Tracerco

Providing Insight Onsite

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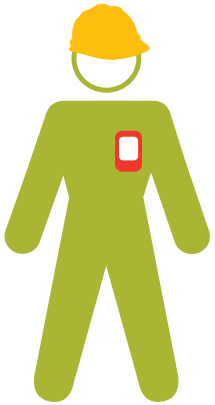
JM Johnson Matthey

Monitors & Servicing

Monitors & Servicing



Tracerco's Award Winning Radiation Monitors and Servicing business unit provides a range of products and services accredited to ISO9001:2008 and EN80079-34 international standards together with our laboratory in Malaysia having MS ISO/IEC 17025 accreditation. With items both for sale and hire and a repair, testing and re-calibration service, there's a solution for every radiation monitoring need. Our range of portable radiation monitors provide both intrinsically safe and standard instrumentation with an established track record for reliable operation in a wide range of environments. The calibration and repair service includes standard 3-5 day turnaround with an express option also available. As well as our own range of instruments our technicians are also trained to calibrate and repair other manufacturers' instruments.

Monitors & Servicing

Monitors & Servicing

Monitors and Servicing

Tracerco provides an award winning range of radiation monitor products and services accredited to ISO9001:2008 and EN 80079-34 international standards together with our laboratory in Malaysia having MS ISO/IEC 17025 accreditation. Our product range is designed to be lightweight, easy to use and operate in the most demanding of environments.

Radiation Monitors

We offer a number of monitors, including a range of intrinsically safe monitors, which are suitable for use in potentially explosive environments. Our product range includes hand held and personal monitors.

Our radiation contamination monitors conform to European Standard EN 60325:2004 and our radiation dose rate monitors to EN 60846:2004.

Radiation Monitor Calibration

We provide a fast, efficient and professional calibration service for all types of radiation monitor. Calibration services are available at our global bases in:

- **Billingham, UK**
- **Houston, USA**
- **Perth, Australia**
- **Abu Dhabi, UAE**
- **Kuala Lumpur, Malaysia**

We even provide a free of charge reminder service to let you know when your next calibration is due.

Our Radiation Monitor Calibration service is:

- **Quick.** Typical turnaround within 3-5 days. We can also provide an express service on request.
- **Flexible.** We offer calibration of contamination monitors against a range of Isotopes including Ra-226 and Pb-210.
- **Comprehensive.** We can test Dose Rate monitors to saturation dose rates in excess of 100mSv/hr.

Tracerco personnel involved in Radiation Monitor Calibrations are all fully trained and supervised by a member of staff appointed as a qualified person under Regulation 19(3) of the Ionising Radiation Regulations.

Radiation Monitor Repair

Tracerco Technicians are available to carry out quick and effective repairs on a wide range of instruments including intrinsically safe equipment.

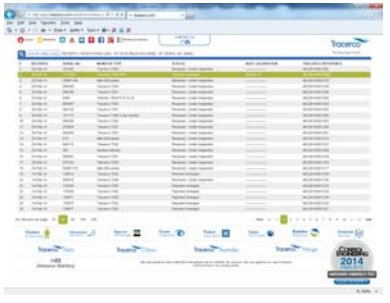
Hazardous Area Inspection Service

Tracerco Technicians are also trained and approved to perform a Hazardous Area Inspection Service alongside your annual calibration to ensure that your monitor's intrinsic safety is not compromised.

FREE Online Calibration Tracking Service

Tracerco also provides a free of charge Calibration Tracking Service so you can trace your monitor in our system and even check on delivery status.

This secure online service is available to all customers and it also stores all your calibration certificates and service history.



