

Gamma/x-ray radiation automated monitoring



Features

- Automated radiation monitor with Ethernet connectivity to centralize data
- Real time alerts
- Direct and Cloud data access via API
- Rugged design with aluminum enclosure
- Low power consumption
- Compact size 110x65x25 mm
- Wall mounting support

Applications

- Home monitoring
- Lab space monitoring
- NPP monitoring
- CBRN Monitoring
- Internet of things

Description

uRADMonitor A is an automated radiation dosimeter with Internet connectivity. It comes in a rugged aluminum enclosure with wall mounting support. It is elements proof when mounted in vertical position. The data is exported to the uRADMonitor network and can be accessed in real time using the cloud API interface or directly via the local network. Automated monitoring provides more options over using handheld units occasionally. Mapping data trends becomes possible thanks to continuous surveillance and a permanent data flux. We have a higher detection capability for small variations and can trigger automated alarms if predefined thresholds are reached, improving reaction time while lowering costs.

The uRADMonitor network is a global array of interconnected monitoring stations, focused on continuous Environmental Surveillance. Its purpose is to generate fully transparent open data, used to assert the quality of our environment.

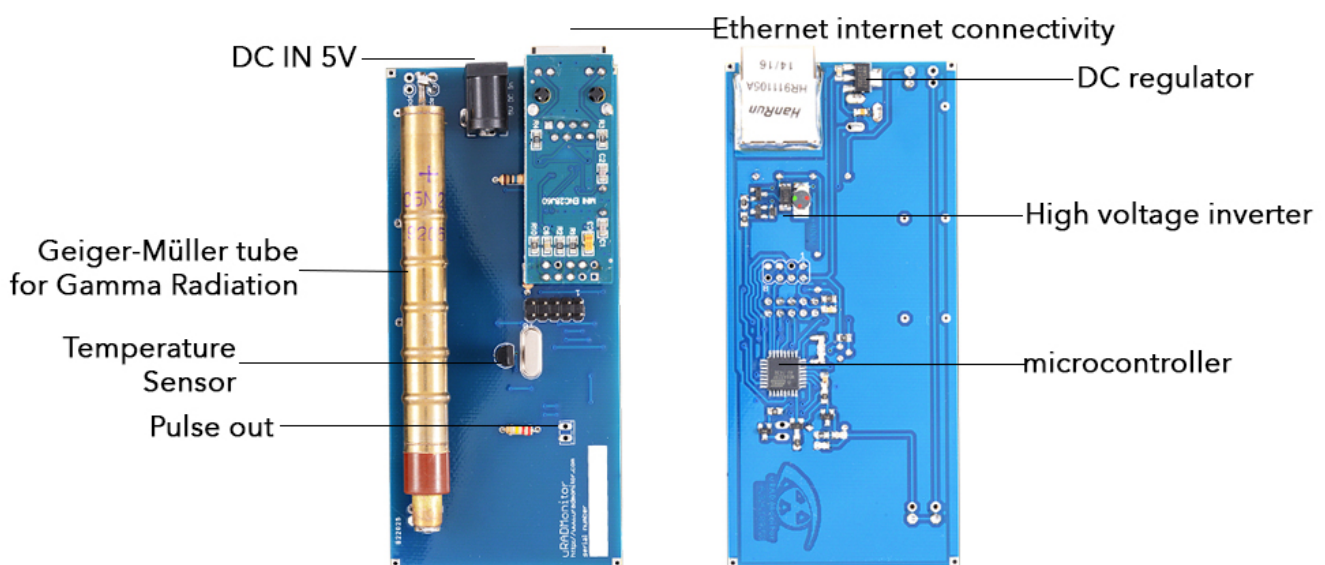
Sensors

uRADMonitor model A uses the military grade SBM20 Geiger Tube to detect gamma and x-ray ionizing radiation. It also features a digital temperature sensor to complement the readings.

Sensor	Parameter	Minimum value	Maximum value	Operating temperature
Dallas DS18B20	Temperature	-55 °C	+125 °C	-55 °C .. +125 °C
SBM20	γ,x-rays	0.01μSv/h	9999.99μSv/h	-40 °C .. +100 °C

Specification

Parameter	uRADMonitor
Internet connection	Ethernet RJ45 10/100/1000 Base-T Networks
Standards	IEEE 802.3
Enclosure Protection	IP63
Supply Voltage	5V
Dimensions	110x65x25 mm (excl. sup)
Weight	180g
Mounting	mounting support provided



uRADMonitor Model A

Impact

As part of the uRADMonitor network, the purpose of the Model A is to provide a global image on the radioactive contamination, ranging from natural sources such as soils rich in radioactive elements to man made sources mostly released in case of nuclear incidents, illegal nuclear activities or illegal transportation of nuclear materials.

Ionizing radiation is harmful to living organisms because it can cause damage to cells that can result in multiple disorders, the most common of which is cancer. Ionizing radiation is naturally occurring from cosmic and terrestrial sources, but there are also artificial generators related to nuclear activities or x-ray devices. Worldwide global average dose is 3.01mSv according to [Radiation Health Effects, US Environmental Protection Agency](#).