



NUCLEAR INDUSTRY

Radiation Detection Product Catalog



MIRION
TECHNOLOGIES

Radiation. **Safety.**



MIRION
TECHNOLOGIES

Mirion Technologies Health Physics Division

Mirion Technologies is a leading provider of radiation detection equipment to protect people, measure radiation, identify contamination and search for sources.

Contact your nearest Health Physics Division office for product details, pricing and availability.





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ELECTRONIC DOSIMETRY



- 30+ years of industry experience
- Implemented in more than 90% of North American utilities
- Innovation driven by user feedback
- Technically advanced, user-friendly design



Dosimeters

The key component of an effective dose measurement program is the dosimeter itself. While passive dosimetry ultimately provides a worker's dose of record, electronic dosimeters serve a complimentary role. They provide workers with real-time, precise updates and alarms, ensuring proactive awareness of their current radiological conditions. The Mirion line of electronic dosimeters and accessories provides a stable platform for an effective radiation protection program and monitoring of workers' radiation exposure.

DMC 3000

Encompassing continuous improvements suggested by our user community, combined with Mirion's technical innovation, the DMC 3000 represents the culmination of over 30 years of industry expertise. The DMC 3000 is a highly advanced electronic dosimeter that accurately measures X-ray and gamma exposure across a wide range of energies. The modular design of the DMC 3000 also allows for expanded capabilities such as enabling measurement of beta or neutron exposure, extremely low dose rates, and even wireless data transmission as a teledosimeter.

Additional information on page 14

Add-on Modules for the DMC 3000:



Beta Module Hp(0.07)

In addition to the gamma and X-ray -Hp(10)- the Beta Module provides operational dosimetry for workers where Beta radiation monitoring is required. The Beta Module attaches to a DMC 3000 dosimeter allowing it to measure Hp(0.07) radiation at a wide range of energy levels.



Neutron Module Hp(10)

In addition to the gamma and X-ray -Hp(10)- the Neutron Module provides operational dosimetry for workers where Neutron radiation monitoring is required. The add-on Neutron Module attaches to a DMC 3000 dosimeter allowing it to measure neutron radiation at a wide range of energy levels.



Telemetry Module

In addition to the gamma and X-ray -Hp(10)- the Telemetry Module allows transmission of a worker's radiological data (accumulated dose, dose rate and alarm status, etc.) to nearby WRM2 equipment. Additionally, the Telemetry Module provides access to a variety of accessory functions via supplied Bluetooth connectivity.



PRD Module

In addition to the DMC 3000 dosimeter's detection of gamma and X-ray fields greater than ten millirem per hour, the integrated PRD Module provides sensitive detection for situations where very low dose radiation fields are a concern. The PRD Module attaches to a DMC 3000 allowing for detection of very weak or masked radioactive sources.

Additional information on pages 14-15

RWP Smart Turnstile

Access control is an important aspect of maintaining a secure Radiologically Controlled Area (RCA) within a nuclear facility. Ensuring that workers do not inadvertently enter areas for which they are not authorized is critical. The RWP Smart Turnstile accomplishes this task by checking that the worker is logged into the proper work permit for access to the restricted area, that they have been briefed on conditions in the area, and that their dosimeter is turned on, ultimately providing entry only to the approved personnel.

Additional information on page 18

Additional Pictures:



Portable version



Touch-screen monitor includes 64-bit (Windows 7) OS and TPM Security Chip



INSIDE: 4 outlet surge protector, DC fan for power supply

Electronic Dosimetry (Dosimeters)



DMC 3000

Personal Electronic Dosimeter

OVERVIEW

The DMC 3000 features a unique, high contrast and back-lit LCD display, enhanced alarms (audible, visual, and vibration alerting), high EMI and RF Immunity and long battery life.

PRODUCT FEATURES

NUCLEAR

- Display Units: mSv, μ Sv, or mrem
- Measurement range (Dose): 0.01 mrem (0.1 μ Sv) to 1000 rem (10 Sv)
- Measurement range (Dose Rate): 0.01 mrem/h (0.1 μ Sv/h) to 1000 rem/h (10 Sv/h)
- Energy Range(X-ray and Gamma): 15 keV to 7 MeV
- Energy response: $\pm 20\%$ (typically 10% from 16 keV to 7 MeV)

OPERATIONAL

- Display: Large LCD with high quality white back-lighting 8 alpha-numeric digit display
- Audible Alarm: Loud speaker (>85 db)
- Visual: Super bright forward facing alarm LED along with alarm and information LEDs on top
- Shock, vibration and drop resistant (1.5 meters on concrete)

ELECTRICAL

- Power Supply: Standard AAA (LR03) 1.5V Alkaline battery
- Battery Life: 2500 hr continuous run

MECHANICAL

- Dimensions: 3.4 x 2.2 x 0.8 in (86 x 56 x 21 mm) without clip
- Weight (alkaline battery and clip): < 2.9 oz (84 g)



Beta Module Hp(0.07)

For the DMC 3000

OVERVIEW

The Beta Module combines with the DMC 3000 dosimeter to measure the Hp(0.07) shallow dose radiation at a wide range of energy levels.

PRODUCT FEATURES

NUCLEAR

- Display: Dose and dose rate Hp(0.07)
- Measurement range Hp(0.07) X and
- Energy range (gamma): 15 keV to 7 MeV;
- Energy range (beta): 0.22 MeV to 2.3 MeV
- Dose Rate Linearity Hp(0.07): $< \pm 20\%$ up to 1000 rem/h (10 Sv/h)

OPERATIONAL

- Display: LED- Red, Green, Yellow, Blue, Magenta, Cyan, and White LED's
- Shock, vibration and drop resistant

ELECTRICAL

- Power Supply: DMC 3000
- Battery Life: 2000 hr with DMC 3000 in continuous run, w/o excessive alarms

MECHANICAL

- Housing: Rugged, high impact polycarbonate-ABS case
- Dimensions (with DMC 3000): 4.8 x 2.4 x 0.8 in (122 x 60 x 21 mm) max. without clip 4.8 x 2.4 x 1.1 in (122 x 60 x 28 mm) with standard clip
- Weight (with DMC 3000): < 3.9 oz (112 g)



Neutron Module Hp(10)

For the DMC 3000

OVERVIEW

The Neutron Module combines with the DMC 3000 dosimeter to measure Neutron radiation at a wide range of energy levels.

PRODUCT FEATURES

NUCLEAR

- Display: Hp(10) Typical Energy response from thermal to fast Neutron
- Measurement range Hp(10) X and
- Energy range (gamma): 15 keV to 7 MeV;
- Energy range (neutron): 0.025 eV to 15 MeV
- Dose Rate Linearity Hp(10): $< \pm 20\%$ up to 1000 rem/h (10 Sv/h)

OPERATIONAL

- Display: LED- Red, Green, Yellow, Blue, Magenta, Cyan, and White LED's
- Shock, vibration and drop resistant

ELECTRICAL

- Power Supply: DMC 3000
- Battery Life: 2000 hr with DMC 3000 in continuous run, w/o excessive alarms

MECHANICAL

- Housing: Rugged, high impact polycarbonate-ABS case
- Dimensions (with DMC 3000): 5.1 x 2.4 x 0.8 in (131 x 60 x 21 mm) max. without clip 5.1 x 2.4 x 1.1 in (131 x 60 x 28 mm) with standard clip
- Weight (with DMC 3000): < 4.9 oz (138 g)



Telemetry Module

For the DMC 3000

OVERVIEW

The Telemetry Module combines with the DMC 3000 dosimeter to transmit the radiological data (accumulated dose, dose rate and alarm status) to other WRM2 Telemetry System components (Base Station, Repeater, etc.)

PRODUCT FEATURES

NUCLEAR

- Frequencies: 900 (902-928) MHz or 2.4 GHz ISM frequency range
- Transmit Power Output: 100 mW(900 Mhz), 10 mW - 63 mW(2.4 Ghz) locally regulated

OPERATIONAL

- Display: LED- Red, Green, Yellow, Blue, Magenta, Cyan, and White LED's
- Shock, vibration and drop resistant
- Bluetooth option

ELECTRICAL

- Power Supply: DMC 3000
- Battery Life: >40 hrs

MECHANICAL

- Dimensions: 4.8 x 2.3 x 0.98 in (121 x 58 x 25 mm)
- Weight: 54 g without DMC 3000; 165 g with DMC 3000 and AAA Battery



PRD Module

For the DMC 3000

OVERVIEW

The PRD Module is a Personal Radiation Detector add-on module to the DMC 3000 dosimeter for source detection and search. It is intended for First Responders, Law Enforcement, Customs Inspectors protecting critical infrastructures against unexpected radiation sources and who also need state-of-the-art radiological protection.

PRODUCT FEATURES

NUCLEAR

- Energy Range (gamma): 60 keV to 3 MeV
- Detects better than 0.05 mrem (0.5 μ Sv/h) level increase in less than 2 seconds.

OPERATIONAL

- Display: LED- Red, Green, Yellow, Blue, Magenta, Cyan, and White LED's
- Shock, vibration and drop resistant

ELECTRICAL

- Power Supply: DMC 3000
- Battery Life: Runs continuously in excess of 1000 hours

MECHANICAL

- Housing: Rugged, high impact polycarbonate-ABS case
- Dimensions (with DMC 3000): 5.1 x 2.4 x 0.8 in (131 x 60 x 21 mm) max. without clip 5.1 x 2.4 x 1.1 in (131 x 60 x 28 mm) with standard clip
- Weight (with DMC 3000): < 5.3 oz (150 g)



SOR/R

Personal Electronic Dosimeter

OVERVIEW

The SOR/R Electronic Dosimeter was specifically designed to meet the needs of various applications with one product. The SOR/R dosimeter is qualified in accordance with current military and civil standards. The SOR line exceeds some of the standards currently in use in order to account for harsh operational environments.

PRODUCT FEATURES

NUCLEAR

- Display Units: cGy; cGy/h; mSv; mSv/h; mrem; mrem/h
- Measurement Range (Dose): 0.1 mrem (1 μ Sv) to 1000 rem (10 Sv)
- Measurement range (Dose Rate): 0.01 mrem/h (0.1 μ Sv/h) to 1000 rem (10 Sv/h)
- Energy response: $\leq \pm 20\%$ in the range 60 keV to 2 MeV. $\leq \pm 50\%$ in the range 2 MeV to 6 MeV Accuracy $\leq \pm 10\%$ (137 Cs)

OPERATIONAL

- Display: backlighted (option)
- Hands free communication with Dosimeter Readers

ELECTRICAL

- Power Supply: standard battery
- Battery Life: one year lifetime

MECHANICAL

- Housing:
 - Waterproof
 - Small and lightweight
 - Rugged for battlefield use

Electronic Dosimetry (Accessories)



LDM 320 W

Hands-Free Dosimeter Readers

OVERVIEW

The LDM 320W reader operates using software packages installed on the computer (PC) and communicates with the DMC 3000 and SOR families in hands-free data exchange mode.

Wall Mount version

PRODUCT FEATURES

OPERATIONAL

- Visual: Two-color electroluminescent diode for different indications
- Compatible with software packages: DOSICARE, DOSIFAST, DMCUser and LDM 3000SW
- Nominal range:
 - DMC 2000 / SOR: 9.8 in (25 cm) max
 - DMC 3000: 1.9 in (5 cm) max

ELECTRICAL

- Power Supply: Self powered through USB port

MECHANICAL

- Dimensions: 6.2 x 3.9 x 2.9 in (157 x 99 x 75 mm)
- Weight: 400 g (14.1 oz)
- Compatible with the DMC 2000 and SOR families, iPAM-Tx as well as the DMC 3000 dosimeter
- Operating temperature: 32°F to 122°F (0°C to 50°C)
- Storage temperature: 14°F to 140°F (-10°C to 60°C)
- Humidity: 90% HR (without condensation)



LDM 320 D

Hands-Free Dosimeter Readers

OVERVIEW

The LDM 320D reader operates using software packages installed on the computer (PC) and communicates with the DMC 3000 and SOR families in hands-free data exchange mode.

Desktop version

PRODUCT FEATURES

OPERATIONAL

- Visual: Two-color electroluminescent diode for different indications
- Compatible with software packages: DOSICARE, DOSIFAST, DMCUser and LDM 3000SW
- Nominal range:
 - DMC 2000 / SOR: 9.8 in (25 cm) max
 - DMC 3000: 1.9 in (5 cm) max

ELECTRICAL

- Power Supply: Self powered through USB port

MECHANICAL

- Dimensions: 4.3 x 3.9 x 1.1 in (109 x 100 x 29 mm)
- Weight: 150 g (5.3 oz)
- Compatible with the DMC 2000 and SOR families, iPAM-Tx as well as the DMC 3000 dosimeter
- Operating temperature: 32°F to 122°F (0°C to 50°C)
- Storage temperature: 14°F to 140°F (-10°C to 60°C)
- Humidity: 90% HR (without condensation)



IRD 3000

Irradiator for Electronic Dosimeter Calibrations and response checking

OVERVIEW

The IRD 3000 is a bench-top calibrator used for calibrating and calibration checking the DMC 3000 and the SOR electronic dosimeters against a NIST traceable standard and to ensure ANSI compliance. The IRD 3000, combined with a PC running the DosiCal software and a PC printer will automatically generate a calibration report for each dosimeter.

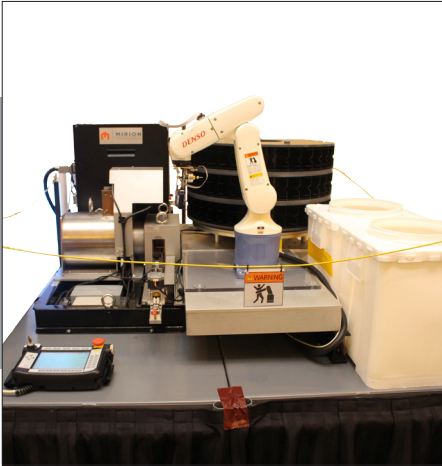
PRODUCT FEATURES

NUCLEAR

- Delivers a dose rate of approximately 300mRem/h (3 mSv/hr) within the shielded compartment.
- Radiation Source - ¹³⁷Cs, 0.37 GBq (10mCi) shielded source, very low external radiation at < 0.25 mR/h (2.5 uSv/h)

OPERATIONAL

- Can calibrate up to 3 dosimeters at a time
- Automated measurement acquisition



IDC 3000

Intelligent Dosimeter Calibrator

OVERVIEW

The IDC 3000 is a calibration system designed to automatically or manually calibrate DMC 2000 and DMC 3000 electronic dosimeters against a NIST traceable standard and to ensure ANSI compliance. The IDC has been designed for facilities that need to calibrate large inventories of electronic dosimeters rapidly and efficiently. The IDC is another world class solution you can expect from Mirion.

PRODUCT FEATURES

NUCLEAR

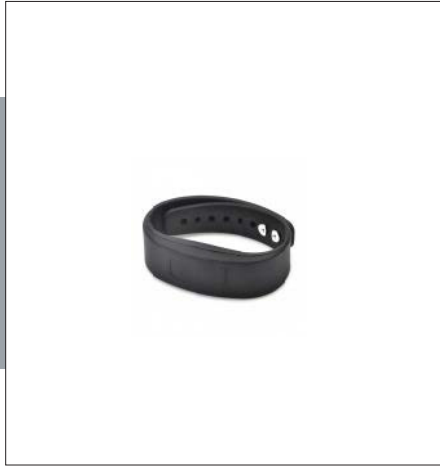
- Dose rates of 5rem/h (50 mSv/h), 500 mrem/h (5 mSv/h) and 50 mrem/h (0.5 mSv/h)

OPERATIONAL

- Can be loaded with up to 180 dosimeters at a time

MECHANICAL

- Dimensions: approximately 5x5 feet (1.53 Meters)
- Weight: approximately 1,800 pounds (816.5 KG)



Vibrating Wristband

DMC 3000 Accessory with a Transmitter Module

OVERVIEW

The wireless Bluetooth Vibrating Wristband further augments the DMC 3000 Dosimeter's alarm capabilities. The wristband will vibrate whenever the DMC 3000 Dosimeter equipped with a Transmitter Module is in alarm. The vibrating wristband which is extremely beneficial in high noise areas is worn under PC's in contact with skin. This direct contact ensures the worker will note the alarm.

