

## Voltage / Current Protector GPS8-10 Instruction Manual



### General

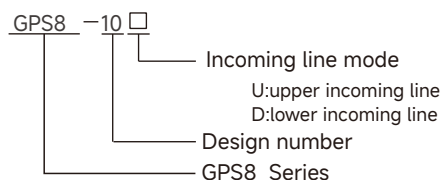
#### ■ Applications

-Overvoltage, undervoltage, overcurrent and leakage protection for household equipment, while displaying frequency, power factor, power, and electricity consumption;.

#### ■ Function Features

-Overvoltage, undervoltage, overcurrent, and leakage protection.  
-Special metering chips are used to detect voltage, current, electricity consumption and power.  
-Double bus wiring design stronger ability.  
-Over / under voltage value and over-current value can be set.  
-Self reset after fault.  
-Large color screen display.  
-DIN rail mounting.

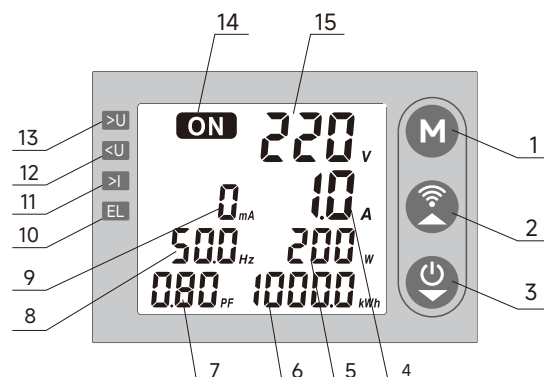
#### ■ Model and connotation



### Technical parameters

|                                 | GPS8-10                                      |
|---------------------------------|----------------------------------------------|
| Function                        | Over voltage, under voltage and over current |
| Rated supply voltage            | AC220V(L-N)                                  |
| Rated supply frequency          | 45~65Hz                                      |
| Operation voltage range         | 80V~400V(L-N)                                |
| Rated operational current       | 32A,40A,50A,63A,80A (AC1)                    |
| Burden                          | AC max.3VA                                   |
| Over voltage operation value    | OFF,230V~300V                                |
| Under voltage operation value   | 140V~210V,OFF                                |
| Over/under voltage action delay | 0.1s~10s                                     |
| Over current operation value    | 1~32A,40A,50A,63A,80A                        |
| Over current action delay       | 2s~600s                                      |
| Leakage current value           | OFF,10mA~400mA                               |
| Leakage reclosing count         | OFF,1~20,ON                                  |
| Power-up delay                  | 2s~600s                                      |
| Reset time                      | 2s~900s                                      |
| Measurement error               | ≤1%                                          |
| Electrical life(AC1)            | 1×10 <sup>4</sup>                            |
| Mechanical life                 | 1×10 <sup>6</sup>                            |
| Operating temperature           | -20℃ ~ +60℃                                  |
| Storage temperature             | -35℃ ~ +75℃                                  |
| Mounting/DIN rail               | Din rail EN/IEC 60715                        |
| Protection degree               | IP40 for front panel/IP20 terminals          |
| Operating position              | any                                          |
| Overvoltage cathogory           | III.                                         |
| Pollution degree                | 2                                            |
| Dimensions                      | 82×54×68mm                                   |
| Weight                          | 205g                                         |

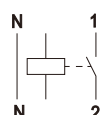
### Panel Diagram



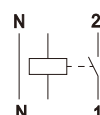
|    |                                                                                                                                                                                                                                                                   |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Press and hold the setting key for 3 seconds to enter the setting. After modifying the setting, press and hold for 3 seconds to save the setting.                                                                                                                 |
| 2  | 1.Used to increase the value when setting parameters.<br>2.Long press for 5 seconds to configure WiFi network.                                                                                                                                                    |
| 3  | 1.Used to reduce the value when setting parameters.<br>2.After exiting the setting, it can be used to manually turn on or off the load.<br>3.If the automatic fault reset function is turned off, this button can be used for manual reset when the fault occurs. |
| 4  | Current value                                                                                                                                                                                                                                                     |
| 5  | Power                                                                                                                                                                                                                                                             |
| 6  | Electricity consumption                                                                                                                                                                                                                                           |
| 7  | Power factor                                                                                                                                                                                                                                                      |
| 8  | Frequency                                                                                                                                                                                                                                                         |
| 9  | Leakage current                                                                                                                                                                                                                                                   |
| 10 | Leakage fault indication                                                                                                                                                                                                                                          |
| 11 | Overcurrent fault indication                                                                                                                                                                                                                                      |
| 12 | Overvoltage fault indication                                                                                                                                                                                                                                      |
| 13 | Undervoltage fault indication                                                                                                                                                                                                                                     |
| 14 | ON/OFF status indication                                                                                                                                                                                                                                          |
| 15 | Voltage value                                                                                                                                                                                                                                                     |

