

# User Guide

## How to Use

- Application download

Android

Search for 'FTLAB' in Android Google play store and download the app for 'Smart Geiger' / 'Smart EM Checker' / 'Smart UV Checker' and run the app.

IOS (iPhone, iPad)

Search for 'FTLAB' in the App store and download the app for 'Smart Geiger' / 'Smart EM Checker' / 'Smart UV Checker' and run the app.

- Measurement

- Smart Geiger: Connect the sensor to the smart device earphone jack.

- When first run, but the initial setup takes 1 minutes wait, do not remove the sensor. (At run time, this action does not proceed), the initial setup is finished, click the [ON] button to start radiation measurement. Try to measure time more than 10 minutes to get an accurate measurement.

- Smart EM Checker : Connect the sensor to the smart device earphone jack.

- Click the [ON] button to start the EM Checker measurement.

- Smart UV Checker : Connect the sensor to the smart device earphone jack. Click the [ON] button to start the UV Checker measurement.

- Please refer to the application or website for product compatibility.
- In order to obtain accurate measurements, do not apply vibration or shock to smart devices and sensors under test and a minimum of 10 minutes or longer measurement times.
- The phone comes in a smart device being measured can affect the measurement.
- Click on the menu button on your smart device, you can adjust your preferences, such as save, capture and set a timer.
- Because it uses the earphone jack product can not receive call. Would you please remove the sensor from the device when you call.

- Depending on smart devices, measurement sensitivity is different measurement results appear abnormal may I. In such cases, please see the app to change the initialization methods and reference methods listed on the website.
- More detailed information can be found on the Customer Support page of the smart lab website ([www.allsmartlab.com](http://www.allsmartlab.com)).

**WARNING!**

- There is a risk that the small size of the sensor, so the children can swallow placed in a mouth. Please keep hands out of the reach of children.
- Do not disassemble the sensor because of the precise products. If the user is not possible to exchange decomposition.
- Scratches or contact failure is due to measurement errors can cause damage to the sensor or connector, so be sure to observe the archive.
- During measurement, the touch sensor can be measured with a hand so the noise caused by static electricity, do not touch the sensor unit by hand.
- You must not be in contact with extreme heat or chemicals, must be managed so that it is not exposed to hot and humid environments.
- In use, you can get a reliable measure actual use of the product should turn off the wifi, data communication. (Airplane mode recommended)

**Measurement value FAQ**

- Smart Geiger: In no radiation environment is often measured as 0.1 uSv / h. In addition, you may not change from 0.1 uSv / h. The sensors are returning to normal operation, you can see the logo of the app in action looks after the operation, press the bottom right of the screen 'on' button and then run the Smart Geiger application.
- Smart EM Checker: If the number is too high or too low, you get the normal measure should the new calibration. Use the calibration button on the app might not toward the electromagnetic environment (outside the window, etc.)
- Smart UV Checker: measurement figures, please refer to the table.

Index range	Level	Recommended protection
1-2	Low	Wear sunglasses on bright days; use sunscreen if there is snow on the ground, which reflects UV radiation, or if you

		have particularly fair skin.
3-5	Moderate	Take precautions, such as covering up, if you will be outside. Stay in shade near midday when the sun is strongest.
6-7	High	Wear sunglasses and use SPF 30+ sunscreen, cover the body with sun protective clothing and a wide-brim hat, and reduce time in the sun within three hours of solar noon.
8-10	Very High	Wear SPF 30+ sunscreen, a shirt, sunglasses, and a hat. Do not stay in the sun for too long.
Over 11	Extreme	Take all precautions: Wear sunglasses and use SPF 30+ sunscreen, cover the body with a long-sleeve shirt and trousers, wear a very broad hat, and avoid the sun from three hours before until three hours after solar noon.

## Specification

- Smart Geiger

Item	Specification
Radiation Measurement	Gamma, X-ray
Measuring range	0.1~200 $\mu$ Sv/h
Measurement error	$\pm 30\%$
Sensor type	Semiconductor Sensor
Size	30mm (Include Ear Jack : 47mm ), Diameter $\Phi 10$
Weight	6g
Case Material	Al (Aluminum)
Interface	Smart Phone Earphone Jack (Supports iOS4S later, Android 3.0 later)
Linearity	97% at 20 ~ 120 $\mu$ Sv/h

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- Smart EM Checker

Item	Specification
Electromagnetic measurement	Electromagnetic field
Measuring frequency	16 Hz ~ 100 kHz
Measuring range	1 ~ 2000 V/m
Minimum reaction point	1 V/m
Sensor type	Semiconductor Sensor
Size	30mm (Include Ear Jack : 47mm ), Diameter $\Phi$ 10
Weight	6g
Case Material	Al (Aluminum)
Interface	Smart Phone Earphone Jack (Supports iOS4S later, Android 3.0 later )

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- Smart UV Checker

Item	Specification
Measuring area	UVA,UVB
Wavelength measurement range	240~380nm
Measurement error	$\pm$ 10%
UVI(UV Index)	0~12
UV Power	0~6mW/cm <sup>2</sup>
Sensor type	Semiconductor Sensor
Size	30mm (Include Ear Jack : 47mm ), Diameter $\Phi$ 10
Weight	6g
Temperature	-20~50°C
Humidity	<80%
Case Material	Al (Aluminum)

Interface	Smart Phone Earphone Jack  (Supports iOS4S later, Android 3.0 later )
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### **Contact**

- Website : [www.allsmartlab.com](http://www.allsmartlab.com) / [www.technonia.com](http://www.technonia.com)
- Contract : [sales@allsmartlab.com](mailto:sales@allsmartlab.com)
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