Radiation Monitor Hire

In addition to the range of Radiation Monitors available for purchase from Tracerco, we also offer our full range of monitors for hire

Monitors available for hire include:

From our intrinsically safe range:

- **TRACERCO** NORM Monitor-IS - Full Kit
- **TRACERCO** NORM Monitor-IS - Scint
- **TRACERCO** NORM Monitor-IS - GM
- **TRACERCO** T202 Dose Rate Monitor
- **TRACERCO** Personal Electronic Dosimeter (PED)

From our standard range:

- **TRACERCO** T401 Contamination Monitor
- **TRACERCO** T402 Dose Rate Monitor
- **TRACERCO** T403 Contamination Monitor
- **TRACERCO** T406 X-Ray Monitor

Hire monitors can often be provided with rapid delivery so if you have an urgent requirement for a Radiation Monitor, we can meet your needs.

As well as the Tracerco range of monitors for hire, we also have a number of other manufacturers monitors available. Contact us for more details.

Meet Tracerco

Tracerco, part of Johnson Matthey's Process Technologies Division, is a world leading technology company, providing unique and specialised detection, diagnostics and measurement solutions. Strong customer relationships, innovative R&D and the delivery of high quality products and services has underpinned Tracerco's growth and success over the years.

There are several other business units within Tracerco:

Analytical Services

Analytical services provide radiochemical analysis, analytical support for our reservoir characterisation business and certain types of analysis for oil and gas production fluids and gases. We also provide radiation protection advice and training.

Measurement Instruments

Tracerco designs, manufactures and technically supports an extensive range of measurement instruments. Our nucleonic instruments are always custom designed to meet the needs of the specific application, are non intrusive and are easily fitted.

Process Diagnostics

Tracerco is able to offer scanning and tracer characterisation technologies to operators of process plant. They are non intrusive and so allow the cost and time associated with process shutdowns to be avoided.

Product Assurance

Tracerco's strength and depth in chemistry, physics, electronics, software and instrument design, makes us uniquely placed to develop customised product assurance solutions. The technologies we provide are used in brand protection and authentication programs globally, to challenge adulteration and counterfeiting across a range of products.

Radiation Protection

Tracerco's experienced and qualified Radiation Protection Advisers (RPA's) provide a complete range of radiation protection services from advice on legislation, compliance, risk assessments and waste management through to drafting of local rules, full site auditing and the staff training that is crucial to operating safely with radiation.

Reservoir Technologies

Tracerco's hydrocarbon reservoir technologies involve the use of an extensive range of tracers to provide a true understanding of fluid flow paths inside the reservoir. The technologies help oil companies optimise drilling strategies and get the best investment returns from Enhanced Oil Recovery (EOR).

Subsea Technologies

Our inspection services are used subsea to provide operators with assurance of the integrity of their assets and to diagnose flow abnormalities. Understanding the production system and pipeline transport network is key to safeguarding production from reservoir to point of topside processing.

Monitors & Servicing

Tracerco and Johnson Matthey

Formed almost 200 years ago, Johnson Matthey is a leading speciality chemicals company focused on catalysis, fine chemicals, precious metals and process technologies. It has operations in over 30 countries, employs around 10,000 people and has a turnover in excess of $10 billion.

Innovation and continued investment in R&D is an integral part of Johnson Matthey's growth strategy. Over 1,000 of its employees work in R&D (some 11% of the total workforce). Around 80% of Johnson Matthey's R&D employees work within the Group's businesses in dedicated R&D Technology Centres around the world.

Johnson Matthey also has central strategic R&D capability which works on behalf of all of the Group's businesses. The Group Technology Centre, which operates across two sites in the UK (Sonning Common and Billingham), employs around 200 people - 50% of whom have a PhD qualification.

Since its inception over 50 years ago, Tracerco has focused on innovation in detection and tracer technologies. Our scientists and engineers have been at the forefront of the development of many groundbreaking measurement, detection, analytical and diagnostic technologies.

Our business excellence is evidenced by the international recognition our products and services have received and we have over 3,000 customers worldwide who look to Tracerco for high quality products and continuous innovation. The majority of our people are in technical roles and are highly qualified with over 10% dedicated to R&D. The R&D team covers a broad range of disciplines including advanced chemistry, physics, electronics, software and instrument design.