### Wiring Diagram

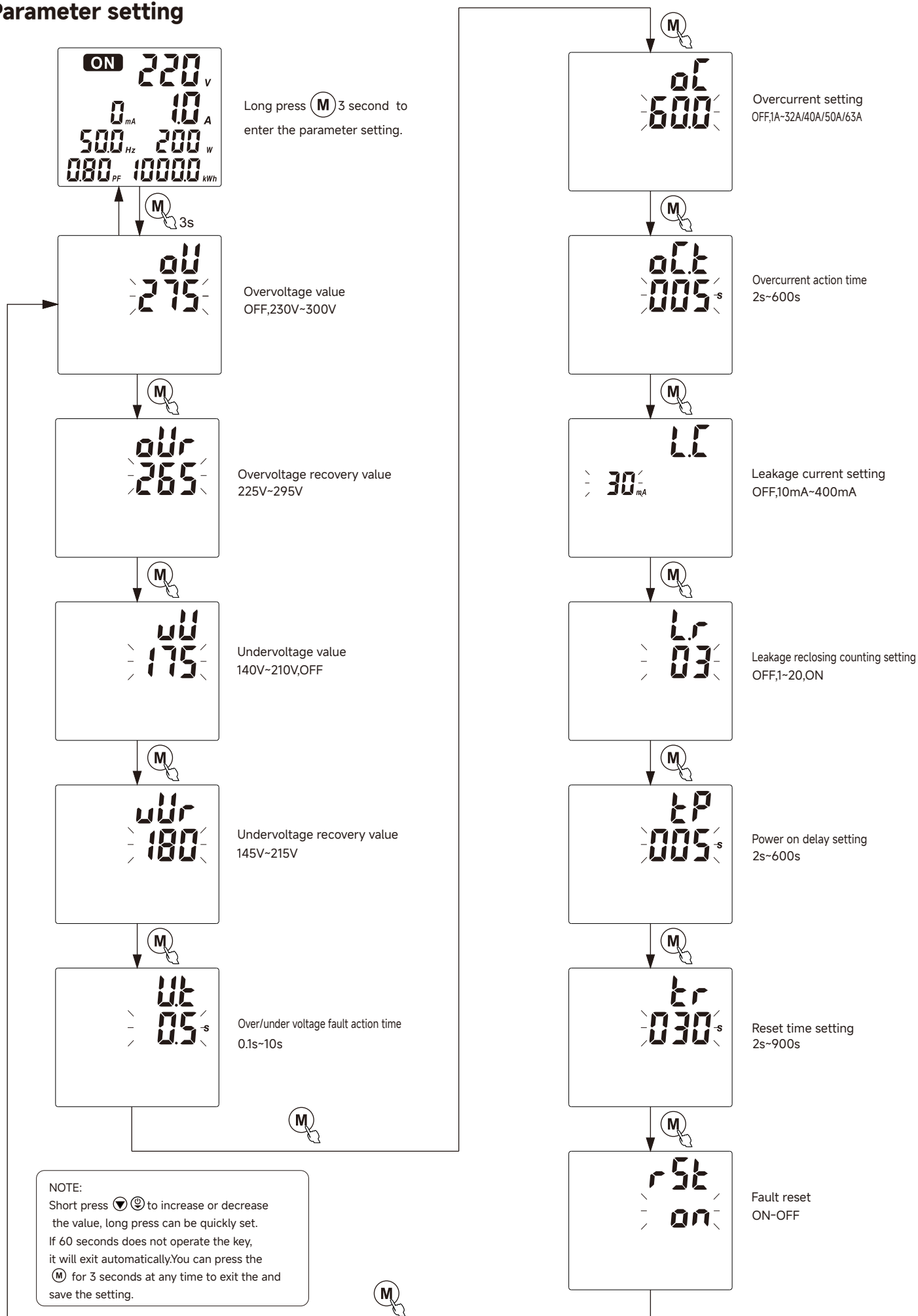
GPS8-10U



GPS8-10D



## Parameter setting



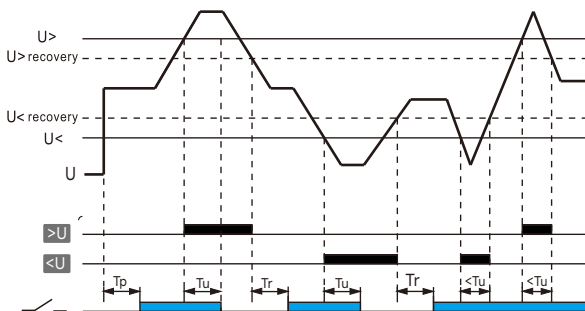
## Factory settings

| Parameter                    | Range                   | Step value | Factory settings |
|------------------------------|-------------------------|------------|------------------|
| Over voltage value           | OFF,230V~300V           | 1V         | 275V             |
| Over voltage recovery value  | 225V~295V               | 1V         | 265V             |
| Under voltage value          | 140V~210V,OFF           | 1V         | 175V             |
| Under voltage recovery value | 145V~215V               | 1V         | 180V             |
| Voltage fault action time    | 0.1s~10s                | 0.1s       | 0.5s             |
| Over current value           | OFF,1A~32/40/50/63A/80A | 0.1A       | 32A/40/50/63A    |
| Over current action delay    | 2s~600s                 | 1s         | 5s               |
| Leakage current              | OFF,10mA~400mA          | 1mA        | 30mA             |
| Leakage reclosing count      | OFF,1~20,ON             | 1          | 3                |
| Power on delay time          | 2s~600s                 | 1s         | 5s               |
