



HZ-002 Radiation detector (WIFI upgrade version)

Product Brief introduction:

This product adopts a micro-controller chip and comes with a "TuYa" WIFI module. It is equipped with the "TuYa" Smart app, which can be downloaded from both Android and iOS app stores. The device features a 0.96-inch OLED display screen and can generate a data document that can store up to 50,000 sets of data. It has a real-time clock and can display the reading in a trend graph. It can also alert using audio, light, graphics, or vibration, and the threshold value can be set.

The dosimeter uses a Geiger-Müller counter tube to measure radiation. When each ray passes through the GM tube and causes ionization, it generates a detection current pulse in the GM tube. Each pulse is detected and recorded by the electronic circuit as a count, and the display value of the dosimeter is the counted value in the mode you select. Due to the random characteristics of radioactivity, the count value detected by the dosimeter varies every minute. The average reading over a period of time is more accurate, and the longer the time interval, the more accurate the average. The detector is used to measure beta, gamma, and X-ray radiation and is suitable for measuring small changes in radiation levels. It has high sensitivity for most commonly used radionuclide.

Alarm mode:

1. Horn sound and vibration can change any value alarm

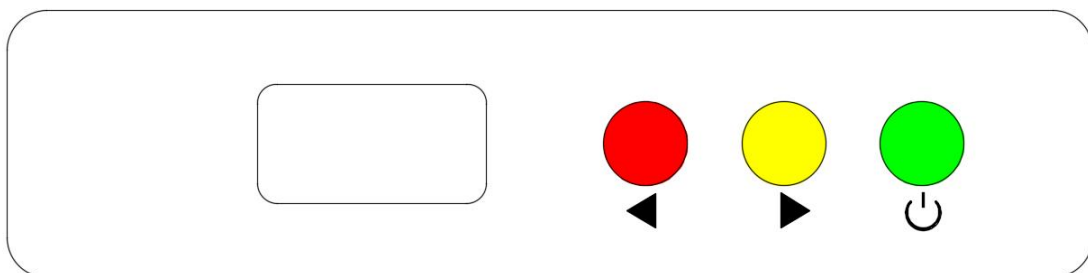
2. LED light and color display strip :

Green) 0.00-0.50 μ SV/h

Yellow) 0.51-1.0 μ SV/h

Red) 1.1 μ SV/h

Button operation:




1. Switch button: Short press to turn on or off :

On the Settings interface, can confirm to enter the modification item





2. Left button: Press Historical Trend interface → PC connection data export

interface → Main interface


3.  Right button: Short press to enter the setting interface → main interface

Setting interface operation


- Short press the power button .


Press this button  to switch to the parameter




interface, short press the power button  to enter the




interface to modify, press this button  to select

the parameter of the item that needs to be modified. Press the power button  to

confirm entry into the modification interface, press the power button again  to set

the alarm value, press this button  to modify the parameter value. After the

modification is completed, long-press the power button  to exit to the main




interface.


Alarm value setting: short-press the power button  to enter the interface and

modify the items. Press the power button  again to set the alarm value. Press





this button  to modify the parameter value. After modification, long-press the

power button  to exit to the main interface.








Time setting: Short Press the power button  to enter the interface and modify



the item,press the power button again  to time setting,press this button   to modify the parameter value. After the modification is completed,long press the power button  to exit to the main interface.



Interval time setting for data recording:Short press the power button  to enter the interface and modify the item,press the power button again  to set the interval time,press this button   to modify the parameter value.After the modification is completed,long press the power button  to exit to the main interface.

Technical specifications

Sensor type	Energy-compensated GM tube
Detectable measurement type	B -ray, γ -ray,X-ray
Energy range	20kev \sim 3.0mev $\leq \pm 30\%$ (137Cs-)
Sensitivity	80cpm/ μ SV/ (Co-60)
Resolution	0.01 μ SV/h
Measurement range	9999 μ SV/h
Real time error	$\leq 3\%$
Power supply	5V/USB 3.7V lithium battery/500MAH
Charging time	1-2 hours
Weight	59g
Size	110*16*27mm



Caution : There is a high voltage of 500v inside the device.Do not disassemble it privately to avoid electric shock.

Noted:


If the app cannot find the device after a long search,it may have already been bound and not removed from the app.In this case,you need to forcibly disconnect the previous binding information in order to find the device(each device can only be bound once,and to re-bind,you need to perform a forced restart and disconnection).The once,and to re-bind,you need to perform a forced restart and disconnection).The completed WIFI connection can be shared with other mobile phone users,and there is no need for each phone to bind to a separate device.