In addition to our central resources, Tracerco has an extensive network of 31 overseas regional offices, laboratories and calibration facilities which allow us to deliver local service to our global customers supporting our products and services anywhere in the world.

Monitors & Servicing

TRACERCO™ NORM Monitor-IS

An intrinsically safe, weatherproof monitor with dual probe capability - the ultimate tool for obtaining accurate NORM Measurements in hazardous areas or difficult conditions.

The TRACERCO™ NORM Monitor-IS allows users to monitor wet and dry NORM in a variety of situations. Its unique, intrinsically safe design incorporates different probe options to make it the optimum measurement tool.

Key product benefits include:

- Intrinsically safe
- Easy to clean and decontaminate
- Rugged, shock proof casing for use in all weather conditions
- Digital display and live background subtraction
- Multiple measurement modes.
- Bq/cm^2 output for NORM Isotopes
- Adjustable alarm thresholds

The NORM Monitor-IS Handset is available to purchase with a Scintillator Probe, a GM Probe, or Dual Probes as the NORM Monitor Kit.

NORM Monitor-IS KIT - Handset with dual interchangeable probes, supplied in a transit case complete with carrying harness

NORM Monitor-IS GM - configured for one-handed operation with removable GM Probe (replacement for the award winning Tracerco T201 Contamination Monitor)

NORM Monitor-IS SCINT - Handset and Scintillator Probe supplied in a transit case complete with carrying harness

Both probes have built in calibration data, so they can also be purchased separately and calibrated without the handset.

Scintillator Probe

- Robust and suitable for use in challenging conditions
- The ability to undertake surveys of external walls for internal deposits of NORM*
- The ability to measure NORM in low diameter tubular internals (360 degree response)

GM Probe

- Perfect for alpha and beta measurement
- High sensitivity to Lead-210 NORM
- Rotating Probe head for surface measurements

* Subject to wall thickness of pipe

Monitors & Servicing

TRACERCO™ NORM Monitor-IS specification:

Radiation detected	Scintillator: gamma, high energy beta GM: alpha, beta with some gamma response
Measurement modes	Scintillator: CPS, μSv/h GM: CPS, Bq/cm^2 All modes have background subtraction option CPM and μR/h option available for USA
Dose rate range (scintillator probe)	0.000 to 50μSv/h (Cs137 only) (0.0 - 5000 μR/h)
Count range	Scintillator: 0 - 150,000 cps (1 million cpm) GM : 0.00 to 4000 cps (240,000cpm)
Over-range response	Bar graph display will read full scale. Digital numeric display will read "0UEr"
Integrate period	Auto = 60 seconds or 1000 counts. User defined = 5 - 600 seconds
Scintillator detector	NaI crystal in metal/polymer enclosure
GM detector	Single halogen thin window detector in static dissipative nylon housing
Handset material	Static dissipative nylon
Weight	Handset: 500g Scintillator: 700g GM: 435g
Battery	Alkaline Manganese MN1604 or MX1604
Battery life	Scintillator:85 hours typical GM: 190 hours typical
Low battery indication	<10 hours available life remaining
Variation with battery voltage	+/-2%
Working temperature range	-20 to +50°C
Variation with temperature	<10%
Humidity range	0 - 95%
Ingress protection rating	Scintillator: IP67 GM: IP34 Handset: IP65
Standard compliance	EU directives: 2004/108/EC Electromagnetic Compatibility Directive; 94/9/EC ATEX Directive CSA C22.2; CAN / CSA / UL 60079-0; CAN / CSA / UL 60079-11; UL 913 7th Edition
Hazardous area certification code	II 1G Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +50°C) Intrinsically safe equipment suitable for hazardous area zones 0,1 and 2 Class 1, Div 1, Groups A, B, C, D; Temp code T4 Class 1, Zone 0, Ex/Axia, IIC, T4
Certificate Nos: ATEX, IECEx CSA	12ATEX0209X IECExBAS12.0114X

Monitors & Servicing

TRACERCO™ T202: Radiation Dose Rate Monitor

The intrinsically safe TRACERCO™ T202 is the ultimate, lightweight, practical hand held monitor. It has a variety of applications from oil and gas production to military and first responders.