PRODUCT FEATURES

NUCLEAR

- Effective Range: 10 meters

OPERATIONAL

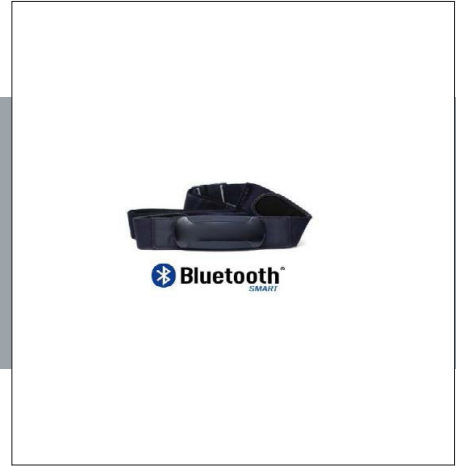
- Bluetooth Version: V2.0
- Bluetooth Carrier Frequency: 2402 MHz–2480 MHz

ELECTRICAL

- Power Supply: 5–5.3V
- Charge Time: 2 hours
- Battery Life: 90 hours per charge

MECHANICAL

- Operating Temperature Range: 14°F to 122°F (-10°C to 50°C)
- Storage Temperature Range: -4°F to 176°F (-20°C to 80°C)



Heart Rate Monitor

DMC 3000 Accessory with a Transmitter Module

OVERVIEW

The Heart-Rate Monitor is a small wireless Bluetooth device that attaches directly to the user's chest via a chest strap and continually transmits their heart-rate through the DMC 3000 Transmitter Module to a central location using TeleView 3000 remote monitoring software. The Heart-Rate Monitor is useful for monitoring a worker for symptoms related to heat stress.

PRODUCT FEATURES

NUCLEAR

- Heart Rate Range: 25 -240 BPM
- Effective Range: 10 meters

OPERATIONAL

- Bluetooth Version: V2.0
- Bluetooth Carrier Frequency: 2402 MHz–2480 MHz

ELECTRICAL

- Power Supply: 5–5.3V
- Charge Time: 3 hours
- Battery Life: 26 hours per charge

MECHANICAL

- Operating Temperature Range: 14°F to 122°F (-10°C to 50°C)

Electronic Dosimetry (Accessories)



Passive Entry Turnstile

Access Dosimeter Checkpoint

OVERVIEW

The Passive Entry Turnstile provides a Dosimeter checkpoint: It permits the workers to proceed and access the area if their dosimeter is turned on.

PRODUCT FEATURES

OPERATIONAL

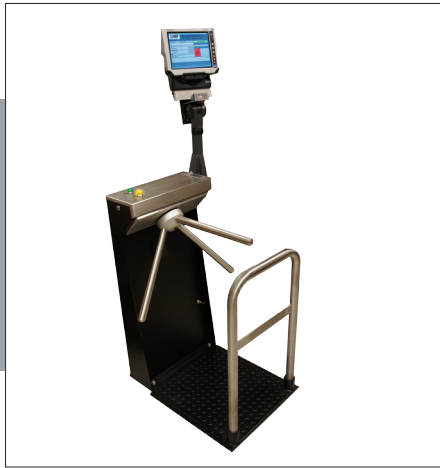
- Visual: LED indicator lights

ELECTRICAL

- 110 VAC/50Hz, 240 VAC/ 60Hz switching

MECHANICAL

- Dimensions: 36 x 27 x 67 in. (91.4 x 68.5 x 170.2 cm)
 - Passage Space: 18 inches (45.7 cm)
 - Turnstile Arm: 1.25 inch diameter (3.17 cm)
- Weight: 130 lbs (58.95 kg)
- Compatible with all DMC-2000/3000 and SOR Electronic Dosimeters.
- Types: Right hand or left Hand
- Fail Safe and fail lock mechanical controls
- Portable size also available



RWP Smart Turnstile

RWP Smart Access
Dosimeter Checkpoint

OVERVIEW

The RWP Smart Turnstile provides a Dosimeter checkpoint: It permits the workers to proceed and access the area if their dosimeter is turned on and they are on the correct RWP.

PRODUCT FEATURES

OPERATIONAL

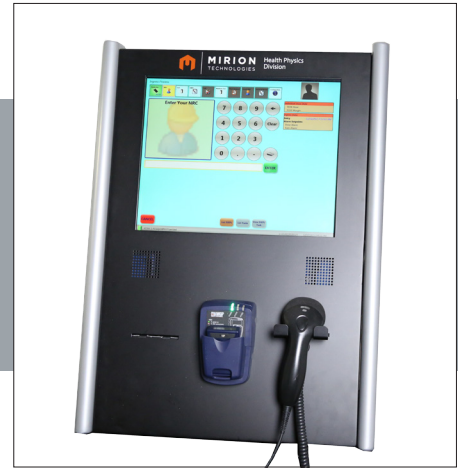
- Display: Touch Screen Tablet Computer for visual verification / acknowledgement by access personnel. Remote (Desktop) configuration if the Turnstile is on a PC Network.
- Visual: LED indicator lights (Amber and Green)

ELECTRICAL

- Power Supply: DC Fan
- -4 outlet surge protector
- 110 VAC/50Hz, 240 VAC/ 60Hz switching
- Outputs: +5V; +24V; +15V; -15V (not used for this application)

MECHANICAL

- Portable Dimensions: 21 x 27 x 38 in (53.3 x 68.6 x 96.5 cm)
- Full Size Dimensions: 36 x 27 x 39 in (91.4 x 68.5 x 99.1 cm)
 - Passage Space: 18 inches (45.7 cm)
 - Turnstile Arm: 1.25 inch diameter (3.17 cm)
- Weight: 140 lbs (63.5 kg)
- Types: Right hand or left Hand
- Fail Safe and fail lock mechanical controls



LDM 320K Wall Kiosk

Access Control Kiosk

OVERVIEW

The LDM 320K is a fully self-contained, "out of the box" turnkey solution for Access Control workstations. Designed for ease of use, the LDM 320K includes all of the components needed to log workers into and out of a Radiologically Controlled Area

PRODUCT FEATURES

OPERATIONAL

- Display: 19 in. touchscreen
- Windows 7 64-bit small form factor PC
- Bar code scanner

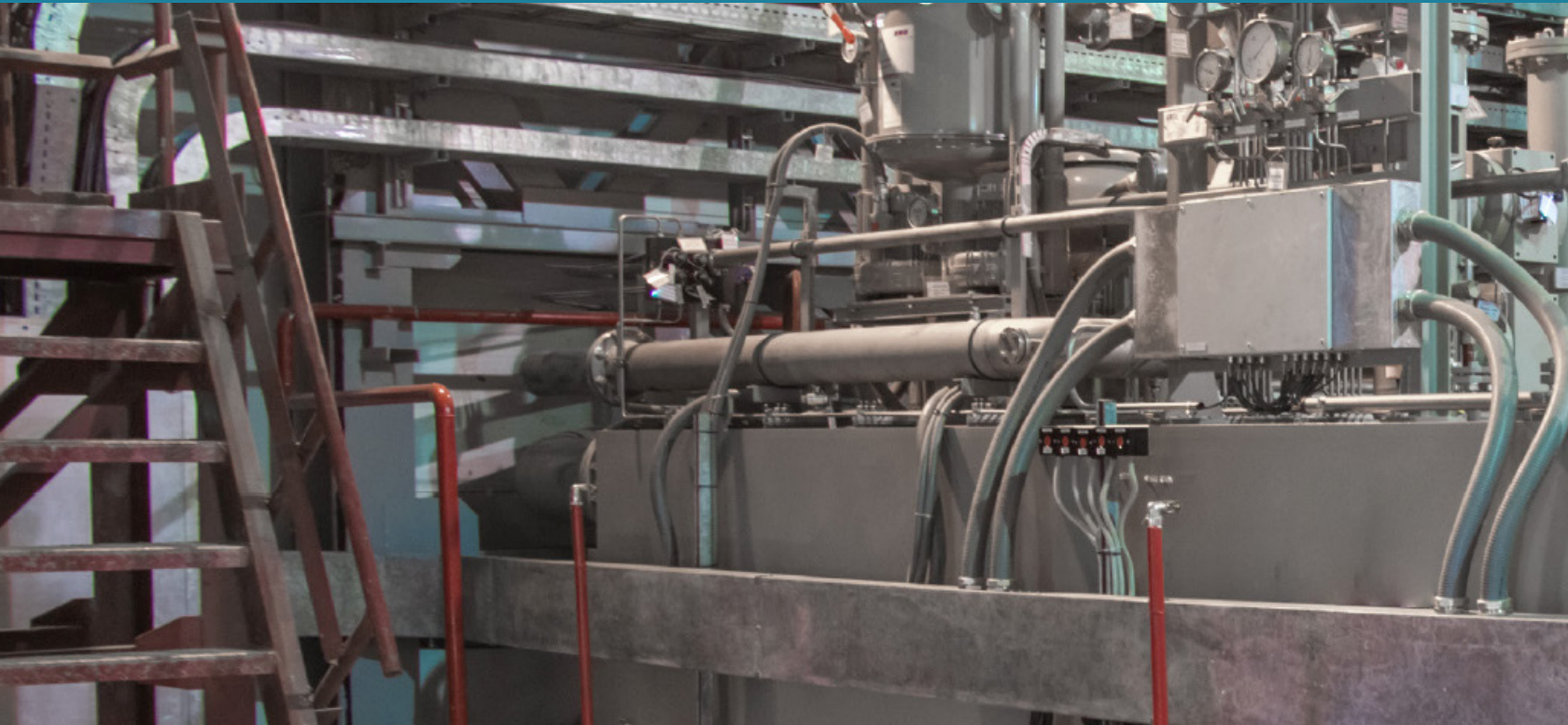
ELECTRICAL

- Input Voltage: 120 VAC AC nominal
Frequency 60Hz + 3

MECHANICAL

- Dimensions: 22 x 29 in.
(Thickness: 12.5 in)
- Weight: 70 pounds
- Desktop or Wall mountable

Notes



- Multi-Purpose meters meet a variety of applications
- Smart add-on probes allow flexible deployment
- Integrated wireless functionality across the product line
- Rugged, dependable, accurate, and easy to use



SURVEY INSTRUMENTATION





RDS-31

An extremely versatile dose rate meter on its own, the RDS-31 can be a highly effective tool for contamination screening with the addition of smart external probes. Both the GMP-25i and the ABP-150 probes provide sensitive frisking capabilities. The RDS-31 iTx models relay both dose rate and frisking survey data wirelessly back to a central monitoring station for verification and logging. In addition to contamination frisking smart probes, the RDS-31 can alternatively fit a number of additional probes (GMP-12 series) for increased range and applications, making it the “go-to” instrument for a wide variety of radiation safety tasks.

RDS-31 Add-on Probes:

GMP-12 UW



The GMP-12 UW probe connects to the RDS-31 survey meter allowing enhanced gamma and X-ray detection up to 1,000 R/hr and up to 300 feet away. The enclosure is IP68 rated for long term, self-submersing use under water.

GMP-12 SD



The GMP-12 SD probe connects to the RDS-31 survey meter allowing enhanced gamma and X-ray detection up to 1,000 R/hr and up to 300 feet away. The enclosure is IP67 rated for short term water immersion and contains no internal memory for higher radiation resistance (up to 60K rad).

GMP-12 GSD



Enhances the detection capability of the RDS-31 survey meter for gamma and X-ray radiation. Designed to provide both low and high-range detection with an automatic switch-over between GM tube (low range) and Silicon Diode (high range) detectors. The GMP-12 GSD is a “smart” probe storing calibration coefficients and probe identification internally, allowing any probe to be connected to any RDS-31.

GMP-25i



Used as an external detector with the RDS-31 multi-purpose survey meter and designed for surface contamination monitoring. Like other Mirion external probes, the GMP-25i is a “smart” probe, having an internal high voltage generator and non-volatile memory for calibration coefficients and probe identification.

ABP-150



A hand-held frisking/surface contamination probe for sensitive alpha or beta measurement when used with the RDS-31 multi-purpose survey meter. The ABP-150 contains a dual phosphor scintillation detector; ZnSAg for alpha and plastic scintillator for beta detection.



Telepole II

Representing a marked improvement over a venerable industry standard, the Telepole II features a number of innovations and upgrades from its predecessor, the Telepole, to fit the demanding applications of the nuclear industry. An improved internal locking mechanism makes for a sturdier, more reliable pole that is more readily decontaminated. Further additions such as a third detector inside the meter for dose rates at the worker's location, a color display, and an integrated LED light in the probe head all add up to the Telepole II as an excellent tool for performing surveys in hard-to-reach places.

Additional Pictures:



Collapsed Length:
120cm (3'11"),
Extended Length:
400cm (11')



Detachable meter box



Color LCD display

Survey Instrumentation



RDS-31

Multi-Purpose Survey Meter

OVERVIEW

RDS-31 is a multipurpose survey meter with internal detector and optional externally connected probe. The RDS-31 is a complete solution that can be used for handheld surveillance, personal monitoring and as an area radiation monitor.

PRODUCT FEATURES

NUCLEAR

- Display units: rem/(h), Sv/(h)
- With external detector: Gy/(h), cps, cpm, dpm and Bq
- Detectors: one energy-compensated GM tube, energy response according to ambient dose equivalent H*(10)
- Measurement range (Dose rate): 10 µrem/h (0.1 µSv/h) to 10 rem/h (100 mSv/h)

OPERATIONAL

- Display: 128 x 64 pixel
- Keyboard: Two buttons
- Flexible histogram functions
- Real time clock function

ELECTRICAL

- Power Supply: 2 AA size batteries (alkaline or NiMH)
- Battery life: ~1000 hours at normal background

MECHANICAL

- Housing: IP67 Waterproof
- Dimensions: 3.93 x 2.63 x 1.29 in (100 x 67 x 33 mm)
- Weight: 175 g w/o batteries (0.385 lb), 220 g w/ batteries (0.485 lb)



RDS-31iTx

Multi-Purpose Telemetry Survey Meter

OVERVIEW

RDS-31iTx is a multipurpose survey meter with internal detector and optional externally connected probe. This version also has an internal telemetry module. The RDS-31 is a complete solution that can be used for handheld surveillance, personal monitoring and as an area radiation monitor.

PRODUCT FEATURES

NUCLEAR

- Display units: rem/(h), Sv/(h)
- With external detector: Gy/(h), cps, cpm, dpm and Bq
- Detectors: one energy-compensated GM tube, energy response according to ambient dose equivalent H*(10)
- Measurement range (Dose rate): 10 µrem/h (0.1 µSv/h) to 10 rem/h (100 mSv/h)

OPERATIONAL

- Keyboard: Two buttons
- Flexible histogram function
- Real time clock function

ELECTRICAL

- Power Supply: 2 AA size batteries (alkaline or NiMH)
- Battery Life: ~350 hours at normal background

MECHANICAL

- Housing: IP67 Waterproof
- Dimensions: 3.93 x 2.63 x 1.29 in (100 x 67 x 33 mm)
- Weight: 175 g w/o batteries (0.385 lb), 220 g w/ batteries (0.485 lb)



RDS-31iTxSD

Multi-Purpose Telemetry Survey Meter

OVERVIEW

RDS-31iTx SD is a multipurpose survey meter with internal detector and optional externally connected probe. This version also has an internal telemetry module. This version of the RDS-31 was designed mainly for area monitoring in higher dose rates.

PRODUCT FEATURES

NUCLEAR

- Display units: rem/(h), Sv/(h)
- With external detector: Gy/(h), cps, cpm, dpm and Bq
- Detectors: silicon detector, one large area PIN diode, energy response according to ambient dose equivalent H*(10)
- Measurement range (Dose rate): 1 mrem/h (0.01 mSv/h) to 100 rem/h (1 Sv/h)

OPERATIONAL

- Keyboard: Two buttons
- Flexible histogram function
- Real time clock function

ELECTRICAL

- Power Supply: 2 AA size batteries (alkaline or NiMH)
- Battery Life: ~350 hours at normal background

MECHANICAL

- Housing: IP67 Waterproof
- Dimensions: 3.93 x 2.63 x 1.29 in (100 x 67 x 33 mm)
- Weight: 175 g w/o batteries (0.385 lb), 220 g w/ batteries (0.485 lb)

Survey Instrumentation



RDS-30

Radiation Survey Meter

OVERVIEW

The RDS-30 is a digital handheld dose rate meter designed for a wide range of gamma and X-ray radiation surveillance applications. The RDS-30 is simple-to-use, compact, lightweight and waterproof with reliable and accurate performance and a friendly user interface.

PRODUCT FEATURES

NUCLEAR

- Measurement range (Dose): from 1 µrem to 100 rem (0.01 µSv to 1 Sv)
- Measurement range (Dose rate): from 1 µrem/h to 10 rem/h (0.01 µSv/h to 100mSv/h)

ELECTRICAL

- Power Supply: 2 alkaline batteries IEC LR6/AA size(recommended)
- Battery Life: > 2000 hours at normal background with alkaline cells

MECHANICAL

- Housing: IP67 Waterproof

Other Versions:

RDS-80/80A

- Measurement Range: surface contamination 1 to 100 000 cps, 0.01 to 1 000 000 Bq/cm² or 1 to 1 000 000 DPM
- Surface activity (Bq/cm²) display configurable for different isotopes



RI-02

Portable Ion Chamber Survey Meter

OVERVIEW

The RI-02 is the next generation ion chamber survey meter. This smart meter features accurate dose rate measurement with accumulated dose. The optional radio allows it to send data to the sites WRM2 Telemetry System.