| Reset time                   | 2s~900s                 | 1s         | 30s              |
| Fault reset                  | ON-OFF                  | —          | ON               |

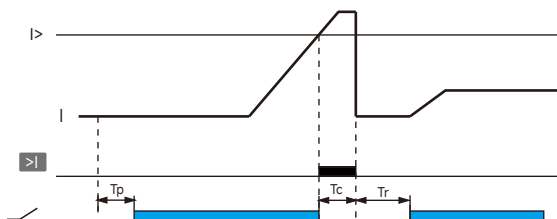
NOTE:

In the power off state, press and hold  + , and then power on again to restore the factory settings.

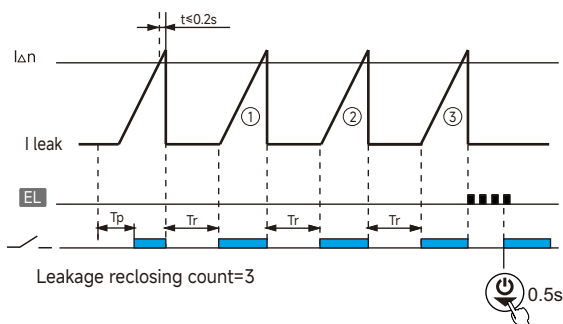
## Functions Diagram



When an overvoltage/undervoltage fault occurs, the protector will turn off. When the voltage returns to normal, the protector will return on after the reset time ( $T_r$ ) and the overvoltage/undervoltage value can be set.



When the current value exceeds the set current value and lasts for  $T_c$  time, the protector will off and start resetting with a delay ( $T_r$ ). After the reset time is up, it will on again.



When the leakage current of the circuit exceeds the set leakage current, the protector will turn off. You can turn off the leakage protection function by setting it. The protector will reset according to the set reclosing count. If the count is exceeded, the protector will not reclose and will be indicated by the leakage current indicator light. You can reset it by pressing the ON/OFF button. The reclosing count of the protector can be set to ON to permanently activate the reclosing function.