Our monitor is robust and reliable. Coupled with its excellent lightweight design and the fact it is intrinsically safe, this makes it perfect for challenging environments.

The benefits of using our monitor are:

- Intrinsically safe so no need for a hot work permit to operate in a hazardous area †
- Reads and records peak measurement so you can measure radiation levels remotely
- Use in all weathers and shock proof
- Alerts you when it needs to be calibrated
- Adjust your own alarms
- Lightweight, making it easy to carry and manoeuver
- Easy to read display
- Easy to decontaminate

There are some accessories available with the monitor:

- Robust weatherproof transit case
- Extension clamp kit
- Protective leather holder
- Safety signs and labels

† Please refer to specification table over the page.

TRACERCO™ T202 Radiation Monitor Specification

Radiation detected	X-rays and gamma rays in range 59keV to 1332 keV.
Detector	Single halogen, energy compensated Geiger Muller tube.
Dose rate range	Bar graph display 0-1000 µSv/h Digital numeric display 0-10,000 µSv/h USA version: Bar graph display 0-100 mRem/h Digital numeric display 0-1000 mRem/h.
Accumulated dose range	Digital numeric display 0-10,000 µSv. USA version: Digital numeric display 0-1,000 mRem.
Peak radiation dose rate	Digital numeric display 0-10,000 µSv/h. USA version: Digital numeric display 0-1,000 mRem/h.
Case material	Static dissipative nylon body with ABS window.
Hazardous area certification	Equipment code Ex ia IIC T4 (-20°C ≤ Ta ≤ + 50°C) Ga. ATEX code II 1G. Suitable for hazardous area zones 0, 1 and 2.
Variation with battery voltage	Less than 2%.
Battery life	100 hours typically with background radiation.
Low battery indication	On 4 hours available life left.
Battery	Alkaline Manganese MN1604 or MX1604.
Ingress protection rating	Rated IP65 (dust tight and will withstand water jets).
Humidity range	0 to 95%.
Weight	500 grammes.
Variation with temperature	Less than 15% over operating temperature range .
Standard compliance	EU directives: 2004/108/EC Electromagnetic Compatibility Directive 94/9/EC ATEX Directive.

Applications

- Oil and gas
- First responders
- Military
- Research laboratories
- Mining
- Nuclear power
- Medical
- Environmental agencies

TRACERCO™ Personal Electronic Dosimeter (PED)

We have created a device that gives exceptional performance in the most challenging environments.

The easiest personal radiation monitor to read and operate on the market.

Perfect for both radiation specialists and those who are not working with radiation every day. It is safe to use in potentially explosive environments, (Intrinsically Safe) robust and reliable, making it ideal for challenging environments.

Everything on the device has been designed with the user in mind; the display system features graph measurements but also a simple diagram of a man who fills with colour depending on the dose received.

DoseVision™, the software interface for the PED has been designed to be simple and interactive to use. Users can set alarm levels, create reports and analyse data. Software updates are available free of charge on our website.

The benefits of using our monitor are:

- Intrinsically safe so no need for a hot work permit †
- Icons and one touch operation means it is simple to use and there is no need to continually look at the user manual
- Use in all weathers and easy decontamination
- Lightweight, making it easy to carry and manoeuver
- Extra large memory reducing the risk of data being overwritten
- Easy to read with a large Amoled display screen
- Three measurement modes and four alarm settings
- Wear it several ways as the screen can be flipped

There are some accessories available with the monitor:

- Portable in car charger
- Travel case
- Travel pack, which includes in car charger, continental adaptors and a small travel dock

† Please refer to specification table over the page.