Wifi forced restart disconnection operation:

Short press  power button , press and hold the button  to the parameter setting



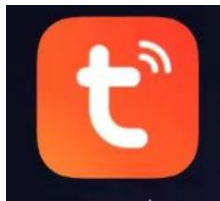
interface, long press the power button for 3 second  , Lines appear

at the bottom,indicating to release the power button  ,release the button to perform a forced restart and disconnect operation,press any button to exit the operation and return to the main

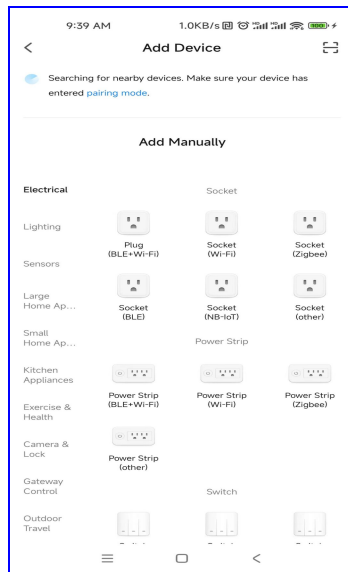
testing interface.   Press any button to exit the operation and return to the main testing interface.After shutting down,if the device can be searched normally after it has been shut down and powered on again,it indicates that this operation has been completed successfully.

Tuya smartphone APP connection operation:

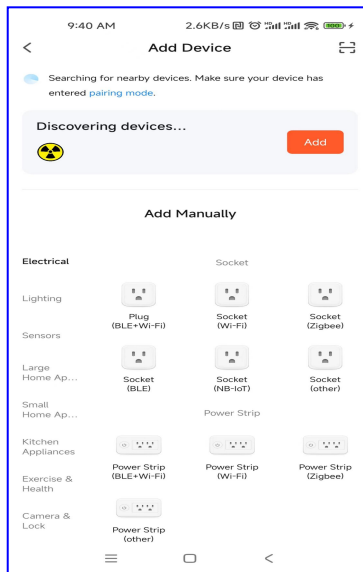
1. Download and install Tuya Smart APP in mobile app store.



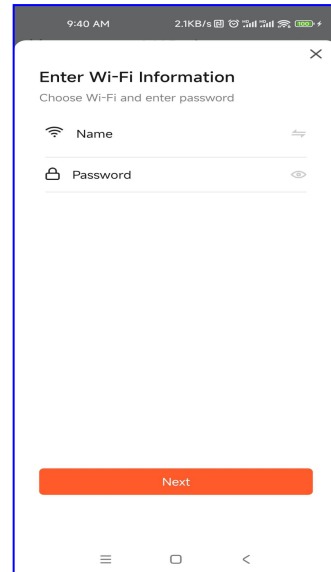
2. Figure 1: Open the 'TUYA' Intelligence App, and then turn on the nuclear radiation detector. Next, click on [Add] after the App detects the WiFi connection (see Figure 2). Figure 3: Start connecting to WiFi by entering the WiFi name and password, then click Next. Figure 4: Wait for the "add completed" message to be displayed. Figure 5: Click on "Finish" to enter the App testing interface (see Figure 6).



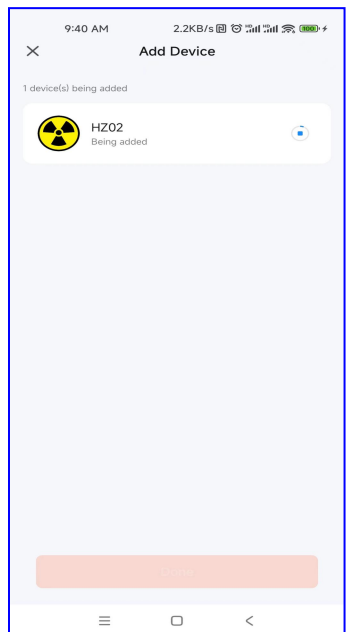
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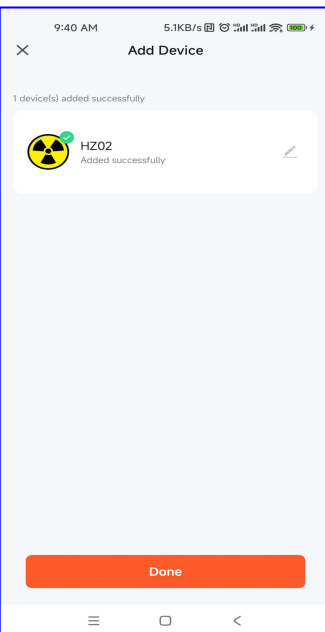
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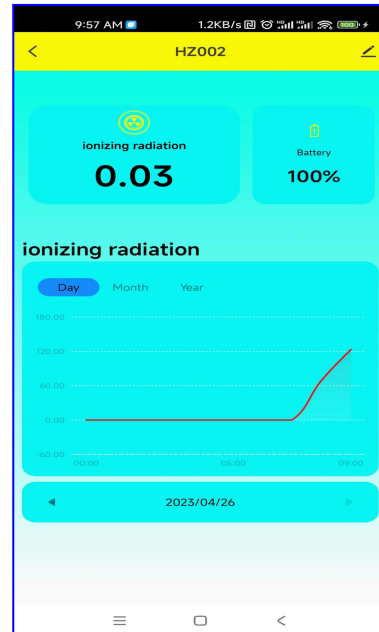
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