PRODUCT FEATURES

NUCLEAR

- Measurement Range: 0.1 mrem/h (1 iSv/h) to 100 rem/h (1 Sv/h)

OPERATIONAL

- Display:
 - Custom LCD display with LED backlight
 - Auto ranging digilog display
 - Icon on display indicating Open or Closed window reading
- Keyboard: 4 pushbutton, short and long press
- Optional WRM2 Radio

ELECTRICAL

- Power Supply: 2 each "C" cell batteries housed in a sealed externally accessible compartment
- Battery Life: >200 hrs

MECHANICAL

- Dimensions: 8.25 x 4.5 x 6 in. (21 x 11.5 x 15.2 cm) w/o handle
- Weight: 1.4 Kg (3 lb) w/ batteries
- Large Chamber Volume: 21.36 in³ (350cm³)



Telepole II

Telescoping Gamma Survey Meter

OVERVIEW

The Telepole II is a wide range telescopic survey meter with a measuring range of between 0.05 mR/h to 1000 R/h. It features the same length pole as its predecessor, reaching 11 feet when fully extended. With a backlit color display and an integrated LED in the detector head, the Telepole II makes it easier than ever to survey components in dark or dimly lit areas.

PRODUCT FEATURES

NUCLEAR

- Detector: Energy Compensated GM tubes
- Measurement Range – External Detector: 0.05 mR/h (0.5 Sv/h) to 1000 R/h (10Sv/h) Automatic switching between the two GM tubes at 1,500 mR/h (ascending dose rate) and 400 mR/h (descending dose rate)
- Measurement Range – Internal Detector: 0.05 mR/h (0.5 Sv/h) to 1500 mR/h

OPERATIONAL

- Display: Color TFT
- Built in LED to light up dark areas being surveyed
- Built-in telemetry

ELECTRICAL

- Power Supply: four 1.5 Volt AA batteries
- Battery Life: 80 hours continuous operation (with no telemetry)

MECHANICAL

- Pole Length:
 - Collapsed: 120 cm (3'11")
 - Extended: 400 cm (13')
- Weight: 1.95 Kg (4.3 lb)

Survey Instrumentation



RDS-31 Probe: GMP-12SD

External Gamma Probe

OVERVIEW

The GMP-12SD probe is used as an externally connected detector to the RDS-31 family of multipurpose meters and intended for long term monitoring of high dose rate applications.

PRODUCT FEATURES

NUCLEAR

- Detector: Silicone PIN diode
- Measurement Range (Dose rate): 1 mrem/h (10 μ Sv/h) to 500 rem/h (5 Sv/h)
- This probe does not have internal memory to allow a high amount of absorbed dose (90 krem (900 Sv) total exposure)
- While not a smart probe the calibration for this probe can be uploaded to allow use on the meter

MECHANICAL

- Housing: IP67 Waterproof
- Dimensions:
 - length: 6.9 in (177 mm)
 - cylinder diameter: 1.37 in (35 mm)
- Weight: 400 g (0.88 lb)



RDS-31 Probe: GMP-12UW

External Gamma Probe

OVERVIEW

The GMP-12UW probe is used as an externally connected detector to the RDS-31 family of multipurpose meters and intended for long term monitoring of high dose rate applications. It is the same detector as the GMP-12SD except it has a weighted cap and is rated for under water applications

PRODUCT FEATURES

NUCLEAR

- Detector: Silicone PIN diode
- Measurement Range (Dose rate): 1 mrem/h (10 μ Sv/h) to 500 rem/h (5 Sv/h)
- This probe does not have internal memory to allow a high amount of absorbed dose (90 krem (900 Sv) total exposure)
- While not a smart probe the calibration for this probe can be uploaded to allow use on the meter

MECHANICAL

- Housing: IP68 Waterproof (tested to 3 Atmospheres)
- Dimensions:
 - length: 7.2 in (185 mm)
 - cylinder diameter: 1.37 in (35 mm)
- Weight: 450 g (0.99 lb) w/ submersing weight



RDS-31 Probe: GMP-12GSD

External Gamma Probe

OVERVIEW

The GMP-12GSD probe used as an externally connected detector to the RDS-31 family of multipurpose meters. It has dual detectors to provide a wide measuring range and has internal memory to store calibration data (Smart Probe)

PRODUCT FEATURES

NUCLEAR

- Detector: One halogen quenched, energy compensated GM tube and silicon PIN diode
- Measurement Range (Dose rate): (10 μ rem/h (0.1 μ Sv/h) - 1000 rem/h (10 Sv/h)
- Being a Smart Probe allows this probe to be automatically connected to any meter without additional calibration

MECHANICAL

- Housing: IP67 Waterproof
- Dimensions:
 - length: 8.18 in (208 mm)
 - cylinder diameter: 1.37 in (35 mm)
- Weight: 220 g (0.48 lb)

Survey Instrumentation



RDS-31 Probe: ABP-150

External Alpha and Beta Probe

OVERVIEW

ABP-150 is a large area (100 cm²) handheld surface contamination probe when connected to the RDS-31 family of multipurpose meters. It is switchable between alpha and beta monitoring.

PRODUCT FEATURES

NUCLEAR

- Detector: Dual phosphor scintillation detector
 - ZnSAg for alpha
 - Plastic scintillator for beta
- This is a Smart Probe which allows the Efficiency to be stored in the memory to allow any probe to be used by any meter. Also with the efficiency stored in the probe, the meter reads out in activity (dpm) not count rate

MECHANICAL

- Dimensions: 3.93 x 3.93 x 9.84 in (100 x 100 x 250 mm)
- Weight: 0.7 kg (2.20 lb)



RDS-31 Probe: GMP-25i

External Beta Probe

OVERVIEW

The GMP-25 is a Smart Frisker probe, used as an externally connected detector to the RDS-31 family of multipurpose meters. It is intended for routine beta contamination monitoring.

PRODUCT FEATURES

NUCLEAR

- Detector: GM tube 7313
- This is a Smart Probe which allows the Efficiency to be stored in the memory to allow any probe to be used by any meter. Also with the efficiency stored in the probe, the meter reads out in activity (dpm) not count rate

MECHANICAL

- Housing: Durable ABS/polycarbonate
- Dimensions:
 - length: 14.8 in (375 mm)
 - width: 2.75 in (70 mm)
- Weight: 490 g (1.08 lb)



PERSONNEL

OBJECT

VEHICLE

WASTE

CONTAMINATION AND CLEARANCE



- Comprehensive product line that fits several applications
- Gasless options for easier deployment
- The most advanced detection algorithm available
- Interconnectivity for remote management and maintenance



Personnel

Ensuring that personnel who are exiting an RCA are clear of any radioactive contamination is one of the primary goals of any contamination and clearance program. Due to the sheer number of workers coming and going, personnel movement is one of the easiest means to spread contamination from inside a controlled area to the general public. Contamination screening is also a key step in ensuring that workers' radiological exposure and possible health effects are kept to a minimum. While detection accuracy is a key concern, rapid worker throughput is also critical to avoid excessive wait times and the temptation for workers to skip steps just to get home sooner.

TwoStep™-Gas II

The TwoStep™-Gas II (TSG II) is the newest whole body monitor developed by Mirion Technologies. This monitor combines the latest technologies in electronics with 30 plus years of design and deployment experience into a state of the art tool, while also providing Mirion's traditional level of accuracy and reliability. The TSG II ensures complete coverage of the worker by virtue of one of the lowest occurrences of dead zones between detectors in the industry. Maintenance of the TSG II is an easy task as well, as the monitor is comprised of 34 uniform detectors, requiring fewer spare parts to be kept on hand.

Additional information on page 40

Additional Pictures and Information:



Moveable Head Detector (option)



Outstanding detector geometry that contours to a person's shape



TSG II with backwall (reduced footprint version on page 40)



Object

A nuclear facility is not unlike any other industrial environment. Routine work takes place inside the Radiologically Controlled Area (RCA) on a regular basis. This work requires tools, paperwork, perhaps even a laptop computer. These objects that are taken into and out of the RCA are often carriers of contamination picked up in the area where the work was done. Screening these objects to ensure that any contamination on them does not spread outside of the RCA is an important activity. Unfortunately, this screening process often involves the painstaking task of checking the object with a handheld survey instrument, ultimately causing the worker delays exiting the area. An automated tool and object monitor can expedite this process by providing a fast, accurate initial screen, allowing those instruments that do not test positive to bypass the more labor-intensive frisking process with survey meters.

CPO-Smart

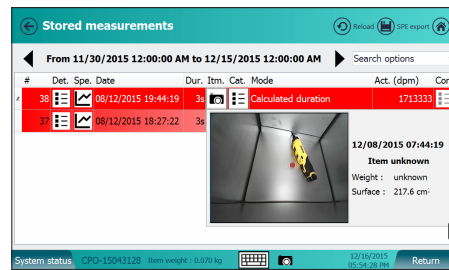
The CPO-Smart uses advanced multichannel analyzers to verify that items such as gloves, tools, or other material are free of radioactive material and, if contamination is present, to identify specific isotopes. The monitor is ideal for fast, automated checks of items being removed from controlled areas. It is designed to operate accurately in virtually any background environment. Operation is simple: objects are placed into the monitor and either audible and visual alarms trigger if user-set alarm thresholds are exceeded. If the object is deemed free of contamination, it is approved to leave the area and can be safely removed. Additionally, the dual-door design of the CPO-Smart also enables the monitoring of long objects in Pass-Through mode.

Additional information on page 42

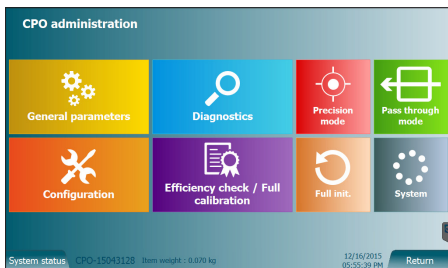
Additional Pictures and Information:



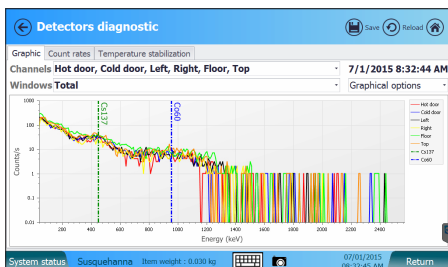
A typical contamination alarm screen



Stored measurements with picture



Main Menu



Detector diagnostics based on Co-60 and Cs-137 reference



CPO-Smart in Pass-Through mode



FastTrack-Vehicle™ Standard

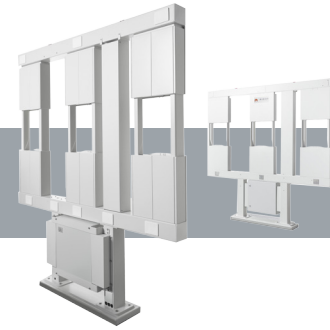
Vehicle

A nuclear facility is obligated to ensure that there is no uncontrolled release of radioactive material to the general public, including radiological contamination to the vehicles and cargo containers that pass into and out of the plant on a regular basis. Power plant operation requires a great deal of traffic onto and off of the grounds: from worker commutes, the delivery of needed goods, or the shipment offsite of any waste material. Any vehicles exiting the Protected Area need to be quickly and effectively screened for the presence of radioactive materials or contamination before leaving the facility.

FastTrack-Vehicle™

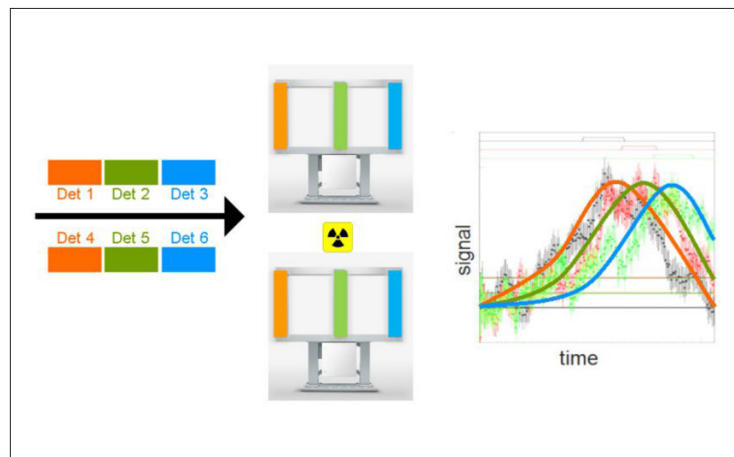
Mirion's FastTrack-Vehicle (FTV) monitors are used to monitor trucks, cars, and other vehicles. The FTV delivers robust performance by combining Mirion's patented GammaFiber™ and FastTrack technologies to accurately identify only those radiological materials that are in motion inside the monitor on the vehicle being screened. The FTV consequently avoids many circumstances where other vehicle monitors typically produce a false alarm or fail to activate a genuine alarm.

Newest Version:

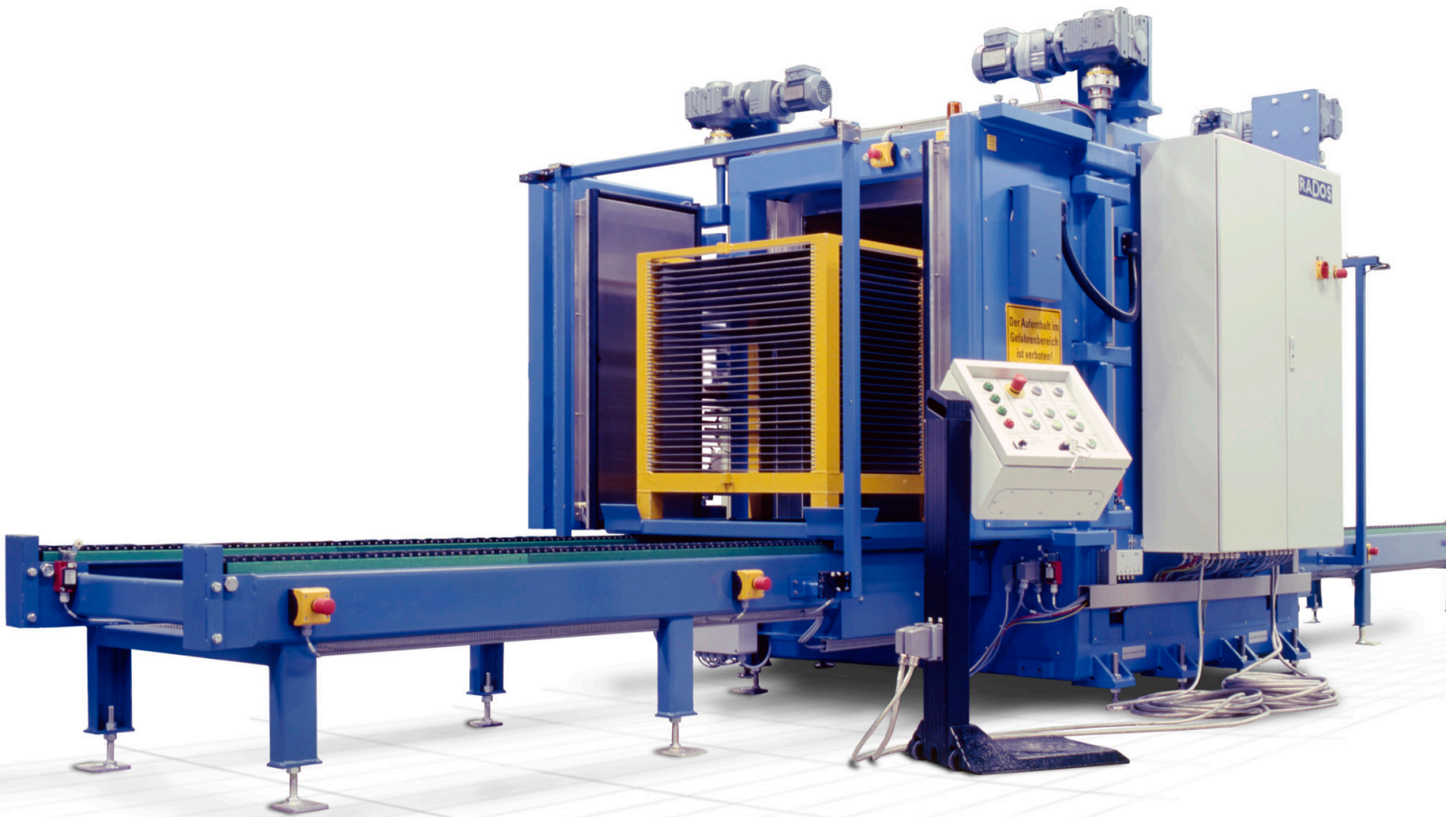


FastTrack-Vehicle™ XL

A unique monitor for radiological screening of trucks and vehicles. It combines the FastTrack- algorithm with large area, highly sensitive GammaFiber™ detectors, low energy response, optional Norm recognition, and optional neutron detection.



