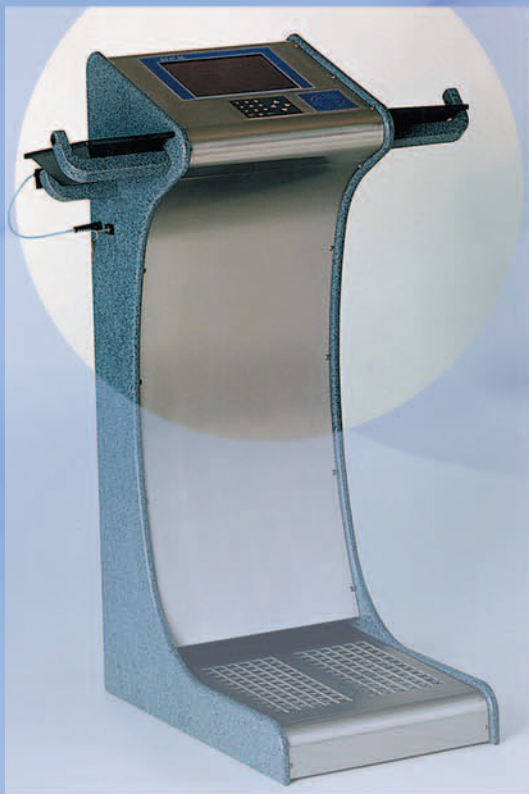




Lab  
Impex  
Systems

# MEDICAL PHYSICS - RADIATION MONITORING EQUIPMENT





## HFC – Contamination Monitor

IRR99 regulation 19 directs the employer to ensure adequate monitoring and record keeping for personnel working within designated controlled areas. The HFC Contamination Monitor is an effective, accurate personnel monitor which is an option to provide this. Personnel movements can be recorded to provide auditable records to satisfy the regulator of good practice.

Personnel records can be made in one of two ways; the first by manually entering a unique user ID prior to using the system or alternatively using an individual transponder to automatically activate the monitor.

The user friendly unit incorporates large area thin-layer plastic scintillation detectors offering simultaneous or selective alpha and beta-gamma contamination measurement in CPS or nuclide selectable Bq/m<sup>2</sup>. With large area, graphic colour LCD and nuclide selection menu, this 'easy to use' monitor is ideal for all medical personnel monitoring. Available in a variety of dimensions, the ergonomic unit boasts a detachable hand probe providing the capability of a frisking device. The HFC offers a cost effective solution to radiation monitoring applications in hospitals and other medical facilities.

## Hand Held Contamination Monitors

The CoMet range is a series of highly efficient surface contamination monitors fitted with dual phosphor plastic scintillation detectors. Utilising the latest in photo-multiplier technology the CoMet range detects alpha, beta and gamma radiation.

### CoMet 17

Hand held, portable 170cm<sup>2</sup> detector system suitable for monitoring work surfaces, small articles and personnel hands/clothing. The system can be supplied with a variety of options including GM probes for dose rate measurement, additional scintillation probes for hard to reach applications, wall mounting station for storage and charging and, when in conjunction with CoMet 17 floor monitoring device, the unit proves handy for small area floor monitoring.

### CoMet 30

Hand held, portable, 300cm<sup>2</sup> detector system suitable for monitoring large area work surfaces and, when used in conjunction with CoMet 30 floor monitoring device, large area floor sections. Options available identical to sister product CoMet 17.

### CoMet Frisker

The CoMet Frisker is a contamination monitoring station which can be installed or transportable (when trolley or railing mounted). This versatile system utilises the CoMet 17 detector for total body frisking prior to exit from a controlled area.



## Mini Trace

The Minitrace-Gamma dose rate meter is a portable device especially designed for use by non specialist staff. Very light yet robust; the Minitrace-Gamma is ideal for measuring dose rate in any building and locating radioactive hotspots. The mini-trace is also available for beta contamination monitoring.

## Personal Electronic Dosimeters

Lightweight and compact, the PM range of dosimeters offer a cost effective solution to routine personal monitoring requirements. Covering energy ranges of 10keV - 20Mev, dose ranges of 0.1  $\mu$ Sv - 9.99Sv, and doserate ranges 0.01  $\mu$ Sv/hr - 135v/hr.

## PM1208/PM1209 Wrist Watch Gamma Indicator

Stylish, robust and reliable.

- DER indication Range: 0.01 $\mu$ Sv/h - 4000 $\mu$ Sv/h
- 100m Water Resistant Case
- Audible Alarm - User Settable
- Electro-luminescent backlight for ease of use in darkness
- Battery lifetime: 1 year
- Ingress Protection: IP68

## PM1621/PM1621A Gamma and X-Ray Personal Electronic Dosimeter

Highly sensitive, pager type personal electronic dosimeter for measurement of personnel exposure to gamma and X-rays:-

- DER range:
  - PM1621: 0.1  $\mu$ Sv/h - 100 mSv/h
  - PM1621A: 0.1 $\mu$ Sv/h - 1 Sv/h
- Energy range: 10 keV - 20 MeV
- Audible alarm when dose and (or) dose rate thresholds are exceeded
- Storage of user PIN and 1000 readings of dose accumulation history
- PC communication by IR interface

