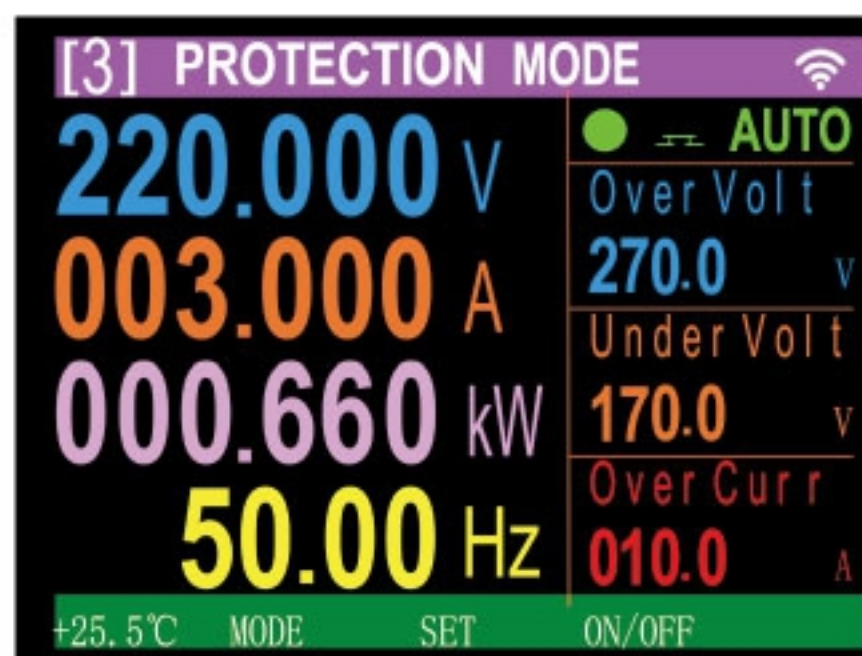
V.Description of the pattern



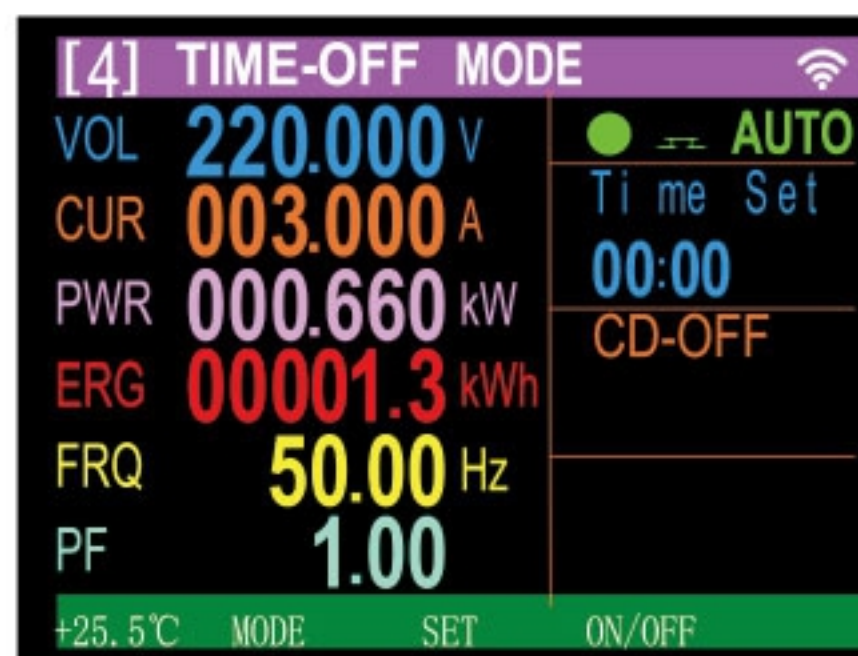
- Voltage, current, power and electricity can be observed in real time



