

GalaxRay

Personal High-Resolution Detection, Identification and Dose Assessment



GalaxRay V 3.0 is a high-resolution solution CZT-type detector that delivers unparalleled performance in express radionuclide identification and radiation dose assessment from low to moderately high levels. Continuous dose rate monitoring and recording enables users to be instantly informed about radiation exposure and/or carefully analyze radiation dose risks by exploring the dose rate recorded charts.

Benefits

- Light and powerful handheld gamma-spectrometer
- Spectroscopic Personal Radiation Detector (SPRD)
- Radioisotope identifier (RIID)
- Radiation dose assessment
- Dose rate time profile recording
- Temperature stabilized
- Option for neutron detector
- Compliant with ANSI 42.48 – 2018

Key figures

1.8 – 2.5%

➔ @662 keV

500 & 1600 mm³
CZT detectors available

0.01 μSv/hr
➔ 30 mSv/hr

➔ Dose range

Application

GalaxRay V 3.0 is suitable for:

- Manufacturing; Safety Professionals, First Responders, Product Security Entrance
- General Public: Vicinity of the Nuclear Power Plant, Concerned about Radioactive Exposure to self or family, Nuclear Threats
- Nuclear Energy Workers
- Radiochemical & Radiopharmaceutical industries
- Steel, Scrap and Waste recycling
- Radiological services
- First responders, Border Patrol, and TSA Screening
- Dirty Bomb Detection

MODEL	DESCRIPTION	DIMENSIONS OF THE CZT/NEUTRON DETECTOR
GalaxRay V3.1	Spectrometric Personal Radiation Detector with CZT of 500 mm ³ detector	CZT Detector: 5 mm x 10 mm x 10 mm
GalaxRay V3.2	Spectrometric Personal Radiation Detector with CZT of 500 mm ³ detector and Neutron Detector	CZT Detector: 5 mm x 10 mm x 10 mm Neutron Detector: 15 mm x 40 mm (Li-6 based cylindrical detector)
GalaxRay V3.3	Spectrometric Personal Radiation Detector with CZT of 1600 mm ³ detector	CZT Detector: 16 mm x 10 mm x 10 mm
GalaxRay V3.4	Spectrometric Personal Radiation Detector with CZT of 1600 mm ³ detector and Neutron Detector	CZT Detector: 16 mm x 10 mm x 10 mm Neutron Detector: 15 mm x 40 mm (Li-6 based cylindrical detector)

Specifications

Energy Range: 0.03 – 3.0 MeV, 1024 Ch
 Energy Resolution: 1.8 – 2.5% @662 keV
 Dose Rate Range: 0.01 µSv/hr – 30 mSv/hr
 Dose Rate Accuracy: +/- 30% (0.1 µSv/hr to 100 µSv/hr)
 Neutron Sensitivity: ≈ 2.4 cps/nv
 Nuclide Id Over-Range Dose Rate: 0.5 mSv/hr
 Preset Time: 86,400 s
 Display: LCD 2.8", 240 x 320 pixels, backlight
 Alarms: Audio (~85 dB), audio jack, vibrator, LED
 operations: 3 – button keyboard

Data Storage: up-to 1000 spectra & up-to 24 hours of dose rate time records

Data Transfer: via USB & Wi-Fi

Electrical: Lithium-ion rechargeable battery, 3.7 V 5200 mAh

Battery Continuous Work: with Wi-Fi on & back-light on: - up-to 14 hours with Wi-Fi off & screensaver on: - up-to 26 hours

Charge Time: 4 – 5 hours, with the battery indicator on the display

Environmental: from -10° C to +50° C (-4 F to 122 F)

SPECIAL NUCLEAR MATERIAL (SNM)	NATURALLY OCCURRING RADIO ACTIVE MATERIAL (NORM)	INDUSTRIAL		MEDICAL
Uranium - 233	Uranium - 238	Americium - 241	Cesium - 137	Thallium - 201
Uranium - 235	Thorium - 232	Iridium - 192	Barium - 133	Iodine - 131
Neptunium - 237	Radium - 226	Europium - 152	Cobalt - 57	Technetium - 99m
Plutonium - 239	Potassium - 40	Cesium - 134	Cobalt - 60	Gallium - 67