Monitors & Servicing

TRACERCO™ PED

Radiation detected	X-rays and gamma rays in range 33 keV to 1332 keV.
Detector	Single energy compensated Geiger Müller tube.
Dose rate range	Bar graph display 0-100 mSv/h. Digital numeric display 0-100 mSv/h.
Accumulated dose range	Dose "Man" display 0-10 Sv. Digital numeric display 0-10 Sv.
Peak radiation dose rate	Digital numeric display 0-100 mSv/h.
Case material	Shock, vibration and drop resistant polymers with antistatic surface properties.
Memory	125,000 data point capacity. Serial non-volatile memory. 10 year data retention.
Units	Sieverts or Rem (may be selected in DoseVision™ software).
Operating temperature range	-20°C to 50°C.
Ingress protection rating	IP67 (dust tight and can withstand immersion in water at depth of 1m).
Hazardous area certification	ATEX EU directive 94/9/EC Safe for use in Explosive Atmosphere Zones 0, 1, and 2 ATEX Coding Ex II 1G Equipment code Ex ia IIC T4 Ga (-20°C < Ta < 50°C) ATEX Certificate No Baseefa 11ATEX0045 IECEx Certificate No. IECEx BAS 11.0027. FM approved for Class I Div I Groups ABCD Ta = 50°C and Class I Zone 0 IIC T4.
Low battery indication	On 8 hours available life left.
Battery	Rechargeable lithium ion. 300 hours charge typical.
Humidity range	Up to 95%.
Standard compliance	EU directives: 2004/108/EC Electromagnetic Compatibility Directive 94/9/EC Atex Directive.

Applications:

- Oil and gas
- First responders
- Military
- Research laboratories
- Mining
- Nuclear power
- Medical
- Environmental agencies

Monitors & Servicing

TRACERCO™ T401: Radiation Contamination Monitor

The T401 measures radioactive contamination and has been designed to make life easy for the worker. The ultimate lightweight, practical hand held monitor.

Our monitor is robust and reliable. Coupled with its excellent lightweight design this makes it perfect for challenging environments.

The benefits of using our monitor are:

- Easy to read bar-graph display
- Reads peak measurement so you can measure radiation levels remotely
- Detachable probe with 1.5 metres of cable
- Use in all weathers and shock proof
- Adjust your own alarms
- It is lightweight, making it easy to carry and manoeuver
- Rotating probe 90° for internal surface measurements

There are some accessories available with the monitor:

- Robust weatherproof transit case
- Protective leather holder
- Extension arm kit
- Safety signs and labels

TRACERCO™ T401 Contamination Monitor Specification

Radiation detected	Alpha / Beta / Gamma Automatic direct translation to Bq/cm^2 for Cs-137, Am-241, C-14, Cl-36, Pb-210 (wet and dry), Ra-226 (wet and dry), Sr-90, Co-60, P-32, Pu-239, U-238.
Detector	Single halogen thin window Geiger Muller tube.
Case material	Robust, chemical resistant polymers.
Display	Bar graph display (0-1000 CPS) Digital numeric display in CPS or Bq/cm^2.
Over-range response	Bar graph display will read full scale. Digital numeric display shows 0UEr (over) above 4000CPS.
Variation with battery voltage	Less than 2%.
Battery life	100 hours typically with background radiation.
Low battery indication	On 4 hours available life left.
Battery	Standard 9V PP3 battery.
Ingress protection rating	Main case is sealed to IP65 sensor head sealed to IP34.
Humidity range	0 to 95%.
Weight	1 kilogram (approx.).
Variation with temperature	Less than 15% over operating temperature range.
Standard compliance	EU directives: 2004/108/EC Electromagnetic Compatibility Directive.