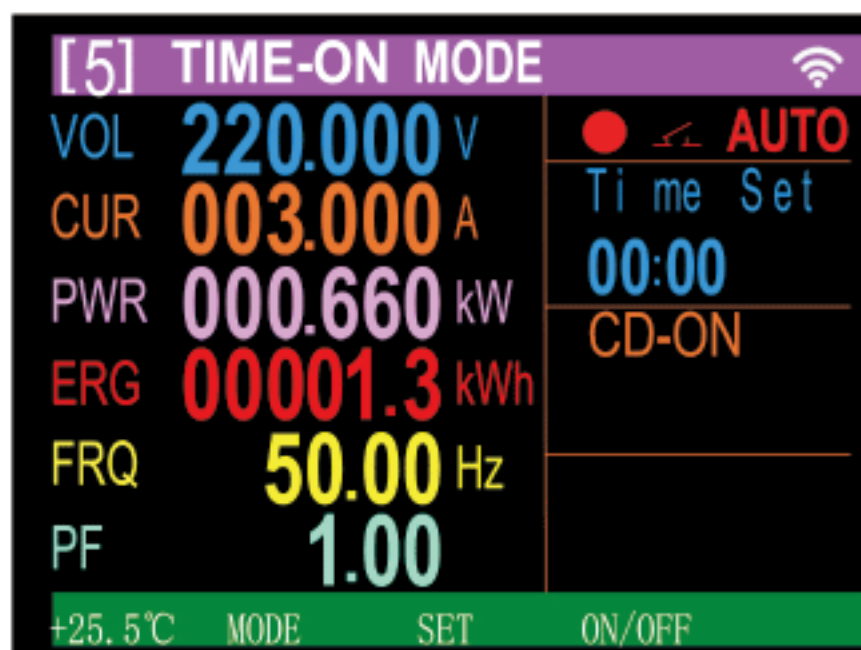
- "M" button to enter electricity price setting mode, switch positions, "+" button to increase the value of the corresponding position (00.00–99.99/kWh)



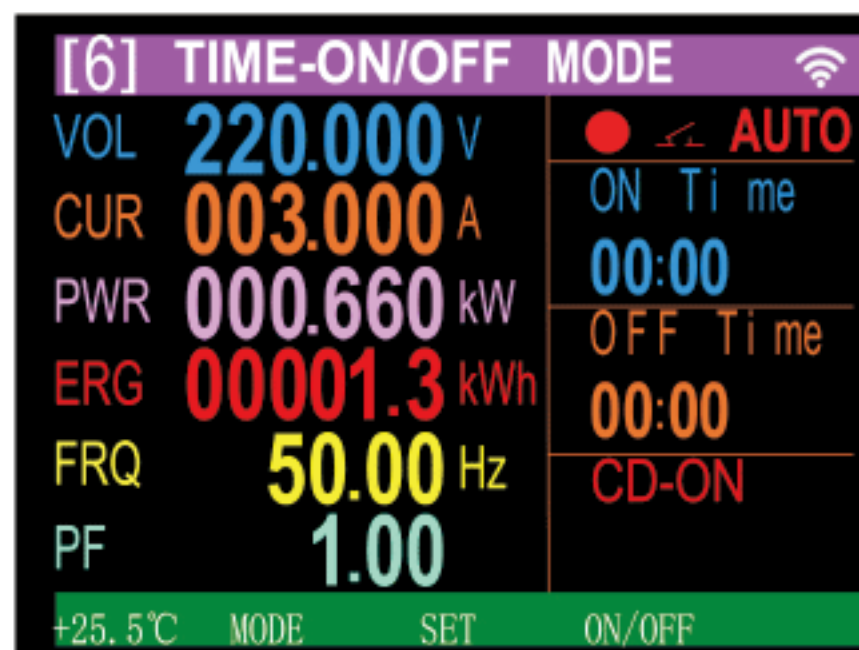
- "M" button to enter the setting of over voltage power-off, under-voltage power-off, over-current power-off mode, switching position, and the "+" button to set the corresponding value. Overvoltage range (230–300V), undervoltage range (140–210V) Overcurrent range (1–16A)