## PM1203 Programmable Dosimeter

Lightweight, slim, large display personal electronic dosimeter:-

- Dose rate range: 0.1 - 2000  $\mu$ Sv/h
- Dose range: 0.01 - 9999 mSv
- Energy range: 0.06 - 1.5 MeV
- Data storage in non-volatile memory
- User settable audible alarm
- PC communication by IR interface



## SRA Smart Scaler Timer/Analyser

The Smart Radiation Analyser (SRA) is an advanced laboratory based sample counter. The system is ideally suited for routine counting applications used within QC and Nuclear medicine. The instrument offers many features to assist in detector set-up and improve the quality control and reliability of sample results. Designed specifically to control the whole measurement process and prevent errors by providing single button operation for the user, features include: Automatic HV plateau and energy spectrum plots, measurement protocols and fully calculated results.

## SAM 935

The SAM935 is a portable spectroscopy system designed for search and identify applications. With an integrated MCA which accurately and 'instantly' (within 1 second, real time) identifies multiple radionuclides concurrently. The system offers isotope specific and total dose rate display in addition to a comprehensive nuclide library of more than 100 isotopes. The unit enables the user to modify isotope energy lines and allows integrated analysis for identification and calculation of dose rate. There are multiple trigger lists for distinct isotopic applications and background subtraction is performed every second for enhanced sensitivity.

## ISOMED Radionuclide Dose Calibrators

The ISOMED series of Dose Calibrators utilise state-of-the-art technology to bring a new level of measurement capability to Nuclear Medicine, both in radiopharmacy dispensing and nuclear medicine administration. Options for PET are also available with a host of accessories to facilitate most applications whether hot cell/environmental cabinet mounted or just bench top. The touch sensitive screen computer on the ISOMED 50, provides both a space saving advantage with the wall mount as well as ease of use. An inventory control and dispensary database is also incorporated into the systems; this can be customised to suit most users procedures and systems.





## Neutron Monitor

The LIS 2222A Neutron Monitor is an advanced portable, digital neutron dose meter designed for general purpose portable monitoring. The unit can also be used as part of a network when continuous monitoring is required. Neutron dose rate is displayed in mSv/h units and adheres to the ICRP Sievert response curve from thermal neutrons to 17 MeV. The instrument is essentially independent of direction of the source and has an extremely low sensitivity to gamma dose rate.

## PC controlled MCA for NaI based Gamma Spectrometry

### MCA 2100R

Lab Impex Systems supply a range of bench top and portable multi-channel analyser systems for laboratory and field based gamma spectrometry. All systems are available with a range of 'easy to use' qualitative and quantitative data analysis software. Designed for gamma spectroscopy with NaI scintillation detectors, the MCA2100 platform incorporates the patented Quadratic Compression Converter (QCC) technique that speeds and enhances isotopic identification.

### Quantum Analysis Software

LIS can provide complete gamma spectroscopy systems including analytical software. Quantum-MCA and Quantum-MCA Gold software packages have been designed to allow the user to decide how an analysis is performed. Powerful and flexible, this software represents the latest advance in the fields of pulse-height analysis and gamma spectroscopy. Each version is a full 32-bit Microsoft Windows® application, and will operate under Windows 95, 98, XP and NT 4 and 2000.

## Waste Bag Monitor

The MED Waste bag monitor has been specifically designed for the contamination of hospital waste. The monitor provides assurance as to the levels of storage and accounts for waste disposed. This accurate measurement system offers a database to track waste in storage and determine the sentencing time (isotope must be known) required before safe disposal can be made. An optional weigh scale may be incorporated within the system.

## Calibration and Test Sources

A wide range of calibration and test sources are available with traceable calibration. Multi-line and single line sources suitable for well counters and gamma spectrometry. Planar sources for instrument calibration checks and calibrated gases for Gaseous monitoring system checks.



Founded in 1976 Lab Impex Systems is a leader in the development and supply of radiation detection equipment and integrated nucleonic systems. As suppliers to Defence, Nuclear, Medical and Industrial customers worldwide, we have superior expertise and knowledge in providing solutions that provide reliability, ease of use and what is seen as a key benefit in today's markets - 'Value for Money'.

Lab Impex can offer inclusive consultation on design, provision of complete systems, installation, commission and post operative service support.

Tailoring systems to meet the specific needs of the Defence, Nuclear and Medical sectors is a major part of Lab Impex's business. With the challenges within these markets now set before us we believe having the skills, knowledge and flexible instrumentation to provide compliant and cost effective solutions provides our customers with peace of mind.



**Laboratory Impex Systems Ltd**  
**Impex House, 21 Harwell Road**  
**Nuffield Industrial Estate, Poole**  
**Dorset BH17 0GE**  
**Tel: +44 (0) 1202 684848**  
**Fax: +44 (0) 1202 683571**  
**Email: [sales@lab-impex-systems.co.uk](mailto:sales@lab-impex-systems.co.uk)**  
**[www.lab-impex-systems.com](http://www.lab-impex-systems.com)**



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