By orienting the detectors in three separate channels we identify each individual peak, which gives a unique pattern that allows for rapid filtering of false detections.



Waste

Waste monitors provide a method of quickly processing large containers or items and identifying any radioactive material that may be present before off-site release.

RTM644Inc

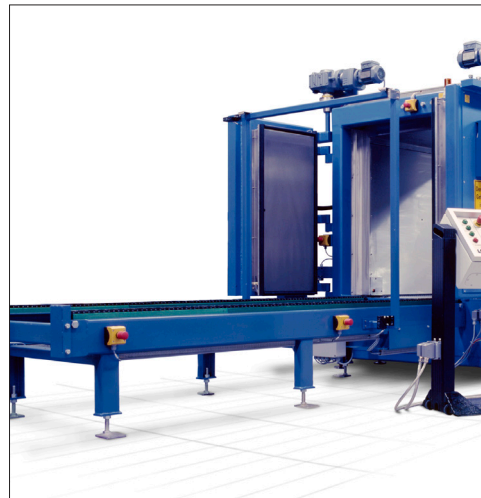
As the largest monitor developed by Mirion Technologies, the RTM644Inc is ideally suited for measurement of items that are palletized or containerized. The monitor has capacity of 1,000 kg and a volume of 1.8 cubic meters, this monitor can check virtually any material generated from daily operations to decommissioning tasks. With its unique software, the RTM644Inc can measure material at a rapid pace allowing for faster throughput. With its many configurable options for specific functionality, this monitor ensures that a facility's waste removal goals are readily achievable.

Additional information on page 45

Key Features:



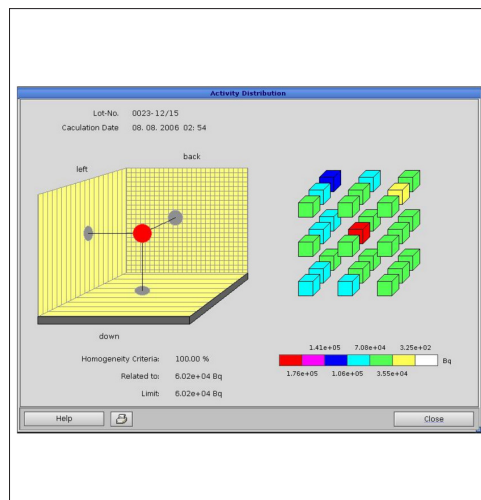
1.8 cubic meter chamber size



System with dual door and conveyor



Remote console for operator



Ability to pinpoint the contamination for any measurement

Contamination and Clearance (Personnel)



FastTrack-Fibre™

Walk-through Portal Monitor

OVERVIEW

The FastTrack-Fibre™ sets a new standard for gamma portal monitors by combining state-of-the-art Mirion GammaFibre™ detectors with FastTrack technology. The FastTrack algorithms ensure a robust performance, especially in challenging background conditions, where conventional gamma monitors would frequently produce false alarms. In combination with the Mirion GammaFibre™ detectors, this allows for an exceptionally fast detection process with remarkably low detection limits.

PRODUCT FEATURES

NUCLEAR

- Detector: Up to 14 large volume GammaFibre™ detectors in a compact steel housing
- Detection limit 550 Bq Co-60, very low compared to conventional monitors

ALARM THRESHOLD

- Drastically reduced false alarm rates, especially in challenging background conditions

OPERATIONAL

- Display: Touch screen for configuration and data display
- Audio and visual alarm signals

MECHANICAL

- Outside Dimensions: (with foot detector and ramps) 35.83 x 41.34 x 92.76 in (910 x 1050 x 2356.2 mm)
- Inside Dimensions: 24.41 x 23.62 x 82.8 in (620 x 600 x 2103 mm)

Other Versions:

FastTrack-Fibre™ Standard
FastTrack-Fibre™ Outdoor
FastTrack-Fibre™ Mobile
FastTrack-Fibre™ Wide



TwoStep™-Exit II

Whole Body Contamination Monitor

OVERVIEW

The TwoStep™-Exit II Whole Body Monitor (TSE II) is the next evolution to the original TwoStep™-Exit monitor with the proven Fiber Technology. It is designed to measure beta contamination (gamma optional) on personnel leaving the controlled area of nuclear facilities. The TSE II WBM is a gas free system which allows for greater flexibility in location. It sets a new standard for measurement performance with economic and robust operation.

PRODUCT FEATURES

NUCLEAR

- Detector: Standard 34 (Max 38)
- Gamma Option (up to 8 gamma detectors)
- Detection limits: 29Bq Co-60
- Automatic background adjustment
- Automatic measurement time adjustment

OPERATIONAL

- Display: Touch screen for configuration and data display
- Audio and visual alarms
- Minimized dead zones, outstanding detector homogeneity and sensitivity

ELECTRICAL

- Uninterruptible power supply

MECHANICAL

- Dimensions: (48 - 52.5 in) x (31.5 - 39.4 in) x (94.5 - 122 in)((1220 - 1335 mm) x (800 - 1000 mm) x (2410 - 3100 mm))
- 100% gas-free operation



TwoStep™-Gas II

Whole Body Contamination Monitor

OVERVIEW

The TwoStep™-Gas II combines the proven geometry of the TwoStep™-Exit II and the decades of knowledge in gas proportional whole body monitoring. With new technology gas proportional detectors provide the smallest dead zone between detectors. Along with an array of options this monitor is designed to meet every customer's need.

PRODUCT FEATURES

NUCLEAR

- Detector: Standard 34 (Max 38) for two more
- Gamma Option (up to 8 gamma detectors)
- Detection Limits: 28 Bq Co-60 in 10 sec. 6 Bq Am-241 in 10 sec.
- Automatic measurement time based on background

OPERATIONAL

- Display: Wide 15" touch screen for configuration and data display
- Audio and visual alarms

ELECTRICAL

- Uninterruptible power supply

MECHANICAL

- Dimensions: (48 - 52.5 in) x (31.5 - 39.4 in) x (94.5 - 122 in)((1220 - 1335 mm) x (800 - 1000 mm) x (2410 - 3100 mm))



HandFoot-Fibre™ XL

Hand, Foot, Clothing Monitor (Gas-less)

OVERVIEW

The HandFoot-Fibre™ XL is used in circumstances which do not require a full body monitor. It is well-suited for mobile contamination screening inside controlled areas or in temporary controlled areas. The monitor is based on state-of-the-art Mirion BetaFibre™ detectors which feature an outstanding measurement sensitivity and uniformity - for a fast and reliable measurement process even in conditions with high, fluctuating background.

PRODUCT FEATURES

NUCLEAR

- Detectors: 8 scintillation fiber
- Detection limit: 30 Bq (hand), 45 Bq (foot) for Co-60
- Short measurement time

OPERATIONAL

- Display: Touch screen for configuration and data display
- Audio and visual alarms

MECHANICAL

- Housing: Wheels for easy transport
- Dimensions:
 - Height: 65.4 in (1660 mm)
 - Width: 18.2 in (478 mm)
 - Depth: 29.5 in (750 mm)
- Weight: 125.7 lb (57 kg)
- 100 % gas-free
- Detachable probe, e.g. for monitoring of clothes

Other Versions:

HandFoot-Fibre Medical

- Higher sensitivity to lower energy isotopes

HandFoot-Fibre™ XL A+

Hand, Foot, Clothing W/ Alpha Monitor

OVERVIEW

The HandFoot-Fibre™ XL A+ is the next evolutionary step of the proven HFF XL. Utilizing slightly different detectors than the original fiber detectors. Mirion has now made it possible to not only detect beta but alpha radiation in a gasless monitor while still providing short count times. This monitor is ideal for those locations where alpha detection is required but use of a gas bottle is not an option.

PRODUCT FEATURES

NUCLEAR

- Detectors: 8 scintillation fiber
- Short measurement times
- Alpha / Beta discrimination

OPERATIONAL

- Display: Touch screen for configuration and data display
- Audio and visual alarms

MECHANICAL

- Housing: Wheels for easy transport
- Dimensions:
 - Height: 65.4 in (1660 mm)
 - Width: 18.2 in (478 mm)
 - Depth: 29.5 in (750 mm)
- Weight: 125.7 lb (57 kg)
- 100% Gas Free
- Detachable probe, e.g. for monitoring of clothes

HandFoot-Gas A/B

Hand, Foot, Clothing Monitor P10 Gas

OVERVIEW

The HandFoot-Gas™ is the latest addition to our family of hand and foot monitors. This model builds on the proven track record of the TwoStep™-Gas II Whole Body Monitor. This now brings the product line to a full circle offering our customers a multitude of options to meet their needs in control of radiological areas.

PRODUCT FEATURES

NUCLEAR

- Detectors: 8 scintillation fiber
- Detection Limits: 5 sec., 1.65 + 1.65 sigma, 10 µrem BG
 - 26 Bq Co-60
 - 6 Bq Am-241

- Short measurement times
- Alpha / Beta discrimination

OPERATIONAL

- Display: Touch screen for configuration and data display
- Audio and visual alarms

MECHANICAL

- Housing: Wheels for easy transport
- Dimensions:
 - Height: 65.4 in (1660 mm)
 - Width: 18.2 in (478 mm)
 - Depth: 29.5 in (750 mm)
- Weight: 125.7 lb (57 kg)
- 100% Gas Free
- Detachable probe, e.g. for monitoring of clothes

Contamination and Clearance (Objects)



TOM-i

Compact Tool and Object Monitor

OVERVIEW

The TOM-i is the smallest and lightest object monitor in the Contamination and Clearance Family for Mirion Technologies. The shielding is designed for easy installation and removal allowing the unit to be relocated with ease. The TOM-i is a reliable monitor for quick measurement of tools, hard hats, and other small items.

PRODUCT FEATURES

NUCLEAR

- Detectors: 2 GammaFibre™
- Energy range: 30 keV to 3 MeV
- Lead shielding: 1 to 2 in (25 to 50 mm)

OPERATIONAL

- Display: Embedded computer with Touch-screen

- Android OS

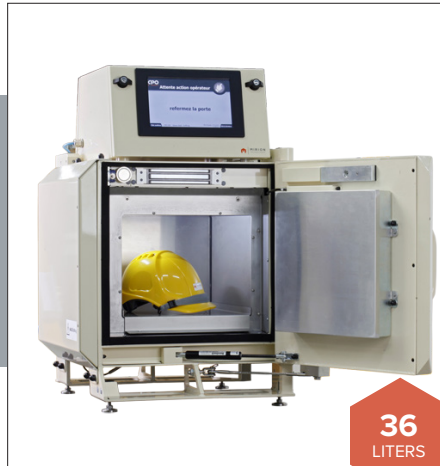
MECHANICAL

- Housing:
 - Two door operation (single door optional)
 - Optional stand
- Dimensions:
 - Outside: 22.8 x 18.8 x 19.1 in (579 x 477 x 486 mm)
 - Chamber: 8.4 x 11.8 x 14.5 in (214 x 300 x 370 mm) or 0.8 ft³ (23.6 L)
- Weight: 64 kg / 142 lbs w/o lead

Other Versions:

TOM-i A4

- Chamber size 3.9 x 11.8 x 14.5 inches (100 x 300 x 370 mm)



CPO-Smart

Small Object Monitor w/
Multi Channel Analyzer

OVERVIEW

The CPO-Smart incorporates the use of proven monitoring technology - with improved, innovative capabilities. The use of multi channel analyzing on each detector allows the CPO-Smart to provide more measurement information, including the type of contamination. It also provides a unique capability of real-time adaptation to background variations.

PRODUCT FEATURES

NUCLEAR

- Detectors: 4 or 6 large plastic scintillation 13.8 x 14.1 x 2 in (350 x 359 x 50 mm)
- Measurement Range: 10 Bq to 10E6 Bq
- Lead shielding 1 to 2 inches (25 to 50mm)
- Energy threshold: 50 keV
- Homogeneity ± 25% for 6 detectors
- Energy uniformity ± 20%

OPERATIONAL

- Display: 2 Touch screen displays
- 8 spectrometry channels
- Operation stabilization by using spectrum analysis

ELECTRICAL

- UPS back up

MECHANICAL

- Dimensions:
 - Chamber: 13 x 11 x 15 inches (335 x 280 x 370 mm) or 1.3 ft³ (36 L)



TOM

Tool and Object Monitor

OVERVIEW

The TOM is a state-of-the-art object monitor which has been developed for fast and reliable contamination screening of tools and other items for gamma radiation. It combines an innovative design with the proven technology of Mirion GammaFibre™ detectors.

PRODUCT FEATURES

NUCLEAR

- Detectors: 4 to 6 detectors
- Lead shielding: 1 to 2 in (25 to 50 mm)

OPERATIONAL

- Display:
 - 10.4" Touch screen for configuration and data display
 - Optional screen on exit side

MECHANICAL

- Housing:
 - Solid welded hinges, steel, stainless steel liner
 - Dual or single door operation
- Dimensions:
 - Outside: 33.3 x 31.5 x 51.2 in (845 x 800 x 1300 mm)
 - Chamber: 19.7 x 15.37 x 15.7 in. (500 x 400 x 400 mm) or 2.8 ft³ (80 L)
- Weight scale (option)



CGO-Smart

Large Item/Waste Bag Monitor
w/ Multi Channel Analyzer

OVERVIEW

The CGO-Smart is the next evolution to the CPO-Smart building on the same principles and technology. Using a spectrometric approach, the CGO-Smart exceeds the basic contamination measurement by indicating the level and type of contamination while still using scintillation detector technology. The CGO-Smart features an intuitive graphical user interface and a compact touch screen for easy display of additional data, based on level of access.

PRODUCT FEATURES

NUCLEAR

- Detectors: 6 plastic scintillator
- Measurement range: 10 Bq to 106 Bq
- Energy threshold: 50 keV
- Homogeneity $\pm 15\%$
- Automatic calculation of measurement time
- Calculation of total, surface and mass contamination
- NORM capability
- Spectrum weighted activity

OPERATIONAL

- Display: Dual touch screen
- Object recognition

MECHANICAL

- Dimensions:
 - Outside: 33 x 35.1 x 61 in (840 x 892 x 1550 mm)
 - Chamber: 10.8 ft³ (307 L)



RTM750

Laundry and Small Item Monitor

OVERVIEW

The RTM750 Conveyor Monitor is a versatile contamination monitor capable of measuring material from clothing to scaffolding, and everything in between. With different detector types available, along with other options this monitor is designed to meet a multitude of applications.

PRODUCT FEATURES

NUCLEAR

- Detector:
 - Beta plastic
 - gas proportional
 - gamma scintillation
- High sensitivity

OPERATIONAL

- Display: Large LCD (touch screen optional)
- Automatic speed control
- Automatic background subtraction

MECHANICAL

- Housing: Optional cross conveyor for sorting
- Dimensions: (6.6 - 11.2 ft) x (35.4 - 55.1 in) x (0.8 - 7.1 in) ((2 - 3.4 m) x (900 - 1400 mm) x (20 - 180 mm))

Other Versions:

- RTM750BP (Gasless)
- RTM750G (Gamma)
- RTM750BG (Beta Gamma)
- RTM750BPG (Beta Gamma Gasless)
- RTM750B (Beta, P10)



Gas Bottle Monitor

Gas Bottle Monitor

OVERVIEW

The RTM614 Gas Bottle Monitor is the newest member of the Contamination and Clearance Family of products. It is designed to measure industrial standard diameter steel or aluminum gas cylinders having a volume of 80, 200, or 300 cubic feet. Utilizing 33 fiber detectors and 32 additional sum channels, every area of the bottle is covered including the base. With a measurement time of 10 seconds for 5000 dpm release limit in a 10 μ rem/hr background, it will greatly reduce operating cost to your organization. This monitor is designed to remove the inconsistencies normally seen with hand frisking the bottles.

PRODUCT FEATURES

NUCLEAR

- Detector: 33 BetaFibre™
- Optimized geometry

OPERATIONAL

- Display: touch screen display for greatest ease of use.
- Intuitive calibration by self-identification of the detector
- 32 Sum channels
- Semi automated operation
- No human error or turbo frisking during measurement of gas bottles anymore
- Platform as autonomous working

ELECTRICAL

- 24V mini UPS with automatic controlled shutdown

MECHANICAL

- New detector mount for easy and fast replacing
- Improved door lock mechanism with soft close
- Robust design
- Simplified and time-saving clearance release of gas bottles

Contamination and Clearance (Waste-Medium)



RTM661/300

Small Item and Bag Waste Monitor

OVERVIEW

The RTM661/300 is a reliable and fast monitor for release measurements of different measurement object such as larger tools, waste bags, or cases. A simple user guidance and easy to select measurement materials make work simple and safe.