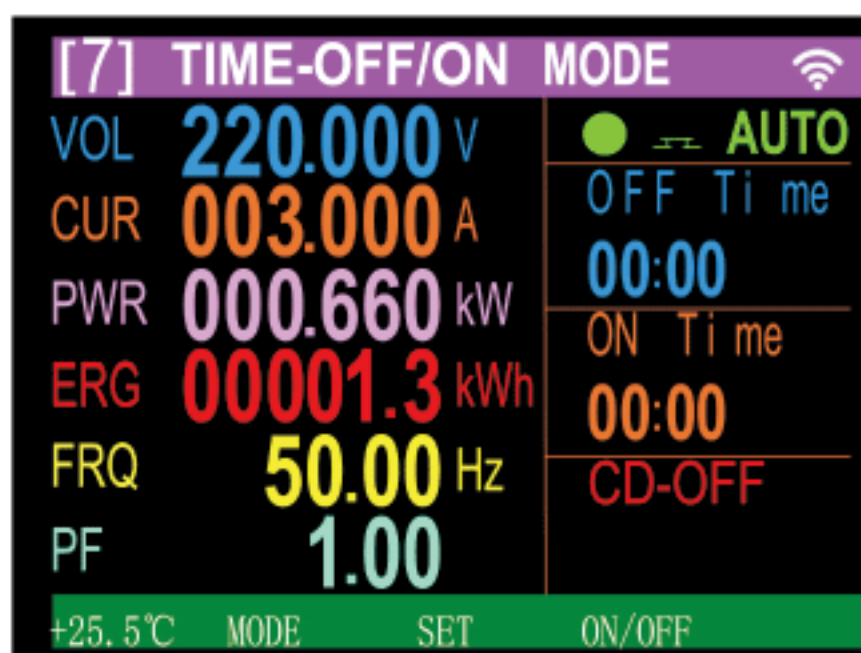
- "M" button to enter the setting off time mode, switch position, "+" button to set the corresponding value (00:00–99.99)



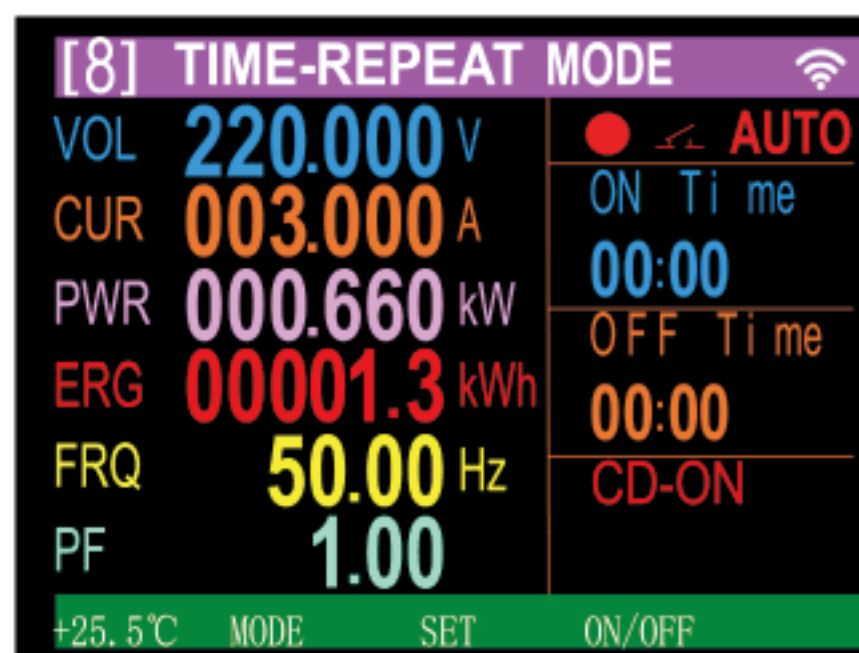
- "M" button to enter the setting start time mode, switch position , "+" button to set the corresponding value (00:00–99.99)



- "M" button to enter the setting of on time, off time mode, switch position , "+" button to set the corresponding value (00:00–99.99)



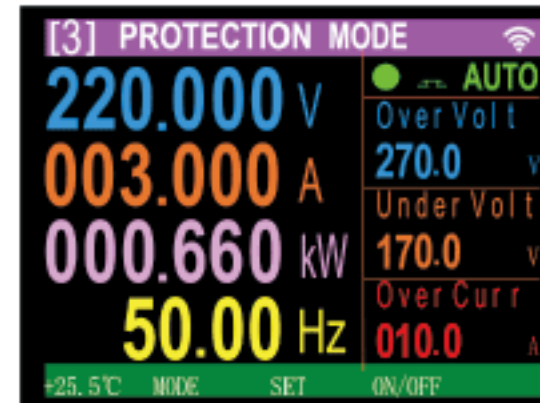
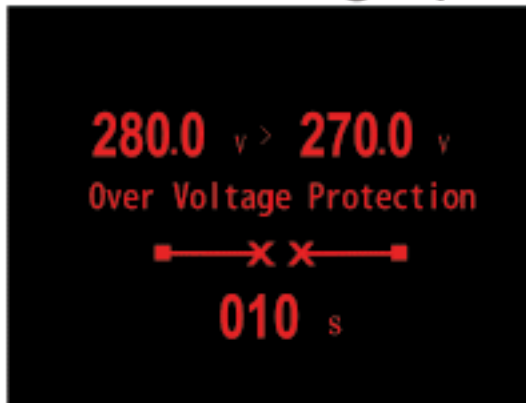
- "M" button to enter the setting off time, on time mode, switch position , "+" button to set the corresponding value (00:00–99.99)



