



SS05 is a sensor designed for measurements of nuclear radiations. Unlike Geiger detectors, based on tubes containing gas, this device uses silicon PIN photodiodes and it is built in a very compact case. In order to obtain a high sensitivity, the sensor is constituted by an array of 9 photodiodes, each of which has its own low noise amplifier. The sensor can be easily connected to a smartphone and all measurement tasks can be controlled through the RadMeter app.



	Radiation plot [uSv/h]	100	Input signal
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100		40	
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1		-40	
.91		-60	
		-80	
9.91	02/05/15 14:47:15	100	02/06/15 15:55:41

The SS05 device can be interfaced with a smartphone through its standard audio jack connector. Since it is powered by the audio signal, there is no battery on board.

The sensor can anyway operate without the use of another device; in this case it needs just to be powered with an external 9V battery. The indication of the intensity of the radiation will be obtained from the counting pulses rate shown by the onboard LED and speaker.

# Ordering codes:

SS05 - 🗌		
	Packaging	
-	Plastic box with transparent lid	

-	transparent lid
D	Dock station*

\*9V battery not included



Ss05 sensor with dock station



The SS05 sensor is compatible with the Android app RadMeter. You can download RadMeter from Google Play Store.



# **Technical specifications**

#### **MEASUREMENT RANGE**

Operating range: 0.05...10000 uSv/h

#### NOMINAL SENSITIVITY 27 CPM/uSv/h

27 CPINI/USV/N

### MEASUREMENT SENSOR

- 3x3 PIN silicon photodiode array
- Especially suitable for gamma and X rays measurements

# INDICATOR DEVICES

- Power On LED
- LED counting pulses
- Speaker counting pulses

#### **POWER SUPPLY**

- Self powered by the audio signal of the smartphone
- 9V/0.6mA (stand alone)

#### **COMMUNICATION INTERFACE**

- Audio interface
- Conn. Jack 3.5 mm 4P (CTIA or OMTP compatible)

#### **OPERATING TEMPERATURE**

0°...40°C working (RH max 85% at 25°C) 20°...60°C storage

#### ENCLOSURE

- Black polyammide PA6 (SS04)

## DIMENSIONS

- 30 mm x 30 mm x 15 mm

# WEIGHT

~13 g



Under a policy of continuous improvement, Optivelox reserves the right to make unannounced changes to the specifications of the products described in this document.

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