PRODUCT FEATURES

NUCLEAR

- Detector: 2 to 6 Scintillation
- Lead Shielding: 0.4 to 1.2 in (10 to 30 mm)

OPERATIONAL

- Display: 15" LCD
- Intuitive graphical user interface
- Embedded industrial PC (fan-less)
- Mini-UPS (10 minute operation)

ELECTRICAL

- Auto shutdown after power loss

MECHANICAL

- Housing: Single or dual door operation
- Dimensions:
 - Outside: 34.9 x 34.9 x 64.3 in (886 x 886 x 1632 mm)
 - Chamber: 10.5 ft³ (300 L)
- Three modes of operation
 - Closed Door
 - Open Door
 - Fast Mode
- Optional weight scale (330.7 lb (150 kg) max)



RTM661/440

Premium Large Volume Waste Bag Monitor

OVERVIEW

The RTM661/440 is designed for the reliable release measurement of various objects such as tools, waste bags or brief cases. Its fast, integral gamma measurement is based on the use of gamma plastic scintillation detectors in line with modern PC based counting electronics. The system is based on an industrial personal computer.

PRODUCT FEATURES

NUCLEAR

- Detector: 6 large area scintillation

OPERATIONAL

- Display: 17 inch LCD
- Embedded industrial PC (fanless)
- Network ready

ELECTRICAL

- 110 to 230 Volt operation

MECHANICAL

- Housing:
 - Single or dual door operation
 - Separate electronic housing
- Dimensions:
 - Outside: 39.6 x 43 x 60.7 in (1005 x 1090 x 1542 mm)
 - Chamber: 15.5 ft³ (440 L)
- Weight scale (330.7 lb (150 kg) max)
- Barcode scanner
- Label printer

Contamination and Clearance (Waste)



540
LITERS

RTM661/540

Large Waste/Drum Monitor

OVERVIEW

The RTM661/540 is the largest monitor of the RTM661 family using the same software and filling the final level in reference to customer chamber size requirements. Through the use of a conveyor system loading and unloading of the chamber is done with ease. Automatically controlled door and weight scale rounds out this monitor. With its ability to support 200 Liter drums in its chamber, it is ideal for mass volume through put.

PRODUCT FEATURES

NUCLEAR

- Detector: 6 large area scintillation detectors
- Lead shielding: 2 in (50 mm)
- MDA: (100 μ R/h, 1.65 sigma, 60 sec.)
 - Co-60 – 65 Bq
 - Cs-137 – 120 Bq

OPERATIONAL

- Embedded industrial PC

MECHANICAL

- Housing:
 - Automatic doors
 - Single door operation (second door optional)
 - Conveyor system for loading and unloading of chamber
 - Separate electronics cabinet
- Dimensions:
 - Monitor: 39.8 x 48.7 x 89.2 in (1011 x 1237 x 2265 mm)
 - Conveyor: 74.8 x 24.4 x 20.3 in (1900 x 620 x 515 mm)
 - Chamber: 19 ft³ (540 L)
- Weight scale: 3.5 oz (100 g) resolution
- Maximum material weight 1322.7 lb (600kg)



540
LITERS

RTM640Inc

Free Release Waste Monitor

OVERVIEW

The RTM640Inc is a unique waste monitor designed to clear large amount of material or drums. Through its specialized programs, it can determine the right path of disposal for the material being measured. In addition, the system can help to pinpoint the area of highest activity thus providing the operator the ability to remove it and re-measure until it meets the clearance criteria.

PRODUCT FEATURES

NUCLEAR

- Detector: 10 large volume scintillation detectors
- Lead shielding: 2 to 3.1 in (50 to 80 mm)
- MDA: (100 μ R/h, 1.65 sigma, 60 sec.)
 - Co-60 – 50 Bq
 - Cs-137 – 140 Bq
- Up to 16 measurements per hour

OPERATIONAL

- Embedded industrial PC

MECHANICAL

- Housing:
 - Single door operation (second door optional)
 - Conveyor system for loading and unloading of chamber
 - Separate electronics cabinet
- Dimensions:
 - Monitor: 39.8 x 48.7 x 89.2 in (1011 x 1237 x 2265 mm)
 - Conveyor: 74.8 x 24.4 x 20.3 in (1900 x 620 x 515 mm)
 - Chamber: 19 ft³ (540L)
- Weight scale 100 g resolution
- Maximum material weight 1322.7 lb (600kg)



1800
LITERS

RTM644Inc

Free Release Waste Monitor XL

OVERVIEW

Building upon the proven RTM640Inc, the RTM644Inc takes this concept to the next level by providing a chamber volume of 1.8 cubic meters and the ability to handle 1 ton of material while still meeting all the criteria for waste stream management. By using preset nuclide vectors, limits for waste streams, and an automated process this monitor is ideal for quick and accurate release of large amounts of material.

PRODUCT FEATURES

NUCLEAR

- Detector: 24 large volume scintillation detectors
- Lead shielding: 2 to 3.1 in (50 to 80 mm)
- MDA: (100 μ R/h, 1.65 sigma, 60 sec.)
 - Co-60 – 55 Bq
 - Cs-137 – 165 Bq
- Up to 22 measurements per hour

OPERATIONAL

- Embedded industrial PC

MECHANICAL

- Housing:
 - Single door operation (second door optional)
 - Conveyor system for loading and unloading of chamber
 - Separate electronics cabinet
- Dimensions:
 - Monitor: 53.5 x 44.1 x 47.2 in (1360 x 1120 x 1200 mm)
 - Conveyor: 74.8 x 24.4 x 20.3 in (1900 x 620 x 515 mm)
 - Chamber: 63.5 ft³ (1800 L)
- Weight scale: 3.5 oz (100 g) resolution
- Maximum material weight 2204.6 lb (1000 kg)

Contamination and Clearance (Vehicles)



FastTrack-Vehicle™

Vehicle Monitor

OVERVIEW

The FastTrack-Vehicle™ is a unique monitor for the screening of trucks and vehicles. It combines the FastTrack- algorithm with large area, highly sensitive GammaFibre™ detectors. Through the use of specially developed filtering programs, the possibility of false alarms is reduced to almost zero making it the ideal choice for any location trying to screen trucks and vehicles.

PRODUCT FEATURES

NUCLEAR

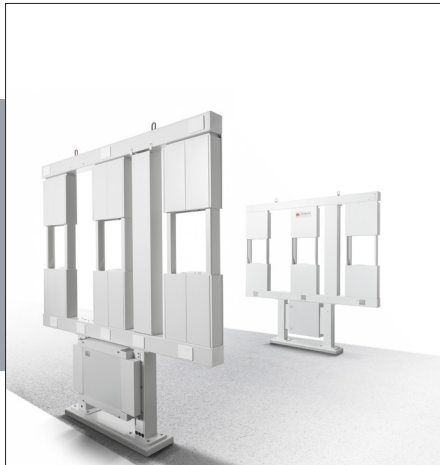
- Detector: 6 Large volume fiber
- MDA: 70 kBq, Co-60 (distance of cabinets 4 m, speed up to 20 km/h)

OPERATIONAL

- Display: Touch screen operation
- Visual: Traffic light for vehicle control
- Infrared sensors for vehicle presence
- Camera system for vehicle and/or container identification
- Networkable

MECHANICAL

- Detector volume of 1.4 ft³ (40 L) each
- Modular design for ease of installation
- Automatic gates for routing control
- Remote operator console



FastTrack-Vehicle™ XL

Large Vehicle Monitor

OVERVIEW

The FastTrack-Vehicle™ XL delivers a robust performance. Under similar circumstances a conventional gamma monitor would produce a false alarm, or even worse go into genuine alarm without actually being able to locate the vehicle or object carrying a source. The monitor combines the FastTrack technology with highly sensitive GammaFibre™ detectors, low energy response, and NORM (Naturally Occurring Radioactive Material) recognition, making the FastTrack-Vehicle™ XL a reliable partner for monitoring truckloads of vehicles in very short time.

PRODUCT FEATURES

NUCLEAR

- Detectors: 2 x 6 GammaFibre™
- Energy range 30 keV - 3 MeV
- MDA: 40 kBq, Co-60 (distance of cabinets 4 m, speed up to 20 km/h)
- Lead shielding: 0.6 in (15 mm)
- Optional neutron detection

MECHANICAL

- Dimensions: 96.6 x 99.8 x 10.3 in (2453 x 2535 x 262 mm)
- Weight: 2 x 1146.4 lb (520 kg)
- False alarm prevention
- Automatic background subtraction for heavily loaded trucks also in high background
- Total active monitor volume: 3.4 ft³ (96 L)

Contamination and Clearance (Floors and Walls)



FloorSweep-Fibre™ II

Floor Contamination Screening

OVERVIEW

The FloorSweep-Fibre™ II is designed for large area floor monitoring of beta contamination (alpha discrimination optional) inside and outside buildings. The monitor is equipped with 4 BetaFibre™ detectors with a total detection area of 1940 cm². The detectors are located in the flat front part, thus being easily able to access all areas to be measured. The easy-to-maneuver bogie is equipped with 4 rugged and smooth-running wheels - well suitable for outdoor usage.

PRODUCT FEATURES

NUCLEAR

- Detectors: 4 BetaFibre™ detectors

OPERATIONAL

- Display: touch screen

MECHANICAL

- Dimensions: 56.3 x 41.7 x 19.6 in (1430 x 1060 x 500 mm)
- Weight: 110.2 lb (50 kg)

- High sensitivity (40 Bq/Co-60)
- Beta detection
- Alpha discrimination as an option
- Plug-and-play operation
- Low costs in maintenance and operation due to fibre technology
- Dynamic background measurement and subtraction
- Sensitive detection area: 1940 cm²
- Protection rating: IP63 (monitor)
- Compliance: IEC 60325 etc.



QuickSweep™-Grand

Large Surface Contamination Monitor

OVERVIEW

The QuickSweep™-Grand is a portable contamination monitor for alpha, beta and gamma measurement. It has been developed for routine assessment and contamination monitoring of large surface areas (floors, walls, etc). The detectors and the micro-processor controlled electronics are state-of-the-art in mobile monitoring.

PRODUCT FEATURES

NUCLEAR

- Detector: scintillating fibre detect or alpha, beta and gamma measurement
- Detection limit Co-60: <0,1 Bq/cm²
- Large detection area of 970 cm²

OPERATIONAL

- Visual: LED indicator light
- Vibration
- Bluetooth capabilities

MECHANICAL

- Housing: Splash waterproof IP64
- Dimensions: 18.1 x 9.3 x 6 in (461 x 237 x 153 mm)

- Outstanding sensitivity and detector homogeneity
- Wireless readout unit with Mirion App for expert functionalities (optional)
- Database with photo and comment line available when using optional readout unit
- Data export from database possible



- Deployed throughout the industry for over 20 years
- Helps reduce RP personnel radiation exposure during job coverage
- Ensures consistent information for all decision makers
- Unparalleled reception range and system flexibility



WIRELESS REMOTE MONITORING

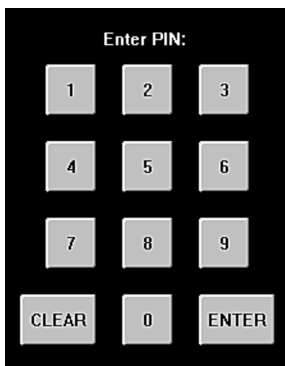




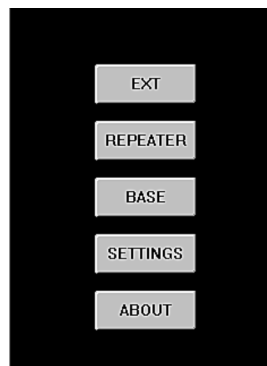
AWM

The Adaptive Wireless Monitor (AWM) represents a paradigm shift in Mirion's approach to wireless remote monitoring. In the past, wireless monitoring required an array of different devices under the same family umbrella that each performed overlapping, but specific, roles. In contrast, the AWM is a single device that fulfills many roles. The instrument can serve as a base transceiver or a repeater, it features a color display for monitoring status and configuration, and it connects to the site LAN via any of a number of interface options including USB, network connection, or WiFi. The AWM eliminates complexity in establishing and maintaining a wireless monitoring system and allows RP personnel to focus their efforts on the data being gathered and interpreted, rather than setup of the system.

Additional Pictures and Information:



Touch-screen user interface allows setup in the field



One touch configuration



The AWM brings together Mirion's wide range of products, enabling wireless functionality across the board – whether covering personnel on a job, monitoring areas, receiving air samples and survey data, or making the data available to multiple departments through the site LAN with Teleview 3000.

Wireless Remote Monitoring



AWM

Adaptive Wireless Monitor

OVERVIEW

The AWM is a dynamic new technology that now represents an all in one solution for teledosimetry. This compact system can be deployed as a base station, repeater, EXT, active dive repeater, etc.; which minimizes the different types of inventory that must be maintained. It connects to software via RS-232, USB, Ethernet or Wi-Fi. Complete with an onscreen configuration for user defined needs and also the ability to be powered by POE.

PRODUCT FEATURES

OPERATIONAL

- Display: On-screen configuration
- WRM2, Wi-Fi, Bluetooth, and GPS enabled
- Power-over-Ethernet
- WRM2 Radio 900 MHz or 2.4 GHz frequency

ELECTRICAL

- Battery Life: > 24 hr battery backup

MECHANICAL

- Dimensions: 7.1 x 4.1 x 2.25 in (180 x 104 x 57 mm)
- Adaptable to interface with a wide range of radiation monitors



Active Dive Antenna and Repeater

For Teledosimetry Data Transmission

OVERVIEW

The revolutionary Active Dive Antenna has built on this functionality of the original Dive System by providing its own WRM2 radio within the antenna paddle. In other words, the Active system doesn't just transfer the WRM2 signal through the cable, it provides a POWERED BROADCAST of the signal – easily overcoming any loss potential. The Active Dive System is ideal for higher frequencies and longer cable lengths. Additionally, because each diver's teledosimetry data is broadcast on their own "closed loop," RP personnel can monitor multiple divers simultaneously without experiencing interfering crosstalk between the divers.

PRODUCT FEATURES

OPERATIONAL

- WRM2 Radio 900 MHz or 2.4 GHz frequency
- Compatible with WRM2 Base Stations, MeshRepeaters, etc.
- Eliminates Crosstalk Interference with multiple divers simultaneously in the water

ELECTRICAL

- Antenna power is provided by the DiveRepeater (typically DC)

MECHANICAL

- Housing:
 - Waterproof (AMP-type) cable
 - Waterproof Antenna up to 100 feet depth
- Up to 300 ft (91.4 m) standard AMP Cable
- Externally connected to diver – does not breach dry dive suit



WRM2 IMUX

Intelligent Multiplexer

OVERVIEW

The iMUX is designed to transmit the TTL RS-232 data packets from up to 8 dosimeters. It is very useful for telemetry monitoring of a worker's dose/dose rates when the worker is required to wear multiple dosimeters (multi badged). The unit is also compatible with the DMC2000S and SOR/R dosimeters.

PRODUCT FEATURES

OPERATIONAL

- Radio sensitivity -110 dBm (900 MHz) and -105 dBm (2.4 GHz).
- 900 MHz or 2.4 GHz spread spectrum frequency hopping (FHSS)
- Frequency Range: 910-917 MHz (900 MHz), 2.4000-2.4835 GHz (2.4 GHz)

ELECTRICAL

- External Power Supply: 8-30 VDC
- Transmit power output 100 mW (900 MHz) or 50 mW (2.4 GHz)

MECHANICAL

- Operating Temp: -10°C to 50°C (14°F to 122°F)
- Relative Humidity: less than 99% (without condensation)

Notes



- Wide ranging detection options fit many applications
- Stand-Alone, Networkable, or Wireless connectivity
- Long-term power options (POE, high-capacity batteries, solar etc.)
- Local or remotely located (up to 300 feet) detector options

AREA RADIATION MONITORING





RPD-AM

The Radiological Posting Display Area Monitor (RPD-AM) is the most recently developed member of Mirion's comprehensive family of area radiation monitors. Intended for simple, rapid deployment into semi-permanent applications, it is ideal for situations such as an outage, when increased needs for short-term area monitoring occur as jobs evolve. The RPD-AM features a large, dynamic display of current dose rates at the monitoring location, along with the ability to use the monitor as a changeable radiological posting based on dose rate thresholds. Customization options include configurable color schemes and user-selectable images which can mimic standard signage and immediately convey radiological conditions to workers in the area.

Different Screen Readings:

Although area dose rates are most prominently displayed to workers, the dynamic nature of the display (specifically based on the dose rates) allows the RPD-AM to function usefully in changing environments.