- "M" button to enter the setting on time, off time mode, switch position , enter the cycle mode after confirmation. The "+" button sets the corresponding value (00:00–99.99)

VI. Protection display description

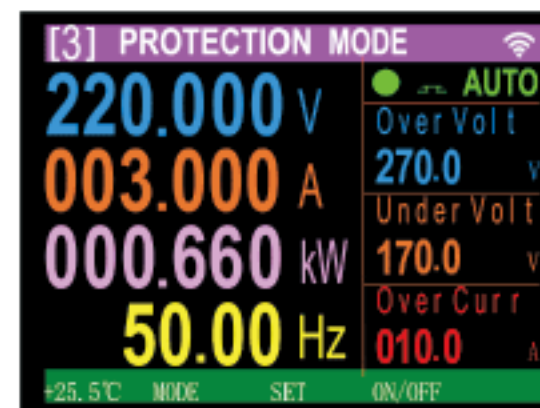
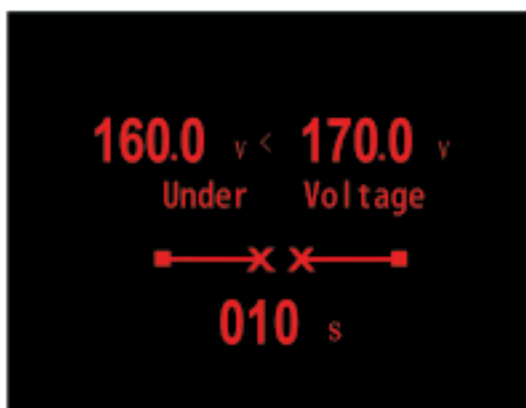
● Over voltage protection status



- When over-voltage, the protector automatically disconnects, the over-voltage alarm indicator on, and the screen shows the over-voltage value.

- When the voltage turns normal, the over-voltage alarm indicator off, and the protector resets automatically within the set recovery time.

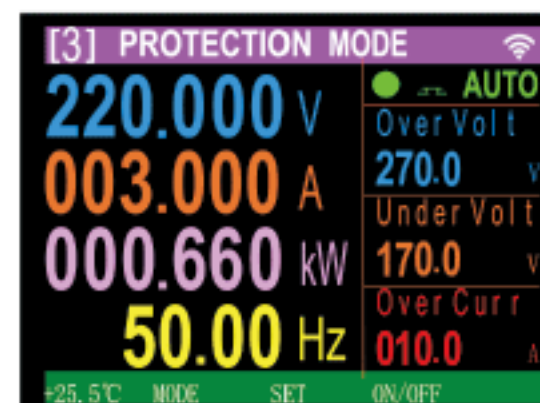
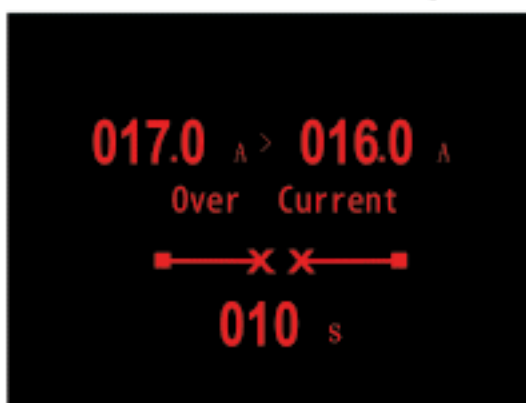
● Under voltage protection status



- When under-voltage, the protector automatically disconnects, the under-voltage alarm indicator on, and the screen shows the under-voltage value.

- When the voltage turns normal, the under-voltage alarm indicator off, and the protector resets automatically within the set recovery time.

● Over current protection status



When over-current, the protector automatically disconnects, the over-current alarm indicator on, and the screen shows the over-current value.

