

The Global Market for Radiation Detection Equipment and Materials 2023-2033

https://marketpublishers.com/r/G036AA9E05AFEN.html

Date: August 2023

Pages: 105

Price: US\$ 1,250.00 (Single User License)

ID: G036AA9E05AFEN

Abstracts

The radiation detection equipment market is an essential part of various industries, including medical imaging, nuclear power, manufacturing, security, and environmental monitoring. The main objective of this equipment is to detect and measure the presence of ionizing radiation, which includes alpha, beta, gamma, and neutron radiation. Market growth is driven by national security, nuclear power generation, and medical imaging/diagnostics applications. Geiger counters and scintillation detectors are the most commonly used technologies. Semiconductor detectors are growing fastest for high resolution analysis. The market is consolidated with the top 5 suppliers accounting for the majority of the market.

Report contents include:

Overview of radiation types and sources.

Principles of radiation detection.

Market trends and drivers.

SWOT analysis.

Analysis of Equipment/devices market including:

Proportional Radiation Detectors (PRDs)

Semiconductor Proportional Radiation Detectors (SPRD)

Dosimeters



Area Monitors
Survey Meters
RIIDs
Portal Monitors, Fixed
Portal Monitors, Portable
Portable Backpack Systems
Contamination Monitors.
Analysis of leading equipment suppliers and market shares.
Equipment pricing analysis.
Emerging technologies and innovations.
Analysis of radiation detection materials market including: Nal scintillators
Cesium Iodide crystals
Thin film scintillators
Lanthanam-based materials
CLYC-based materials
Oxide-based materials
Silicate-based materials
Yittrium-based materials



Plastic scintillators





Contents

1 RESEARCH METHODOLOGY

2 ACRONYMS AND TERMS

3 INTRODUCTION

- 3.1 Overview of radiation types and sources
- 3.2 Principles of radiation detection
 - 3.2.1 Ionization
 - 3.2.2 Scintillation
 - 3.2.3 Luminescence
 - 3.2.4 Detection mediums
 - 3.2.5 Moderation
 - 3.2.6 Multi-stage detectors
 - 3.2.7 Shielding
- 3.3 Applications

4 THE GLOBAL MARKET FOR RADIATION DETECTION EQUIPMENT AND MATERIALS

- 4.1 Market trends
- 4.2 SWOT analysis
- 4.3 Equipment/devices
 - 4.3.1 PRD/SPRDs
 - 4.3.1.1 Proportional Radiation Detectors (PRDs)
 - 4.3.1.2 Semiconductor Proportional Radiation Detectors (SPRD)
 - 4.3.2 Dosimeters
 - 4.3.2.1 Types
 - 4.3.3 Area Monitors
 - 4.3.4 Survey Meters
 - 4.3.5 RIIDs
 - 4.3.6 Portal Monitors, Fixed
 - 4.3.7 Portal Monitors, Portable
 - 4.3.8 Portable Backpack Systems
 - 4.3.9 Contamination Monitors
 - 4.3.10 Leading suppliers and market shares
- 4.3.11 Equipment pricing analysis



4.3.12 Emerging technologies and innovations

- 4.4 Materials
 - 4.4.1 Nal scintillators
 - 4.4.2 Cesium Iodide crystals
 - 4.4.3 Thin film scintillators
 - 4.4.4 Lanthanam-based materials
 - 4.4.5 CLYC-based materials
 - 4.4.6 Oxide-based materials
 - 4.4.7 Silicate-based materials
 - 4.4.8 Yittrium-based materials
 - 4.4.9 Plastic scintillators
 - 4.4.10 Nanomaterials
 - 4.4.11 Material suppliers
 - 4.4.12 Pricing analysis and cost structure
- 4.5 End-use markets
 - 4.5.1 Nuclear Energy
 - 4.5.2 Food Industry
 - 4.5.3 Industrial Radiography
 - 4.5.4 Oil and Mining
 - 4.5.5 Security and Military
- 4.5.6 Medical Imaging
- 4.6 Market outlook
- 4.7 Global market revenues 2018-2033 (Billion USD)
 - 4.7.1 By equipment type
 - 4.7.2 By end-use markets
 - 4.7.3 By region

5 COMPANY PROFILES (33 COMPANY PROFILES)

6 REFERENCES



List Of Tables

LIST OF TABLES

- Table 1. Acronyms and terms: Radiation Detection Equipment and Materials.
- Table 2. Overview of radiation types.
- Table 3. Overview of radiation sources.
- Table 4. Markets and applications for radiation detection equipment and materials.
- Table 5. Market trends and drivers in radiation equipment and materials.
- Table 6. Types of dosimeters.
- Table 7. Leading radiation detection equipment suppliers and market shares.
- Table 8. Nanomaterials utilized in radiation detection.
- Table 9. Radiation detection materials suppliers.
- Table 10. Pricing analysis and cost structure for radiation detection materials.
- Table 11. Food radiation detection.
- Table 12. Applications of radiation detection in medical imaging.
- Table 13. Applications of radiation detection in environmental monitoring.
- Table 14. Global market for radiation detection equipment, by type, 2018-2033 (billions USD).
- Table 15. Global market for radiation detection equipment and materials, by end use market, 2018-2033 (billions USD).
- Table 16. Global market for radiation detection equipment and materials, by region, 2018-2033 (billions USD).



List Of Figures

LIST OF FIGURES

- Figure 1. SWOT analysis: radiation equipment and materials market.
- Figure 2. Commercial Proportional Radiation Detector (PRD).
- Figure 3. Commercial Semiconductor Proportional Radiation Detector (SPRD).
- Figure 4. Commercial radiation detection dosimeter.
- Figure 5. Commercial area monitor.
- Figure 6. Commercial radiation survey meter.
- Figure 7. Handheld Radiation Isotope Identifier.
- Figure 8. Commercial fixed radiation portal monitor.
- Figure 9. Commercial portable portal monitor.
- Figure 10. SPIR-Pack Human Portable Radiation Detection and Identification System.
- Figure 11. RadEye AB100 Alpha-Beta Contamination Monitor.
- Figure 12. Radiation Detection Equipment (RDE) at an Integrated Check Post (ICP) at the Attari Border.
- Figure 13. Global market for radiation detection equipment, by type, 2018-2033 (billions USD).
- Figure 14. Global market for radiation detection equipment and materials, by end use market, 2018-2033 (billions USD).
- Figure 15. Global market for radiation detection equipment and materials, by region, 2018-2033 (billions USD).



I would like to order

Product name: The Global Market for Radiation Detection Equipment and Materials 2023-2033

Product link: https://marketpublishers.com/r/G036AA9E05AFEN.html

Price: US\$ 1,250.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G036AA9E05AFEN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:	
Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970