The RADLAB was developed specifically for the metal industries and environmental control to provide the highest degree of accuracy in measured samples for its specific radiological content and activity.

- Full scale Isotope analysis
- Configurable Quick and Detailed Scan features
- Recommended for certifying material to meet I.A.E.A. clearance levels for radionuclides in solid materials
- Full network capabilities for system monitoring and servicing
- Large 6.5" (165mm) diameter WELL to accommodate different sample sizes

# RADLAB

#### LABORATORY GAMMA SPECTROMETER

#### Detect and identify specific radioactive isotopes in same sample

The RADLAB spectrometer utilizes only the highest quality Thallium doped Sodium lodide crystal, combined with state-of-the-art electronics and software. The result is the ability to distinguish between multiple isotopes and specific activity levels in the same sample. Results are quickly displayed and a report is generated.

#### **Simplified and Flexible**

The RADLAB system features configurable Quick Scan and Detailed Scan options. The RADLAB system uses a Windows<sup>™</sup> based environment and the user based interface software utilizes a systematic approach to the step by step sequences when stabilizing the system, taking measurements and filling in data. There are no complex steps that are required to ensure the system is calibrated and taking measurements correctly. The RADLAB has a network and serial port for connectivity. All system functions can be accessed remotely via a network connection.

#### International Atomic Energy Association (I.A.E.A.)

The RADLAB's design was focused on the I.A.E.A. recommended release limits. The user interface software is extremely flexible allowing the user to configure the RADLAB to best suit the applications library requirements.





## **RADLAB Gamma Spectrometer System** consists of:

#### **Detector Case**

- Detector case: 24"H (60cm) x 24"L (60cm) x 16"W (40cm)
- Outer detector case: Painted aluminum
- Shielding material: Lead and copper
- System weight: 450lbs (204 Kg)
- Sample Well Size: 6.5" (16.5cm) Diameter x 6.5" (16.5cm) High

#### **Electronics**

- Integral PMT with EM shielding
- High speed DSP circuitry with High SNR
- Ultra stable high voltage software adjustable
- Controller with FPGA technology
- Internal memory: 4GB RAM min.
- Hard drive: 120 GB min.
- Serial port
- Two USB ports (2.0)
- RJ45 10/100 network port
- High resolution touchscreen LCD display
- 110/220V 50/60Hz auto-selectable

#### Software

- Windows<sup>™</sup> based operating system with Intel processor
- Windows<sup>TM</sup> based RADLAB application software
- Easy to use menu driven interface with touchscreen
- Configurable data storage with backup
- Easy to use graphic user interface
- Live data analysis, report generation
- Fully remote access with software and hardware service capability

#### **Spectrometer Specifications**

- Large 21 in<sup>3</sup> (0.35L) Sodium Iodide, Thallium Doped (Nal(Tl)) crystal
- Energy resolution 8.5% or better for of 662 KeV
- Number of channels: 512
- Energy range: 30 KeV to 3.0 MeV (Gamma)
- Sensitivity calibration: Covers entire energy range



#### **RADLAB** Options

- Scale Used to weigh sample and download directly into RADLAB system
- Digital Camera Photograph the sample and include a photo of the sample in question with the evaluation report
- UPS battery back up

### RADCOMM RADIATION DETECTION SYSTEMS

Corporate Head Office Scott Aikin Saikin@radcommsystems.com Jeff Adams jadams@radcommsystems.com 2931 Portland Drive Oakville, ON Canada L6H 5S4 Tel. +1 (905) 829-8290 Toll Free. 1 (800) 588-5229 Fax. +1 (905) 829-1406 USA Joshua Hunter jhunter@radcommsystems.com 602 E. Lincolnway Ave. Valparaiso, IN USA 46383 Tel. +1 (773) 680-8430 Toll Free. 1 (800) 588-5229

Fax. +1 (219) 510-5764

Europe Wim van Hove wim.van.hove@radcommeurope.com Watertorenweg 32, 2230 Herselt, Belgium Tel. + 32.14.75.02.13 Fax. + 32.14.75.02.16 Black Sea Osman Tureyyen metkim@metkim.com Kavacik, Onarimli Sokak No 9 Altay Han Daire: 8 Beykoz, Istanbul, Turkey Tel. +90 (216) 425-1412 Fax. +90 (216) 425-1432

Latin America Eduardo Ballesteros analiticacontrol@prodginy.net.mx Amatista No.27, El Pedregal Atizapan de Zaragoza, 52948, Estado De Mexico Tel. (52) 55 5077 4633/ (52) 55 3615 4910

#### India Neelakshi Bhargava neelakshi@radcommsy

neelakshi@radcommsystems.co.in C-34, Ground Floor, Sawan Park, Ashok Vihar New Delhi 110052, India Tel. +91-9717671924 Fax. +91-9818650118