- When the current turns normal, the over-current alarm indicator off, and the protector resets automatically within the set recovery time.

VII. Product dimension



VIII. Socket type



Universal



UK



FR

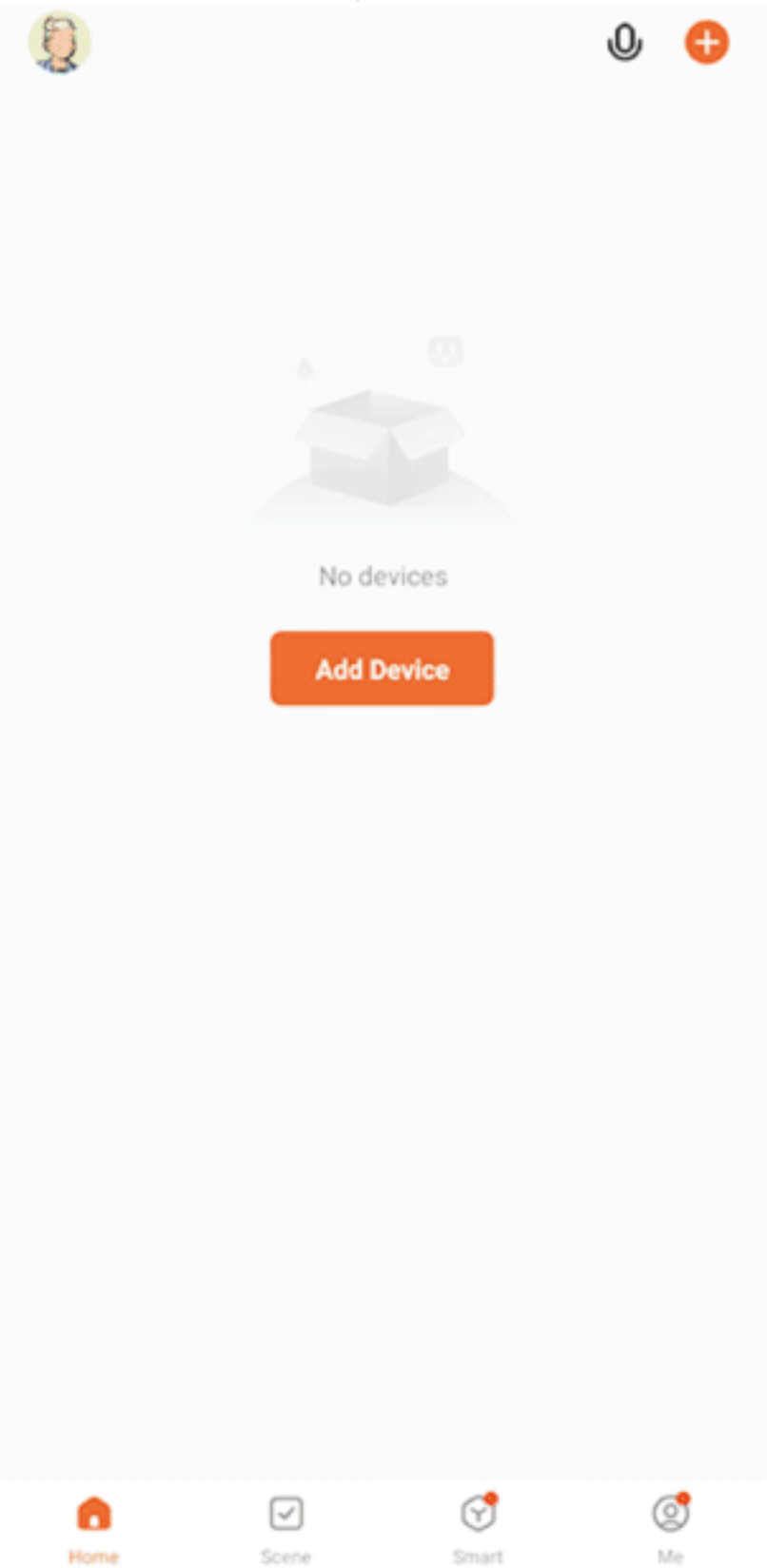


US

IX.Protector networking steps



Scan QR code or search “tuya” in App Store and download the APP



Click Add Device to start adding protector



Discover the protector and click Add



Enter Wi-Fi password to connect to the network



The protector is added successfully



Enter the mobile phone operation interface