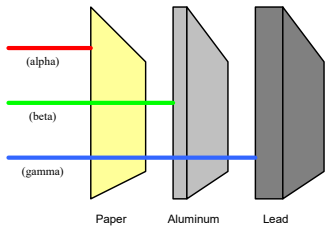
ScienceCube
www.sciencecube.com

# Wireless Radiation

ORDER CODE : WL126R

The wireless radiation sensors instrument for the detection and quantitative determination of ionizing radiation such as the alpha and beta rays given off by radioactive minerals and cosmic rays. The ScienceCube radiation sensor uses a Geiger-Müller(GM) tube. The GM counter detects low level beta and gamma radiation. It is possible to detect background radiation, as well as low level radiation, emitted by radioactive sources, like potassium fertilizers or a gas lantern mantle.

There are three forms of energy associated with radioactivity; alpha, beta and gamma radiation.




It supports both Bluetooth classic mode and low power mode, so it can be used on various smart devices, and can also be connected to a PC via USB.

You can use various functions through the dedicated app (Science#).

* Download Science#

GET IN ON Google Play

Download on the App Store

## Technical data

| | | |
|---|---|---|
| ■ ***Measurement performance*** | Range | 0 ~ 20,000 CPM<br>0 ~ 20 mR/hr (0 ~ 200 uSv/hr) |
| | Resolution * | 1 CPM |
| | Sampling Rate | 100 Samples/second |

| | | |
|---|---|---|
| ■ ***General Conditions*** | Display | OLED 0.96" (128*64 pixel) |
| | Operating Power | Li-Poly Rechargeable Battery (700mAh) |
| | Power Consumption | 0.4W |
| | Power Requirements | USB (DC 5V, 0.5A) |
| | Battery life ** | Approximately 6 hours(after full charge) |
| | Wireless Connection | Bluetooth 5.0 or 2.1+EDR |
| | Wired Connection | USB 2.0(Type-C) |
| | Operating Environment | 0 to 50°C, Max. 85%RH |
| | Compliance | EN 61326-1, EN 55011, EN 55032, EN 301.<br>㊣ R202-SMD070 |

| | | |
|---|---|---|
| ■ ***Mechanics specifications*** | Dimension(WxLxH,mm) | 139 * 50 * 25 mm<br>Probe OD22 * 59 |
| | Weight | 83 g(2.9 oz) |
| | Housing Materials | PC+ABS, POM |
| | Housing Protection | IP30 |

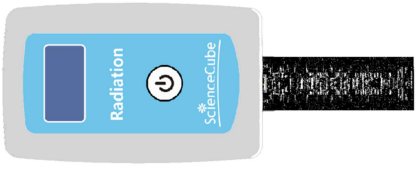
* This resolution can be viewed through the Science# application.

** Battery life varies by use, configuration, temperature, and many other factors; actual results will vary.

### ■ *G-M Tube Specifications*

| | |
|---|---|
| Fill Gas | Ne / Ar + Halogen quenched GM-tube |
| Cathode | 446 Stainless Steel |
| Recommended Operating Voltage | 500 volts |
| Operating Voltage | 450 ~ 650 volts |
| Minimum Dead Time | 90 uS |
| Cathode Wall Thickness | 0.25 mm |
| Mica Window Areal Density | 1.5-2.0 mg/cm$^2$ |
| Effective Window Diameter | 9 mm |
| Gamma Sensitivity (Cs137) | 18 cps, 1000 CPM, 1 mR/hr |
| Max. Background Shielded | 50 mmpB = 3 mmAl (cpm) 10 |

### ■ *Product Appearance Design*




### ■ *Notices*

- This product is to be used for educational purposes only. It is not appropriate for industrial, medical, research, or commercial applications.
- Our products and the contents are subject to change without any notice. In consequence we cannot assume responsibility for any consequential or other damage resulting from the use of this instrument.

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