User-Configurable colors (green, yellow, red, magenta) and images (such as the trifoil) quickly indicate changing radiological conditions to workers and mimic area postings.



Area Radiation Monitoring



DRM-1

Area Radiation Monitors

OVERVIEW

The DRM Digital Radiation Monitor is a compact fixed or portable radiation monitoring system. The DRM uses state-of-the-art microprocessor-based technology combined with telemetry capability using the WRM2 900 MHz or 2.4 GHz FHSS radio. The DRM is designed for highly stable and accurate dose rate measurements from gamma radiation.

PRODUCT FEATURES

NUCLEAR

- Display Units: mR/hr, R/hr, (mSv/hr, Sv/hr)
- Detector: Auto-switching dual GM Tubes or CsI Scintillator
- Measurement Range: 0.05 mR/hr to 1000 R/hr (0.5 mSv/h to 10 Sv/h)

OPERATIONAL

- Display: LCD, 7 segment, 4 digits

ELECTRICAL

- Power Supply: Three (3) 1.2v NiMH 2100mA rechargeable
- Battery Life: 12 hours

MECHANICAL

- Dimensions:
 - Front case flange: 8.75 x 6.125 x 4.25 in (222 x 155.5 x 108 mm)
 - Real Panel: 11 x 6.125 in (279.4 x 155.5 mm)
- Weight: 1.70 kg (3.75 lb)

Other Versions:

DRM-1D(Pictured)

- High sensitivity with a measurement range of 0.001 to 9.999 mR/h (0.01 to 99.9 μ Sv/h)



DRM-Display & Alarm

Remote Display and Alarm

OVERVIEW

The External Display and Alarm module provides dose rate information to be viewed remotely from the DRM as well as provide remote alarm capability. A single DB9 cable provide power and data to the remote display.

PRODUCT FEATURES

NUCLEAR

- Display Units: mR/hr, R/hr, (mSv/hr, Sv/hr)

OPERATIONAL

- Display: LCD, 7 segment, 4 digits
- Provides the indications from any DRM (power and alarm lights, dose rate display, and knowledgeable speaker) to a remote location.

ELECTRICAL

- Power Supply: provided by the DRM it is connected to

MECHANICAL

- Dimensions:
 - Front case flange: 8.75 x 6.125 x 2.875 in (222 x 155.5 x 73 mm)
 - Real Panel: 11 x 6.125 in (279.4 x 155.5 mm)
- Weight: 1.25 kg (2.75 lb)



DRM-2

Area Radiation Monitors with integrated display and alarm

OVERVIEW

The DRM Digital Radiation Monitor is a compact fixed or portable radiation monitoring system. The DRM uses state-of-the-art microprocessor-based technology combined with telemetry capability using the WRM2 900 MHz or 2.4 GHz FHSS radio. The DRM is designed for highly stable and accurate dose rate measurements from gamma radiation.

PRODUCT FEATURES

NUCLEAR

- Display Units: mR/hr, R/hr, (mSv/hr, Sv/hr)
- Detector: Auto-switching dual GM Tubes or CsI Scintillator
- Measurement Range: 0.05 mR/hr to 1000 R/hr (0.5 mSv/h to 10 Sv/h)

OPERATIONAL

- Display: LCD, 7 segment, 4 digits

ELECTRICAL

- Power Supply: Three (3) 1.2v NiMH 2100mA rechargeable
- Battery Life: 12 hours

MECHANICAL

- Dimensions:
 - Front case flange: 8.75 x 6.125 x 4.25 in (222 x 155.5 x 108 mm)
 - Real Panel: 11 x 6.125 in (279.4 x 155.5 mm)
- Weight: 1.70 kg (3.75 lb)

Other Versions:

DRM-2D (Sensitive)

- High sensitivity with a measurement range of 0.001 to 9.999 mR/h (0.01 to 99.9 μ Sv/h)



DRM-2H

High Range Area Radiation Monitors

OVERVIEW

The DRM Digital Radiation Monitor is a compact fixed or portable radiation monitoring system. The DRM uses state-of-the-art microprocessor-based technology combined with telemetry capability using the WRM2 900 MHz or 2.4 GHz FHSS radio. The DRM is designed for highly stable and accurate dose rate measurements from gamma radiation.

PRODUCT FEATURES

NUCLEAR

- Display Units: mR/hr, R/hr, (mSv/hr, Sv/hr)
- Detector: Auto-switching dual GM Tubes
- Measurement Range: 0.05 mR/hr to 10,000 R/h (0.5 mSv/h to 100 Sv/h)

OPERATIONAL

- Display: LCD, 7 segment, 4 digits

ELECTRICAL

- Power Supply: Three (3) 1.2v NiMH 2100mA rechargeable
- Battery Life: 12 hours

MECHANICAL

- Dimensions:
 - Front case flange: 8.75 x 6.125 x 4.25 in (222 x 155.5 x 108 mm)
 - Real Panel: 11 x 6.125 in (279.4 x 155.5 mm)
- Weight: 1.70 kg (3.75 lb)



DRM-2EN

Area Radiation Monitors with External Neutron Detector

OVERVIEW

The DRM Digital Radiation Monitor is a compact fixed or portable radiation monitoring system. The DRM uses state-of-the-art microprocessor-based technology combined with telemetry capability using the WRM2 900 MHz or 2.4 GHz FHSS radio. The DRM is designed for highly stable and accurate dose rate measurements from Neutron radiation.

PRODUCT FEATURES

NUCLEAR

- Display Units: mR/hr, R/hr, (mSv/hr, Sv/hr)
- Detector: External Neutron (Proton Recoil Scintillator)
- Measurement Range: 0.05 mR/hr to 1 R/h (0.5 mSv/h to 99.9 Sv/h)
- Neutron Energy Response: Thermal to 100 MeV

OPERATIONAL

- Display: LCD, 7 segment, 4 digits

ELECTRICAL

- Power Supply: Three (3) 1.2v NiMH 2100mA rechargeable
- Battery Life: 12 hours

MECHANICAL

- Dimensions:
 - Front case flange: 8.75 x 6.125 x 4.25 in (222 x 155.5 x 108 mm)
 - Real Panel: 11 x 6.125 in (279.4 x 155.5 mm)
- Weight: 1.70 kg (3.75 lb)

Other Versions:

DRM-1EN



DRM-2E

Area Radiation Monitors with External Gamma Detectors

OVERVIEW

The DRM Digital Radiation Monitor is a compact fixed or portable radiation monitoring system. The DRM uses state-of-the-art microprocessor-based technology combined with telemetry capability using the WRM2 900 MHz or 2.4 GHz FHSS radio. The DRM is designed for highly stable and accurate dose rate measurements from gamma radiation.

PRODUCT FEATURES

NUCLEAR

- Display Units: mR/hr, R/hr, (mSv/hr, Sv/hr)
- Detector: External with Auto-switching dual GM Tubes
- Measurement Range: 0.05 mR/hr to 1000 R/h (0.5 mSv/h to 10 Sv/h)

OPERATIONAL

- Display: LCD, 7 segment, 4 digits

ELECTRICAL

- Power Supply: Three (3) 1.2v NiMH 2100mA rechargeable
- Battery Life: 12 hours

MECHANICAL

- Housing: Waterproof
- Dimensions:
 - Front case flange: 8.75 x 6.125 x 4.25 in (222 x 155.5 x 108 mm)
 - Real Panel: 11 x 6.125 in (279.4 x 155.5 mm)
- Weight: 1.70 kg (3.75 lb)

Area Radiation Monitoring



AMP-50

Low Range GM Tube-Based
 Ratemeter and Area Monitor

OVERVIEW

The AMP-50 provides real-time remote radiological monitoring of moderate dose rates. It can utilize an optional WRM2 EXT Transmitter for telemetry monitoring. Local readout of hand-held meter allows for use as a portable survey instrument.

PRODUCT FEATURES

NUCLEAR

- Detector: energy compensated GM-tube
- Detection range ($\pm 10\%$): 10 μ R/h to 4 R/h (0.1 iSv/h to 40 mSv/h)

ELECTRICAL

- Power Supply: 9 Volts (supplied by a 9 Volt battery located in the meter case)
- Optional 9 Volt AC adapter available
- Battery life: approximately 50 hours of continuous use

MECHANICAL

- Housing: Waterproof
- Dimensions: 2.7 x 4.7 x 0.5 in (6.8 x 11.9 x 1.2 cm)



AMP-100

High Range GM Tube-Based
 Ratemeter and Area Monitor

OVERVIEW

The AMP-100 provides real-time remote radiological monitoring of high dose rates. It can utilize an optional WRM2 EXT Transmitter for telemetry monitoring. Local readout of hand-held meter allows for use as a portable survey instrument.

PRODUCT FEATURES

NUCLEAR

- Detector: energy compensated GM-tube
- Detection range ($\pm 10\%$): 0.005 R/h to 1000 R/h (0.05 mSv/h to 10 Sv/h)

ELECTRICAL

- Power Supply: 9 Volts (supplied by a 9 Volt battery located in the meter case)
- Optional 9 Volt AC adapter available
- Battery life: approximately 50 hours of continuous use

MECHANICAL

- Housing: Waterproof
- Dimensions: 2.7 x 4.7 x 0.5 in (6.8 x 11.9 x 1.2 cm)



AMP-200

Very High Range GM Tube-Based
 Ratemeter and Area Monitor

OVERVIEW

The AMP-200 provides real-time remote radiological monitoring of very high dose rates. It can utilize an optional WRM2 EXT Transmitter for telemetry monitoring. Local readout of hand-held meter allows for use as a portable survey instrument.

PRODUCT FEATURES

NUCLEAR

- Detector: energy compensated GM-tube
- Detection range ($\pm 10\%$): 0.5 R/hr to 10,000 R/hr (5 mSv/h to 100 Sv/h)

ELECTRICAL

- Power Supply: 9 Volts (supplied by a 9 Volt battery located in the meter case)
- Optional 9 Volt AC adapter available
- Battery life: approximately 50 hours of continuous use

MECHANICAL

- Housing: Waterproof
- Dimensions: 2.7 x 4.7 x 0.5 in (6.8 x 11.9 x 1.2 cm)



RDS-31 AM

Area Radiation Monitor

OVERVIEW

The RDS Area Monitor is a simple, easy to deploy Long Term Battery Powered area radiation monitor intended for any remote monitoring application where power is not available. The RDS AM provides all the features of the RDS-31 (either GM or SD version) but in a mountable enclosure that has battery power enough for up to 2 years of operation.

PRODUCT FEATURES

NUCLEAR

- When monitoring high dose rates long term, you can connect the GMP-12 SD or UW probes which have a lifetime dose expectancy up to approximately 90,000 Rad

OPERATIONAL

- Speaker holes and clear cover provide local alarm capabilities

ELECTRICAL

- Power Supply: two 6 Volt, 45 Ah batteries along w/ the two AA batteries in the meter

MECHANICAL

- Housing: Custom enclosure with injection molded insert, both pieces UL94-HB Flame Rated.
- Dimensions: 3.8 x 7.3 x 10.5 in (96.5 x 185.42 x 266.7 mm) (w/o mounting brackets)
- Weight: 2.9 kg (6.4 lb) (w/ meter & batteries)
- Multiple mounting options
- Ability to add an External probe to allow dual monitoring (such as Contact and General Area).



RPD-AM

Radiological Posting Display Area Monitor

OVERVIEW

The RPD-AM is a self-contained gamma dose rate detection and display monitor. Its large screen clearly displays ambient dose rates or dose information. It can be used with an internal detector (RDS-31 GM or SD) or it can be used with an internal mini WRM2 Base. It can also be connected to your network base station.

PRODUCT FEATURES

NUCLEAR

- Measurement Range: Depends upon instrument used.

OPERATIONAL

- Display:
 - Self-Contained, dynamic display of ambient radiological conditions
 - Can also be setup to display a Radiological posting that automatically changes based on the dose rates in the area
 - Can display rate or dose information from any transmitting device w/in range if deployed w/ a mini base or connected to a network base station
 - Displays dose rate information and transmits to existing WRM2 receivers

ELECTRICAL

- Power Supply: included; will convert AC power to 5V DC so all box connections are low voltage

MECHANICAL

- Housing: made from ABS and is rated UL 94 for Flammability. It is also RoHS and REACH Compliant
- Dimensions: 11.890 x 9.134 x 3.543 in (302 x 232 x 90 mm)
- Weight: 2.72 kg (6 lb)



WRM2 iMux AM

Intelligent Multiplexer Area Monitor

OVERVIEW

The WRM2 iMux Area Monitor is a eight (8) channel wired device that incorporates the DMC 2000 electronic dosimeter or the AMP Family into a site wide remote monitoring system using the WRM2 radio.

PRODUCT FEATURES

OPERATIONAL

- The ability to transmit data from 8 devices, make the iMux AM the most cost affective Area Monitoring Device

ELECTRICAL

- Power Supply: Wall power adaptor 110 to 250 VAC input, output 15 V DC Power jack with center + pin. Threaded locking type plug.

MECHANICAL

- Housing: Compact and rugged for indoor applications
- Dimensions: 7.87 x 4.72 x 2.9 in (200 x 120 x 74 mm)
- Weight: 220 g (7.7 oz)



- Includes fully-functioning simulated instruments
- Full control over instrument response / functionality
- Direct response or automated response options
- Scalable application, to include future instruments

TRAINING





SIM-Teq™ System

The SIM-Teq™ System is a wireless training network of simulated dosimeters, survey meters, and simulated (non-radioactive) sources managed and controlled by the Simulation Control Center (SCC) application. The SCC is a Windows 10™-based application designed to run on a Tablet (10 inches or greater), allowing complete flexibility to the instructor. Setup is quick and easy and requires no calibration of either the instruments or the system. The SIM-Teq™ System instruments either respond automatically to TWR (Two Way Ranging) simulated sources or they can be directly (manually) controlled through the SCC. Instructors can remotely monitor readings and status updates of every device, as well as control or configure any device(s) during a specific session. SIM-Teq™ is fully scalable: as new instruments are developed, the SCC application is conveniently updated.

DMC 3000TD

The DMC 3000TD is the latest training dosimeter of the SIM-Teq™ product line. It features all of the functions of an actually deployed DMC 3000 electronic dosimeter (including alarms, faults, and user interfaces) for extremely realistic training scenarios. As well, the DMC 3000TD is fully configurable to match site RWP configurations, such as: rate alarm latching, time alarm, and threshold warnings. The DMC 3000TD even has the ability to attach dosimeter modules – such as the WRM2 Telemetry Module, to allow specific training of telemetry monitoring personnel. When paired with a Rad Tag, the DMC 3000TD will auto-respond to the TWR simulator and mimic a dosimeter’s behavior near simulated (non-radioactive) sources.

Additional information on page 66

Additional Pictures and Information:



Can be worn around neck
or on belt



Can be attached to modules
for training



Uses SCC to display
measurements



Used in conjunction with
TWR Source

Training Devices



DMC 2000TD

Electronic Dosimeter Training Device

OVERVIEW

The DMC 2000TD is a fully functioning simulator of the DMC 2000S electronic dosimeter. Designed to be an effective and realistic training device, it replicates all dosimeter functions, alarms, and fault displays. It can even be used with existing WRM2 transmitters and alarm modules, allowing training of remote monitoring personnel.

PRODUCT FEATURES

NUCLEAR

- Range of Operation: ~100 Ft line of sight

OPERATIONAL

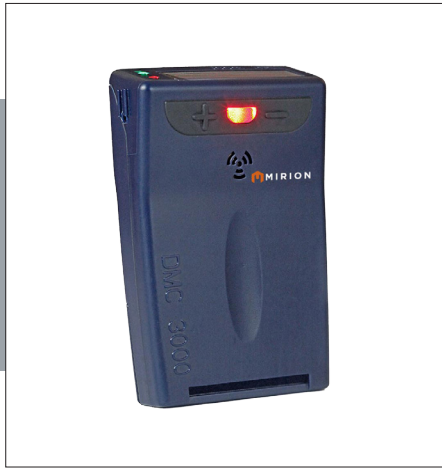
- Audible Alarm: Same as DMC 2000S
- Wireless Communication: IEEE 802.15.4, 2.4 GHz, 18 mW

ELECTRICAL

- Battery: Renata CR 2450 Lithium Battery
- Battery Life: 8-30 hours, based on operating conditions

MECHANICAL

- Housing: Drop Resistant (1.5 meters on concrete)
- Dimensions: Same as DMC 2000S



DMC 3000TD

Electronic Dosimeter Training Device

OVERVIEW

The DMC 3000TD is a fully functioning simulator of the DMC 3000 electronic dosimeter. Designed to be an effective and realistic training device, it replicates all dosimeter functions, alarms, and fault displays. It can even be used with existing WRM2 transmitter modules, allowing training of remote monitoring personnel.

