



**Nuclear Power Radiation Detection
and Monitoring Solutions**

Maximizing safety
and productivity



**Innovative
Industrial Solutions**

Unreal Innovation. Real Solutions.

Thermo
SCIENTIFIC

You can **depend** on Thermo Scientific radiation detection and monitoring solutions to optimize safety, operational efficiency and regulatory compliance of your power generation infrastructures.

Our years of expertise and commitment to the nuclear power industry will give you the **Confidence** to meet today's challenges and sustain safety and productivity long into the future.

Growing portfolio

Our instruments deliver the latest advancements in technology and functionality to meet the most demanding applications.



- ▶▶▶ **Breadth** – Full product suite, for a wide range of radiation detection needs
- ▶▶▶ **Quality** – Designed and manufactured for a lifetime of use in the harshest of environments
- ▶▶▶ **Experience** – Unmatched industry expertise, serving the industry for over 55 years
- ▶▶▶ **Innovation** – Introducing new technologies and solutions focused on improved safety, efficiency and usability

Dosimetry (TLD and EPD)



Our radiation dose collection, processing, and analysis systems are designed to provide Radiation Protection Departments with the highest degree of confidence that the radiation doses to workers or to the public are being measured efficiently and accurately.

EPD TruDose
Electronic Personal Dosimetry System
TLD Systems: Personal (Whole-Body and Extremity), and Environmental

Portable Radiation Survey Instruments

Our trusted portfolio of radiation detectors, meters and instruments serve to monitor, detect and locate alpha, beta, gamma/ x-ray, and neutron radiation. Our flagship RadEye family of survey instruments provides effective solutions for a wide variety of operational health physics applications.



Thermo Scientific RadEye B20-ER
Multi-purpose Survey Meters
Dual contamination and dose rate survey instrument

Thermo Scientific RO-20
Ion Chamber Survey Meter
Portable air ionization chamber instrument used to detect beta, gamma and X-radiation.

Thermo Scientific RadEye NL + Moderator
Lightweight neutron survey Instrument that replaces traditional large, cumbersome REM-Ball neutron survey instruments

Thermo Scientific RadEyeX Series External Detectors (GX, SX, and PX models)
Attach a wide range of Thermo Scientific or 3rd-party Geiger Mueller, Scintillation, and Proportional detectors as external detectors to the RadEye Meter



Over 78,000
RadEye
instruments
in use
worldwide

Work Place Air Monitoring

Providing early warnings on events with reliable, continuous real-time air sampling monitoring equipment to sustain ALARA principles by accurately measuring and providing alarm indication for the work-place environment. Our family of portable CAMs actively measure radioactive beta particulate, alpha particulate, iodine, and noble gasses; minimizing the internal radiation worker dose to these hazards by providing increased worker efficiency (release from respiratory protection) as well as early warning alarm indication capabilities.



Thermo Scientific AMS-4
Beta Air Monitor
Provide an early warning to workers exposed to potential airborne releases of beta-emitting particulates.

Thermo Scientific FHT 1702
Iodine Monitor
Protect employees virtually anywhere in the nuclear power plant with early, automatic warning of gaseous iodine activity.

Thermo Scientific AMS-4
Noble Gas Air Monitor



Thermo Scientific ALPHA 7A
Alpha Air Monitors
Designed to provide early warning to workers exposed to airborne releases of alpha-emitting radionuclides.

Equipped with a diversity of networking and communications capabilities. Key instruments such as the RadEye family can be used with data management systems for long-term trend analysis as well as live-time remote monitoring.

Remote Monitoring Software Systems:
Thermo Scientific Remote DNA™
Thermo Scientific ViewPoint™ Enterprise Remote Monitoring



Contamination Monitoring

We offer a variety of contamination monitors to quickly and accurately detect radioactive contamination on people, property and materials before they leave the radiation controlled areas or the site.



Thermo Scientific SAM 12

Small Article Monitor

Replace complex hand frisking processes with a precise, computerized, measurement control solution for monitoring small articles and tools for radioactive contamination.

Thermo Scientific PM12

Walk Through Personnel Gamma Portal Monitor

Protect nuclear facility workers with a portal monitoring system that uses multi-modal gamma-sensitive plastic scintillation detectors for detecting radiation contamination.

Thermo Scientific iPCM12

Installed Personnel Alpha/Beta Contamination Monitor

Reduce employee downtime and lost productivity with an effective radioactive contamination monitoring system for nuclear facility personnel.

IPM96

Beta/Gamma scintillation based
Personnel Contamination Monitor

Thermo Scientific HFM 11 Series

Hand and Foot Monitors

Help to reduce monitoring times; the longer hand detectors provide wrist and forearm coverage and there is an optional frisker probe available for additional monitoring.



Emergency Planning (EP) and Environmental Monitoring

Whether it is to support Emergency Planning (EP) response actions or Permanent, Off-Site Dose Boundary/Environmental Monitoring, we offer a portfolio of products and software monitoring systems designed to provide real-time data analysis.

Our solutions provide the Radiation Protection professionals the tools necessary to rapidly collect critical field data, identify the release/plume isotopic mix, and make informed recommendations and decisions when required. All of these actions support the ultimate goal of ensuring Regulatory Compliance while maintaining the highest level of human health and safety protection.

Thermo Scientific RadEye

Family of handheld detection instruments

RadEye B20-ER Multi-purpose Survey Meters

RadEye SPRD Spectroscopic Personal Radiation

RadEye G Gamma Safety Surveys

Thermo Scientific RadHalo RDP and FM

Spectroscopic Area Monitors

Optimize efficiency and worker safety with highly-sensitive area monitors that detect and identify radiation on-site or from miles away via five reachback options.

Thermo Scientific RadEye HEC

Stand-Alone Scaler Counter



Extensive, Reliable Services Across the Lifecycle of the Nuclear Power Plants

With more than 55 years of experience providing products and services to the nuclear power industry, we provide the experience to help you meet your business goals of plant reliability and equipment uptime. From installation and certification services to preventative maintenance, technical support, training, spare parts and global support capabilities, we provide a wide variety of integrated solutions and instrument upgrade packages to maximize your nuclear power plant performance.



Reliable Power Level Monitoring and Control for Nuclear Power Reactors



By installing Thermo Scientific Neutron Flux Monitoring systems, you achieve peace of mind with higher reliability, lower maintenance costs and better accuracy. Our rugged, field-proven components and streamlined design deliver

superior reliability and qualify it to last the life of the reactor. No longer must you be forced to routinely replace short lived detectors or continually service obsolete electronics.

We can help you upgrade and standardize your systems, consolidating your engineering and procurement, trim your vendor list, lower your total cost of ownership and enhance your profitability.



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