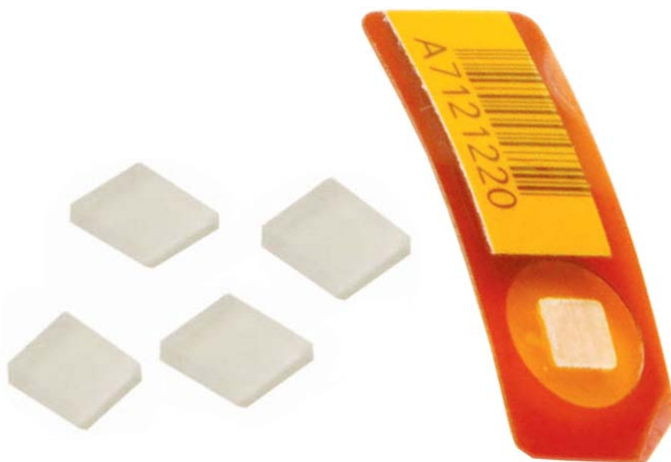


## Specialty Products

Complete monitoring solutions  
to suit your needs



Dosimetry Services understands the importance radiation monitoring plays in your business and in maintaining the health of your employees. With this in mind, we have a wide array of radiation monitoring products to meet your needs. We can help you determine the right products for your business and provide accurate exposure reports.

The Dosimetry Services Division specialty product line includes:

- High Dose Dosimeter
- CR39 Neutron
- REMtrack™ Wallet Card
- Environmental TLD
- Leak Test

### HIGH DOSE DOSIMETER FEATURES

- Unique bar-code identification number insures accurate custody chain
- Comprehensive and reliable dosimetry service ensures employee safety
- Convenience of three unique configurations

### HIGH DOSE DOSIMETERS

*Exacting measurement of extreme doses*

Measure exposure in environments such as radiation therapy, research applications, equipment calibrations, or sterilization applications. This is the perfect measurement device where radiation dose levels exist between 2 and 500,000 rads. A reliable LiF TLD chip offers excellent response and is energy and dose independent for most levels up to 1,000 rads. For higher levels, we employ optical density filters, which reduce the excessive amount of light TLDs emit so the PM tube does not become saturated and assessment accuracy is assured.

## CR39 NEUTRON FEATURES

- Can be combined with a dosimeter or used alone
- Energy independent
- Responds to intermediate and fast neutrons
- Accurate image analysis counting system
- Energy spectrum analysis is capable if used in conjunction with a TLD dosimeter
- Wear periods from one week to one year
- Computer-controlled automatic counting system
- provides objective, error-free dose assessments, and establishes a permanent record of exposure

## REMTRACK WALLET CARD FEATURES

- Bar-coded for user identification and tracking
- Whole body dosimeter
- Convenient credit card size
- Can be customized with company logo
- Second chip option
- Choice of wallet card or clip-on badge

## ENVIRONMENTAL TLD FEATURES

- Thermoluminescent dosimeter element
- Outdoor usage
- Responds to intermediate and fast neutrons
- Polypropylene holder and tamper-resistant pouch
- Variety of holder options available

## LEAK TEST FEATURES

- Automatic reorder or on-demand reorder
- Easy to use kit
- Easy to follow instructions
- Contamination protection provided

## CR 39 NEUTRON

*Complete monitoring for intermediate and fast neutron detection*

In facilities where employees work with neutron generators, linear accelerators or cyclotrons, CR39 Neutron provides accurate exposure determination. The CR39 may be used separately for neutron detection, or in conjunction with a TLD whole body. Exposure to neutrons cannot be detected by film and requires a specific calibration for TLD dosimeters. A computer controlled system provides objective, error-free dose assessment and establishes a permanent record of exposure.

Unlike TLD, the CR39 Neutron Dosimeter is energy independent and a practical and convenient way to accurately monitor exposure to intermediate and fast neutron radiation.



## REMTRACK™ WALLET CARD

*Emergency monitoring convenience*

The REMtrack™ wallet card is a personal radiation dosimeter. These wallet cards are extensively used by counter-terrorism operations, law enforcement and other personnel who encounter radiation emergency situations.

REMtrack consists of natural lithium fluoride chips positioned between high quality paper and polyethylene laminate material. Its unique bar-code identification system displays an individual's name, unique card number; plus issue and expiration dates, and offers an accurate chain-of-custody through the analysis process.



## ENVIRONMENTAL TLD

*Precision reliability to withstand the toughest environmental stresses*

Environmental dosimeters are well suited to monitor low-level gamma radiation and withstand the most intense environmental situations. This dosimeter is designed for outdoor applications and may be used to measure radiation for site characterization, at site boundaries for regulatory compliance, and to monitor public exposure. Issued reports provide easy comparison to ion chamber results.

The Environmental TLD Dosimeter, encased in a holder that protects against moisture, can be attached to fences, gates, trees, or other objects in the environment for quick access.



## LEAK TEST

*Reliable radiation source for leak testing*

The Dosimetry Services Division provides complete Leak Test kits for reliable testing of alpha, beta, or gamma emitting radiation sources. Once completed, you will receive a comprehensive report that lists each source tested and the results in microcuries ( $\mu\text{Ci}$ ). An instruction sheet provides step-by-step instructions.



## TECHNICAL SPECIFICATIONS:

Badge Name	High Dose Dosimeter	CR 39 Neutron	REMtrack Wallet Card
<b>Badge Type</b>	11 = LiF Loose Chip* 12 = LiF Chipstrate*	15 PB = TLD760 with CR39 <sup>1, 2, 3</sup> 15 DB = TLD760 with CR39 <sup>1, 2</sup> 25 = TLD760 with <sup>115</sup> In* and CR39 35 = Genesis Ultra TLD <sup>1, 2</sup>	21= one LiF chip <sup>1</sup> 22= two LiF chips* 23= one LiF chip with <sup>115</sup> In* 24= two LiF chips with <sup>115</sup> In*
<b>Description</b>	Single chip of <sup>6</sup> LiF:Mg, Ti (TLD100 loose chip or a bar-coded chipstrate)	Plastic polymer used to as a track detector	Single chip of <sup>6</sup> LiF:Mg, Ti (TLD100 loose chip)
<b>Manufacturer</b>	Thermo Electron RMP	PPG	Thermo Electron RMP
<b>Accreditations/Approvals/Licenses</b>	n/a	NVLAP (Code: 100555-0) HSE (United Kingdom)	NVLAP (Code: 100555-0)
<b>Holder Type</b>	High dose Loose chips- no holder Bag holder- chips placed in a plastic bag	Whole body Wrist Area Plastic bag	Personal card (loop through card for hanging)
<b>Wear Location</b>	Area, equipment	Whole body, area	Area, whole body
<b>Minimum Reportable Dose</b>	20 mrem (0.20mSv)	20 mrem (0.20 mSv)	20 mrem (0.20 mSv)
<b>Useful Dose Range</b>	Up to 500 krad (5kGy)	20 mrem - 5 rem (0.20 - 50 mSv)	20 mrem - 1000 rad (0.20 mSv - 10Gy)
<b>Energy Response</b>	Beta (MAX) 0.766 MeV - 5 MeV Photon 20 keV - 6 MeV	Neutron: 200 keV - 6 MeV**	Beta (MAX) 0.766 MeV - 5 MeV Photon 20 keV - 6 MeV.

\*Not accredited for personnel monitoring

\*\*Neutron energies up to 20 MeV with CR39 and special calibration

1: NVLAP (Code 100555-0) accredited configuration

2: HSE accredited configuration

3: CNSC accredited configuration