Applications:

- Oil and gas
- First responders
- Military
- Research laboratories
- Mining
- Nuclear power
- Medical
- Environmental agencies

TRACERCO™ T402 and T402HR: Radiation Dose Rate Monitors

Our dose rate monitors have been designed to be lightweight yet tough and to measure dose rate and peak exposure. A perfect design for hand held radiation monitoring.

New for 2014 - Extended range with the T402HR This monitor measures up to 100mSv/hr with the same ease of use and functionality as our popular T402.

The benefits of using our monitor are:

- Reads and records peak measurement so you can measure radiation levels remotely
- Use in all weathers and shock proof
- Adjust your own alarms
- Lightweight, making it easy to carry and manoeuver
- Easy to clean and decontaminate as it has a smooth design and is waterproof

There are some accessories available with the monitor:

- Robust weatherproof transit case
- Extension clamp kit
- Protective leather holder
- Safety signs and labels

TRACERCO™ T402 and T402HR Radiation Monitor Specification

Radiation detected:	T402: X-rays and gamma rays in range 59 keV to 1332 keV. T402HR: X-rays and gamma rays in range 33 keV to 1332 keV.
Detector	Single halogen, energy compensated Geiger Muller tube.
Case material	Robust, chemical resistant polymers.
Dose rate range	Bar graph display 0-1000 µSv/h T402: Digital numeric display 1-10,000 µSv/hr. USA version: 0-1,000 mRem/h. T402HR: Digital numeric display 0-100 mSv/hr. USA version: 0-10,000 mRem/h.
Accumulated dose range	T402: Digital numeric display 0-10,000 µSv. USA version: Digital numeric display 0-1,000 mRem. T402HR: Digital numeric display 0-100 mSv. USA version: Digital numeric display 0-10,000 mRem.
Peak radiation dose rate	T402: Digital numeric display 0-10,000 µSv/hr. USA version: Digital numeric display 0-1,000 mRem/h. T402HR: Digital numeric display 0-100 mSv/hr. USA version: Digital numeric display 0-10,000 mRem/h.
Sensitivity data	T402: 1.7 cps per uSv/hr. T402HR: 0.7 cps per uSv/hr.
Variation with battery voltage	Less than 1%.
Battery life	100-hours typically with background radiation.
Low battery indication	On 4 hours available life left.
Battery	Standard 9V PP3 battery.
Ingress protection rating	Rated IP65 (dust tight and will withstand water jets).
Humidity range	0 to 95%.
Weight	500 grammes.
Variation with temperature	Less than 15% over operating temperature range.
Standard compliance	EU directives: 2004/108/EC Compatibility Directive.

Applications:

- Oil and gas
- First responders
- Military
- Research laboratories
- Mining
- Nuclear power
- Medical
- Environmental agencies

TRACERCO™ T403: Radiation Contamination Monitor

In searching for oil and gas and processing minerals there is a risk of radioactive materials causing contamination.

A challenge for people working in these environments is monitoring the contamination to pipes and materials as part of their work.

We have achieved the ultimate lightweight, practical hand held monitor complete with a 10m probe cable to measure contamination levels on pipes and drains.

Our monitor is robust and reliable. Coupled with its excellent lightweight design this makes it perfect for challenging environments.

The benefits of using our monitor are:

- Reads peak measurement so you can measure radiation levels remotely
- Detachable probe with 10 metres of cable and extension poles
- Use in all weathers
- Adjust your own alarms
- Lightweight, making it easy to carry and manoeuver
- Easy to read bar graph display
- Rotating probe 90° for internal surface measurements

The monitor comes complete with:

- Robust weatherproof transit case
- Extension pole kit
- Transit bag for extension poles