PRODUCT FEATURES

NUCLEAR

- Range of Operation: ~100 Ft line of sight

OPERATIONAL

- Audible Alarm: Same as DMC 3000
- Wireless Communication: IEEE 802.15.4, 2.4 GHz, 18 mW

ELECTRICAL

- Battery: (1) AAA battery
- Battery Life: 8-30 hours, based on operating conditions

MECHANICAL

- Housing: Drop Resistant (1.5 meters on concrete)
- Dimensions: Same as DMC 3000



TWR Source

Simulated Source of Radiation

OVERVIEW

The TWR (Two Way Ranging) Source provides a simulated point source of gamma radiation that is omni-directional. The source is configured by setting the exposure rate at 1 Ft (30 cm) up to 99,999 R/hr. The TWR Source is detectable by any SIM-Teq™ instrument (may require Rad Tag). The TWR Source has a small form factor and internal rechargeable battery that allows easy deployment.

PRODUCT FEATURES

NUCLEAR

- Range of Operation: ~100 Ft line of sight*

OPERATIONAL

- Wireless Communication: IEEE 802.15.4, 2.4 GHz

ELECTRICAL

- Battery: 3.7V rechargeable lithium, Micro-USB recharging port
- Battery Life: 8-10 hours

MECHANICAL

- Housing: Drop Resistant
- Dimensions: 4.59 x 2.86 x 0.94 in (117 x 73 x 24 mm)



RAD Tag

TWR Source to DMC Training Device Interface

OVERVIEW

The Rad Tag wirelessly links a Training Device to auto respond to one or more TWR Sources. Designed to minimize instructor input and provide realistic, automated response using the 1/R2 principle for gamma radiation. The Rad Tag has a small form factor and internal rechargeable battery that allows easy deployment.

PRODUCT FEATURES

NUCLEAR

- Range of Operation: ~100 Ft line of sight

OPERATIONAL

- Wireless Communication: IEEE 802.15.4, 2.4 GHz

ELECTRICAL

- Battery: 3.7V rechargeable lithium, Micro-USB recharging port
- Battery Life: 8-10 hours

MECHANICAL

- Housing: Drop Resistant
- Dimensions: 4.25 x 2.68 x 0.86 in (108 x 68 x 22 mm)



SCC/Dongle

Simulation Control Center and Wireless Communication Dongle


OVERVIEW

The Simulation Control Center (SCC) is a Windows 10™ application that uses a USB Dongle to remotely communicate with all models supported in the SIM-Teq™ product line of training devices. This intuitive application allows the direct control and configuration of each training device including; radiation levels, alarms, faults, dose and dose rate...etc. SCC provides a remote view of the measurements displayed on the controlled instrument.

PRODUCT FEATURES

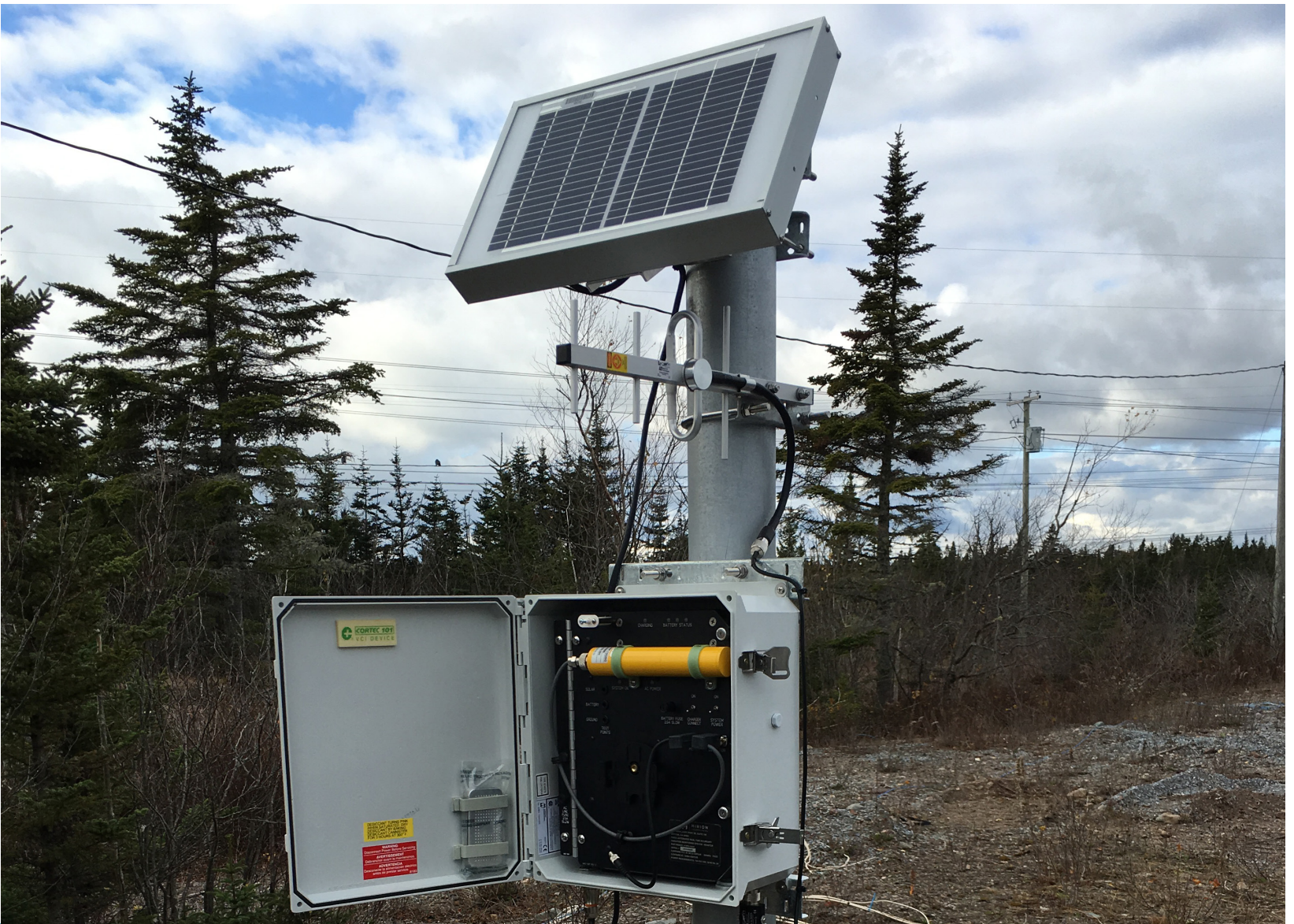
OPERATIONAL

- Display: Full screen and intuitive user interface
- Requirements: any Windows 10™ Tablet (10 inches or larger display) or PC with a free USB port (recommended Microsoft Surface Pro Tablet)

- 
- A person wearing a full-body yellow hazmat suit and a respirator mask stands in a lush green field. In the background, several high-voltage power lines and towers stretch across a clear blue sky with some light clouds. The person is holding a red equipment case.
- Rapidly deployable, self-contained kits
 - Multiple instrument types (exposure, survey, etc.)
 - Routine monitoring of site boundary with alerts
 - Remote connectivity enables continuous awareness

EMERGENCY PLANNING

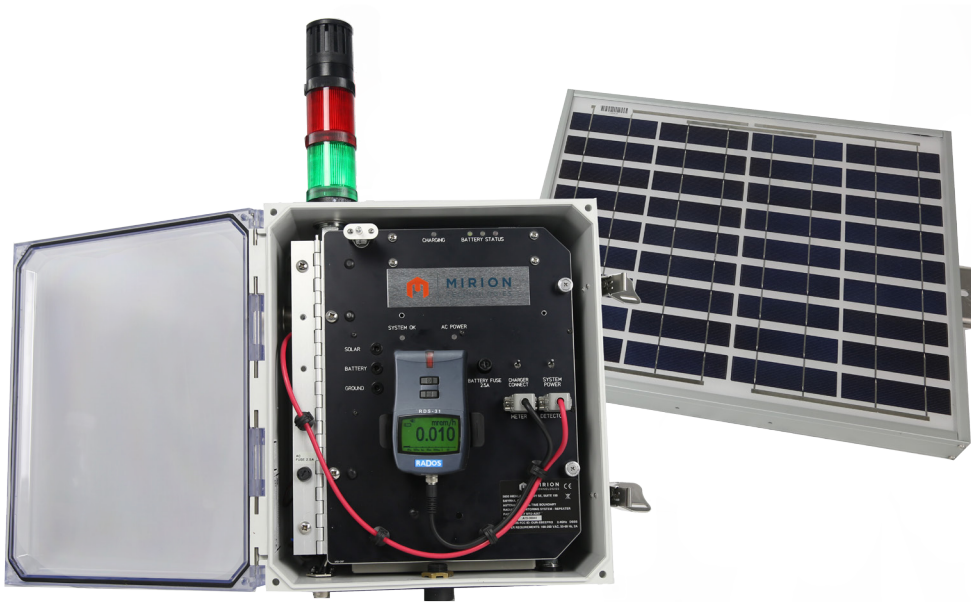




RBM

An emerging area of interest in nuclear power emergency planning is the routine monitoring of site boundaries. Mirion's Radiological Boundary Monitor (RBM) is just such an instrument. Delineating a secure, measurable perimeter around the facility with alarm capabilities and remote data transmission, a network of RBM's alerts plant personnel in the event of any sort of radiological event or accident. These units can be housed in environmentally secure enclosures and equipped with long-lasting batteries or solar power, ensuring that they can be operated and monitored even from areas along a facility's perimeter that are typically difficult to access for survey purposes or emergency alerts.

Additional Pictures and Information:



The RBM is completely self-contained in a NEMA certified case, with its own solar power system.



The RBM's detectors are located on a swiveling panel for easy access to the unit's back-up battery and micro-controller.



The detection panel can accommodate the RDS-31's various extension probes to meet a variety of measurement needs.

Emergency Planning



Short Term Area Monitor Kit

Area Monitor Kit

OVERVIEW

The Short-term Area Monitor allows quick deployment for a few months (in outages, for example) – with regular (four seconds) WRM2 transmission – in a rugged package.

PRODUCT FEATURES

ELECTRICAL

- Power Supply:
 - Uses RDS-31Tx survey meter with four AA alkaline batteries
 - Alternatively, uses DMC 3000 electronic dosimeter with 2 D-cell batteries
- Battery Life: Provides three to four months of four second transmission

MECHANICAL

- Housing: Pelican TM case (for use in harsh environments) features a clear front for increased worker awareness if used for an Alarming Area Monitor
- Integrated WRM2 transmitter – no additional parts needed



RDS-31 Response Kit

Self-Contained Emergency Survey Kit

OVERVIEW

This kit provides multiple survey meters in an “all-in-one” package. Detection is provided by Mirion’s versatile RDS-31 meter, along with an array of external probes to underwater deployment and beta smear frisking capability.

PRODUCT FEATURES

MECHANICAL

- Housing: All materials are self-contained in a rugged, environment-proof Pelican TM case
- Underwater (GMP-12 UW) probe(s) included for use in harsh environments
- Two complete sets are provided for simultaneous dose rate detection and smear counting
- Smart probes allow any meter to be connected to any probe on the fly – just plug in and go!



DMC 3000 Response Kit

Self-Contained Emergency Electronic Dosimetry Kit

OVERVIEW

This kit provides the ability to deploy a small population of electronic dosimeters from a field position (that is, without requirements for network and database connectivity). The included software (DosiFFR) assigns Mirion’s flagship DMC 3000 dosimeter(s) to specific personnel, applies pre-set configuration parameters (alarm thresholds, etc.), and logs personnel exposure upon conclusion of the response. The kit also includes a touch-screen computer to enable quick response to changing field conditions and data trending over longer deployments.

PRODUCT FEATURES

OPERATIONAL

- Display: Touch-screen hand-held computer
- DosiFFR (First Responder Dosimetry Logging) software included
- The software’s data export function allows after-the-fact recording of personnel dose or analysis of team-based performance, etc.

MECHANICAL

- Housing: The complete system is self-contained in a rugged, environment-proof Pelican TM case
- Includes ten DMC 3000 electronic dosimeters and an LDM-320D dosimeter reader

Emergency Planning



RBM

Radiation Boundry Monitor

OVERVIEW

Radiation Boundry Monitors are flexible, easy to operate systems that feature either our DRM-2 area monitors or RDS-31 handheld survey meters, they provide the valuable coverage needed to ensure comprehensive data collection around a nuclear facility. Able to be fitted with a variety of power sources, from solar to battery to AC, and able to be networked with WRM2 radios and monitored using Mirion's Television 3000 software, the Mirion Radiation Boundry Monitors provide a powerful tool for keeping up with the changing requirements for site boundary monitoring.

PRODUCT FEATURES

DRM-2

- Operating temperature: 15°F to 122°F (-9°C to 50°C)
- Storage temperature: -5°F to 140°F (-20°C to 60°C)
- Relative humidity: 10% to 95%
- Dose rate measurement range: 0.05 mR/h to 999 R/hr (0.5 μ Sv/h to 9.99 Sv/h)

RDS-31

- Operating temperature: -13°F to 140°F (-25°C to 60°C)
- Storage temperature: -40°F to 158°F (-40°C to 70°C)
- Relative humidity: up to 85% at 95 °F (35°C)
- Fulfills the RF-immunity levels of applicable standard
- Dose rate measurement range (GM): 1 μ rem/h to 10 rem/h (0.01 μ Sv/h to 0.1 Sv/h) or
- Dose rate measurement range (SD): 1 mem/h to 1000 rem/h (10 μ Sv/h to 10 Sv/h)



SPIR-Ace

Sensitive Handheld Identifier

OVERVIEW

SPIR-Ace is a versatile Radio-Isotope Identifier (RIID), taking advantage of SPIR family capabilities in a small and easy to use instrument. It addresses all applications requiring efficient detection and identification of radiological threats in security applications, including civil defense, border & customs. It also provides accurate assessment of nuclear materials for nuclear power plant, safeguard, labs, OSI/CTBTO agents, and more.

PRODUCT FEATURES

NUCLEAR

- Detectors: NaI(Tl) or LaBr3(Ce), energy compensated GM tube for high dose rate fields, moderated LiI(EU) neutron detector (in gamma-neutron option)
- Energy Range: 25 keV to 3 MeV (gamma) and 0.025 eV to 15 MeV (neutron).
- Dose rate range: 1 to 1500 μ R/h (0.01 to 15 μ Sv/h) for low gamma dose rate range (by NaI or LaBr3); extended gamma dose rate range 0.5 to 99,999 mR/h (5 to 999,999 μ Sv/h) by GMContinuous acquisition: dose rate, count rate and detection

MECHANICAL

- Dimensions: 8.1 in x 6.2 in x 2.2 in (206 x 153 x 57 mm)
- Weight: 2.64 lb (1.20 kg)
- Temperature range: -4°F to 122°F (-20°C to 50°C)
- Connection to external alpha / beta probe
- Can be connected to other warning and surveillance devices (e.g. watch, tablet)



SpiR-ID (LT)

Advanced Detection & ID

OVERVIEW

The SpiR-ID is a rugged handheld advanced identification device (RIID) designed to efficiently search for nuclear and radioactive materials. The SpiR-ID quickly and reliably identifies and categorizes radionuclides for demanding scenarios such as heavily shielded or masked radioactive and nuclear threats

PRODUCT FEATURES

NUCLEAR

- Detectors: SpiR-ID NaI: 3" x 1.5"- SpiR-ID LaBr: 1.5" x 1.5" LaBr- 2 moderated LiI(Eu) detectors- GM tube for high gamma dose rate
- Measurement range- <1 μ R/hr to 1 R/hr (0.01 μ Sv/h to 10 mSv/h)
- Energy range- 25 keV to 3 MeV(gamma) 0,025 eV to 15 MeV (neutron)

OPERATIONAL

- Display: Large TFT 3.5" VGA (640 x 480) sun readable display
- Bluetooth, Wi-Fi, Cellular communications with embedded GPS

ELECTRICAL

- Power Supply: i-ion rechargeable with Secondary "C" cells (6)
- Battery Life: Typical 10 hours