$T_p$ : Power-up delay(2~600s)

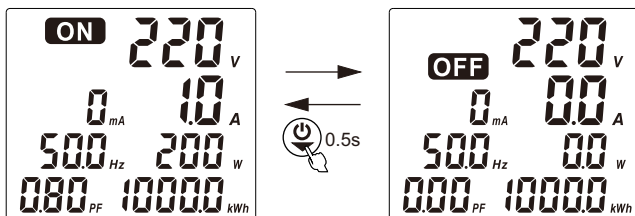
$T_r$ : Reset delay time(2~900s)

$T_u$ : Over/under voltage fault action time(0.1~10s)

$T_c$ : Overcurrent fault action time(2~600s)

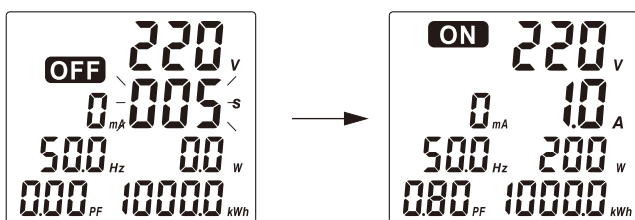
## Open and close manually

Under normal operation, the load can be switched on or off manually by pressing the power key for 0.5 seconds.

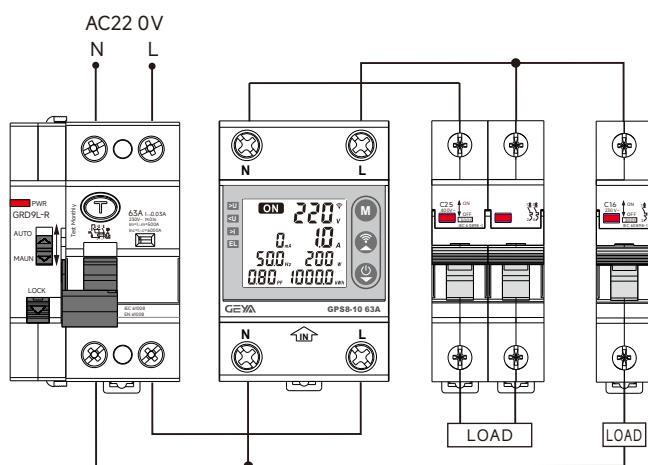


## Power-on and reset delay

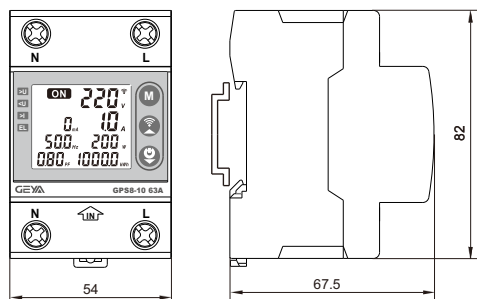
During the power-on and fault reset of the product, the product will count down and display according to the set delay time, and will enter the running state when the countdown ends.



## Example

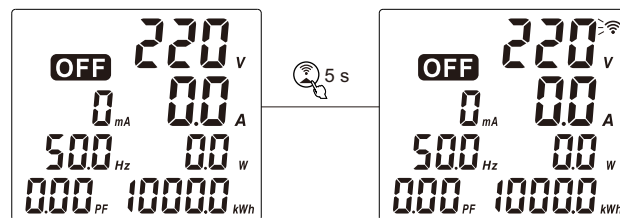


## Dimensions(mm)



This product does not have isolation function.  
Please disconnect the superior MCB during  
maintenance!!!

## WIFI configuration



There is a QR code on the side of the product. Please scan, download, and install it. Press and hold for 5 seconds before entering the WIFI configuration state. At this time, the WIFI indicator flashes. Please open the app and press the prompt to configure. When the WIFI indicator is always on, it indicates that the WIFI signal is good. When the WIFI indicator flashes, it indicates waiting for WIFI configuration. When the WIFI indicator is always off, it indicates that the WIFI cannot be connected.

### NOTE:

Please ensure that the WIFI is 2.4G.



### Disposal of Electrical Waste

All electrical waste should be disposed of in compliance with current WEEE regulations.



### Caution

The products must be installed by qualified electricians. All and any electrical connections of the time relay shall comply with the appropriate safety standards.