MECHANICAL

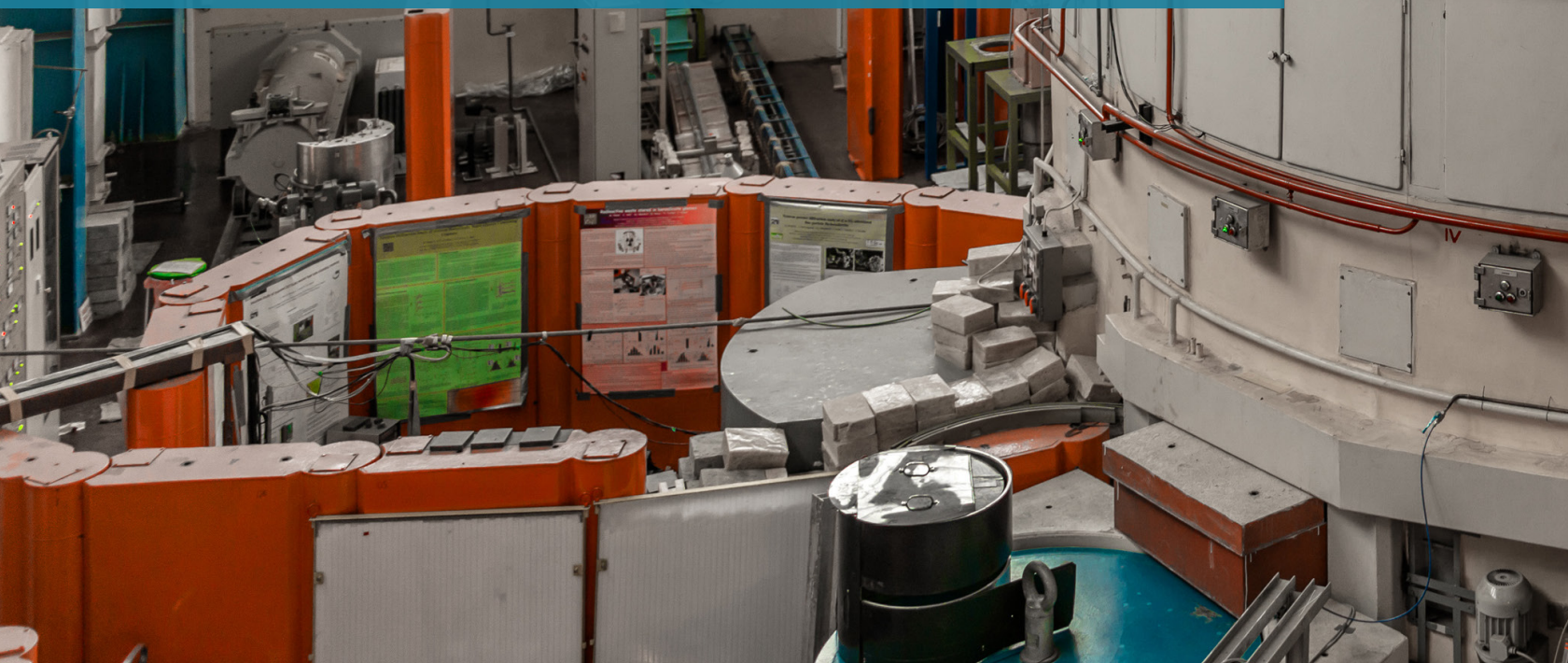
- Dimensions: 12.59 x 5.70 x 6.88 in (320 x 145 x 175 mm)
- Weight: Standard version 10.8 lb (4.9 kg): LT version 7 lb (3.2 kg)
- Temperature range: -4°F to 140°F (-20°C to 50°C); -40°F (-40°C) on request
- Humidity: up to 100%

Other Versions:

- SpiR-ID Standard (NaI or LaBr)
- SpiR-ID LT (NaI or LaBr)

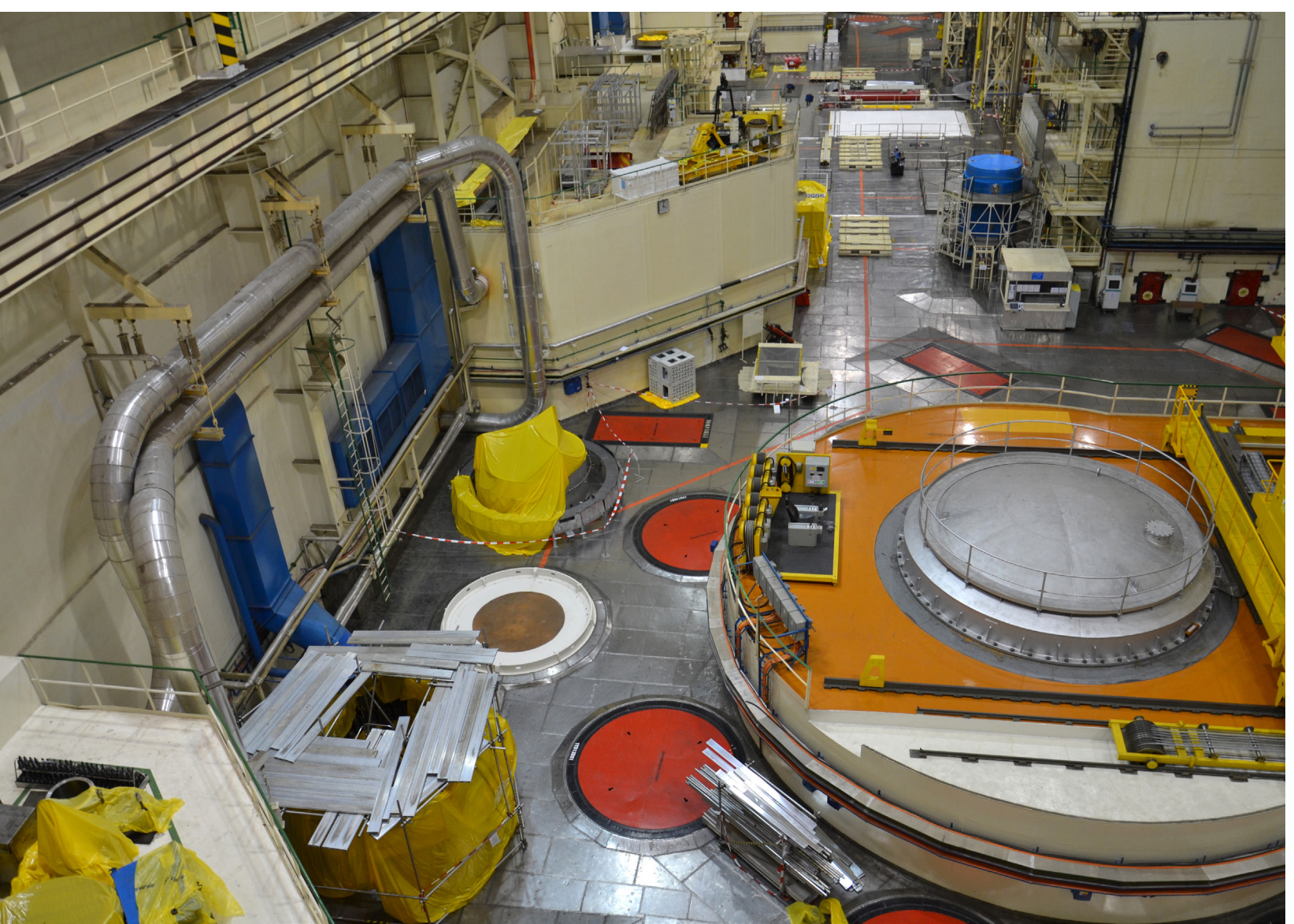


- Moving filter detection head can be remotely located (30 feet)
- On-Board spectroscopic analysis allows for Rn compensation
- Networkable or wireless connectivity
- Robust, quality-assured design for use in harsh conditions



AIRBORNE RADIATION MONITORING





ABPM 203M

A self-contained, mobile unit able to be easily and quickly deployed into any area as conditions require, the ABPM 203M is an airborne radiation contamination monitor measuring both alpha and beta particulates with up-to-the-minute tracking of the radiological conditions in the air. The ABPM features on-board identification and optional subtraction of Radon progeny, and includes a second gamma only detector to allow usage in virtually any level of radiological background. Capable of being configured with WRM2 wireless technology, the ABPM's data can then be transmitted back to a central control area where it can be interpreted and used to inform operational decisions without any of the typical delays caused by cumbersome deployment, longer-term readings, or communication breakdowns.

Additional Pictures and Information:



Automatic moving filter head can be located up to 30 ft away



LPDU displays live time data (alpha, beta, background dose rates, and flow rate) along with audible and light signaling

Airborne Radiation Monitoring



ABPM 203M

Mobile Alpha Beta Particulate Monitor

OVERVIEW

The ABPM 203M forms part of the RAMSYS product line. The detector is small and light weight and allows this monitor to function locally next to the respiratory tract of workers. A dual silicon detector performs the gamma compensation and a radial fin grid limits the scattering of the alpha particles (static compensation) which facilitates the compensation of the radon and thoron solid progenies by the processing algorithms (dynamic compensation). Operating costs are minimized through unattended operation, by the use of continuous filter and the on-line spectroscopy capability. All these features make the ABPM 203M an efficient diversified and cost effective tool.

PRODUCT FEATURES

NUCLEAR

- Measurement range
 - Alpha 2.7 E-13 to E-4 $\mu\text{Ci/cc}$
 - Beta 2.7 E-11 to E-4 $\mu\text{Ci/cc}$

OPERATIONAL

- Display: Alphanumeric; measurement, status...
- Visual: 2 lights (red & yellow)
- Audible Alarm: buzzer 90 dBA at 1 meter (39.3 in)

ELECTRICAL

- Power Supply: 230 Vac – 50 Hz or 120 Vac – 60 Hz

MECHANICAL

- Dimensions: 50 x 14.2 x 12 in (1270 x 360 x 303 mm)
- Weight: ~26 kg (~ 57 lb)

Other Versions:

ABPM 203P



NGM 209M

Mobile Low Range Noble Gas Monitor

OVERVIEW

The NGM 209M monitor from the RAMSYS product line has been developed to sample air in discharge stacks or ventilation ducts. The dual silicon diode detector integrated in a 4 $\pi/3$ cm (4 $\pi/1.18$ in) lead shielded sample volume guarantees high reliability of the measurements. The first silicon diode detects the beta/gamma radiation from sample volume and the gamma ambient radiation (background). The second one detects gamma radiation from the sample volume and the gamma ambient radiation. This allows noble gas beta measurement with dynamic gamma compensation by the processing algorithms.

PRODUCT FEATURES

NUCLEAR

- Detector: dual large area silicon
- Measurement range: E-6 to 2.7E-1 $\mu\text{Ci/cc}$

OPERATIONAL

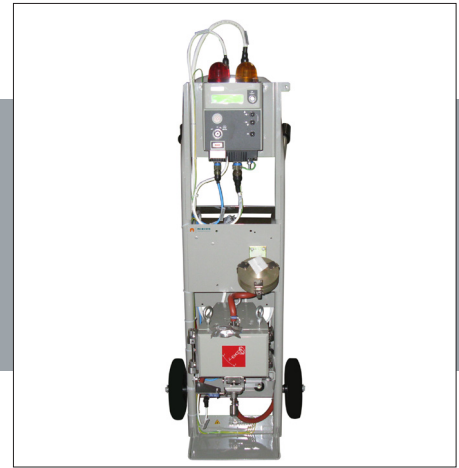
- Display: Alphanumeric; measurement, status...
- Visual: 3 lights (red, yellow, & green)
- Audible Alarm: buzzer 90 dBA at 1 meter

ELECTRICAL

- Power Supply: 230 Vac – 50 Hz or 120 Vac – 60 Hz

MECHANICAL

- Dimensions: 50 x 14.2 x 12 in (1270 x 360 x 303 mm)
- Weight: ~30 kg (~66 lb)



IM 201M

Mobile Iodine Monitor

OVERVIEW

The IM 201M monitor forms part of the RAMSYS product line. It has been developed to continuously measure the gamma volumetric activity of radioactive iodine sample, in both molecular and organic forms (methyl iodine), contained in air drawn from stacks, ventilation ducts or working areas. An NaI scintillation detector faces the activated charcoal cartridge in which radioactive iodine is trapped. The proximity of the detector and the cartridge, enclosed with a 4 $\pi/5$ cm (4 $\pi/2$ in) lead shielding, serves to optimize detection efficiency. A radioactive Am241 source built into the NaI crystal allows compensation of temperature and aging related drifts. The spectrometry capability, based on a 1024 channel spectrum analysis allows radio iodine isotope localization.

PRODUCT FEATURES

NUCLEAR

- Detector: 1 1/4"x1" NaI(Tl) scintillator + PMT
- Measurement range: E-10 to E-4 $\mu\text{Ci/cc}$

OPERATIONAL

- Display: Alphanumeric; measurement, status...
- Visual: 3 lights (red, yellow, & green)
- Audible Alarm: buzzer 90 dBA at 1 meter
- 1024 channel spectrum analysis

ELECTRICAL

- Power Supply: 50 Hz or 120 Vac – 60 Hz

MECHANICAL

- Dimensions: 55.4 x 20.5 x 27.6 in (1406 x 520 x 700 mm)
- Weight: ~200 kg (~ 441 lb)

Notes

Software



RPD

Radiological Posting Display

OVERVIEW

The RPD Software is a hardware and software solution providing the ability to display area monitor data real-time on a large screen display. It was developed using the previous software, the Large Format Device Display as a base and still supports all of the original functionality. In addition, new screens were developed to be used as a Posting Display. That is a set of four screens that can change the appearance of the resultant display based on the Dose rate found in the area being monitored.

PRODUCT FEATURES

- Dynamic display of ambient radiological conditions
- Display up to 4 instruments at one time
- Can be setup to display radiological posting that will automatically change based on the dose rates in the area
- Network or directly connect devices
- Quick and easy setup, designed for all WRM2 devices



Sentinel

Dose Record Management & Access Control System

OVERVIEW

Sentinel™ is a native Microsoft Windows® software system that operates on major database engines including Oracle® and Microsoft SQL Server®. The system is modular and the Access Control Module may be purchased separately.

PRODUCT FEATURES

- Self-Service Radiological Access Control
- Occupational Dose Management including Regulatory Guide 8.7 (U.S.) compliant dose reporting
- Radiological Work Permit (RWP) Creation and Management
- Equipment Management including Inventory, Maintenance and Calibration
- Source Management including Inventory, Services, and Automatic Decay Calculation
- Respirator Management including Inventory, Issue/ Return, and Maintenance
- As Low As Reasonably Achievable (ALARA) Work and Dose Tracking and Dose Budgeting
- High Radiation Area Key Management
- Dosimeter of Legal Record (DLR) Management including Inventory, Posting DLR Results, Comparison of DLR Results with Estimated Dose, and error control functions
- Multiple DLR (Multipack) Management, including EDEX functions



DosiServ

Dose Management Software

OVERVIEW

The DosiServ software is an individual and collective dosimetry management software used for managing all the data related to the workers in controlled areas. It also collects the data recorded by the electronic dosimeters by using the dosimetry readers.

PRODUCT FEATURES

- Real-time self access with threshold customization
- Tasks and group of tasks management
- Radiation work permit management
- Areas, sub-areas and group of areas management
- Worker and company access criteria customization
- Worker data customization
- Official dose calculation customization for various legislation compliance Neutron electronic dosimeter compliance
- Health physics equipments management
- Automatic dose recovery after network failure



TeleView 3000

Web Based Remote Monitoring System

OVERVIEW

TeleView 3000 is Mirion's flagship Remote Monitoring application. Completely redesigned for the next generation of Radiation Protection support, it builds upon the familiar features expected from Remote Monitoring software (e.g. worker grouping by RWP, automatic worker logon via Access Control link, area monitor grouping, etc.), and adds updated features such as multiple windows / tab viewing, as well as GPS overlay functionality.

PRODUCT FEATURES

- Loud alarm, 85 dB (A)
- Browser based Remote Monitoring application Cross-browser-TCP/IP support for multiple sessions
- Networked or stand-alone capability
- Intranet with security level support
- No requirement for workstation database
- Supports multiple telemetry data protocols
- Access Control connectivity for auto-logon features
- GPS supported, with overlaid map view
- Configurable data trending capability
- User configurable for greater flexibility and convenience
- Emergency Planning Perimeter Monitoring system (real time boundary / offsite monitoring for RP teams)
- Monitors over 1000 devices



CeMoSys™

Central Monitoring System

OVERVIEW

CeMoSys™ is a central monitoring software platform for the display and administration of connected Mirion contamination and clearances monitoring systems and a facility network.

PRODUCT FEATURES

- Monitor status overview for all Mirion Contamination and Clearance monitor families
- Measurement results and details on remote desktops
- Management of System Check protocols
- Overview of current measurement parameters on monitors
- Data backup for measurement results, parameter and system check protocols for all monitor families on site



DosiFFR

First Responder's Dosimetry Management System

OVERVIEW

Designed specifically for the rapid-deployment needs of First Responders, DosiFFR is an application that tracks the issuance of electronic dosimeters to personnel, applies the appropriate configuration settings (alarm thresholds, etc.), and logs the dosimetry data from a given use.

PRODUCT FEATURES

- Designed for in-field use (self-contained)
- Can be configured for civil or military applications
- Manages individuals, dosimeters, and exposure data
- Data can be exported to an external reporting system
- SQL-based (free version) for easy implementation
- Dosimeter parameters can be pre-grouped into profiles

Notes



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**We protect people, property,
and the environment.**