TRACERCO™ T403 Contamination Monitor Specification

Radiation detected	Alpha / Beta / Gamma Automatic direct translation to Bq/cm² for Cs-137, Am-241, C-14, Cl-36, Pb-210 (wet and dry), Ra-226 (wet and dry), Sr-90, Co-60, P-32, Pu-239, U-238.
Detector	Single halogen thin window Geiger Muller tube.
Case material	Robust, chemical resistant polymers.
Display	Bar graph display (0-1000 CPS) Digital numeric display in CPS or Bq/cm².
Over-range response	Bar graph display will read full scale. Digital numeric display shows 0UEr (over) above 4000CPS.
Variation with battery voltage	Less than 2%.
Battery life	100 hours typically with background radiation.
Low battery indication	On 4 hours available life left.
Battery	Standard 9V PP3 battery.
Ingress protection rating	Main case is sealed to IP65 sensor head sealed to IP34.
Humidity range	0 to 95%.
Weight	1 kilogram (approx.).
Variation with temperature	Less than 15% over operating temperature range.
Standard compliance	EU directives: 2004/108/EC Electromagnetic Compatibility Directive.

Applications:

- Oil and gas
- Mining
- Environmental agencies

TRACERCO™ T406: X-Ray Monitor

Sometimes we can tell just by looking at something that it is broken, risky or not fit for purpose. However, it is not always obvious when you have a leak on your X-Ray machine.

Spot the defect with the T406 X-Ray monitor. We have achieved the ultimate lightweight, practical hand held monitor; so much easier to use and carry than the traditional hand held X-Ray monitors.

Our monitor is robust and reliable. Coupled with its excellent lightweight design this makes it perfect for hand held monitoring.

The benefits of using our monitor are:

- Robust water resistant design
- Easy to clean and therefore more hygienic than traditional X-Ray monitors
- Lightweight design
- Large graphic display making it easy to take readings as they happen
- Peak measurement facility for checking where a leak is at its worst

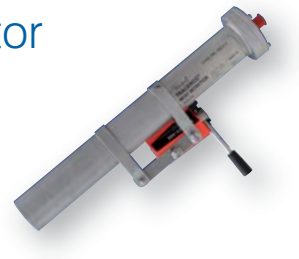
TRACERCO™ T406 X-Ray Monitor

Radiation detected	X-Rays and gamma rays in range of 17 keV to 1332 keV.
Detector	Single, thin window energy compensated Geiger Muller tube.
Dose rate range	Bar graph display 0–1000 µSv/h. Digital numeric display 0-1000 µSv/h. USA version: Bar graph display 0-100 mRem/h. Digital numeric display 0-100 mRem/h.
Accumulated dose range	Digital numeric display 0–1000 µSv. USA version: Digital numeric display 0–100 mRem.
Peak radiation dose range	Digital numeric display 0–1000 µSv/h. USA version: Digital numeric display 0–100 mRem/h.
Measurement	Can be supplied with either mRem/h or µSv/h display.
Over-range response	Bar graph display will read full scale. Digital numeric display will show 0UEr (over).
Case materials	Robust, chemical resistant polymers.
Variation with battery Voltage	Less that 2%.
Battery life	100 hours typically with background radiation.
Low battery indication	On 4 hours available life left.
Battery	Standard 9V PP3 battery.
Ingress protection rating	Rated IP65 (dust tight and will withstand water jets).
Humidity range	0 to 95%.
Weight	600 grammes (approx).
Variation with temperature	Less than ± 5% over temperature range -10°C to 40°C (14°F to 104°F).
Standard compliance	EU Directives: 2004/108/EC Electromagnetic Compatibility Directive.

Applications:

- Security
- Medical
- Food Processing

TRACERCO™ Mud Monitor



If you are using radioactive sources to log reservoir properties the TRACERCO™ Mud Monitor is for you.

Do not risk radiation exposure; use the TRACERCO™ Mud Monitor to be sure your drill bit has not damaged your radioactive source and caused contamination. All major drilling companies are using this to make sure safe working conditions are maintained.

The TRACERCO™ Mud Monitor has been designed as intrinsically safe,† imperative when drilling for oil.

The benefits of using our monitor are:

- Robust water resistant design so it can be used in many different environments
- Powerful magnetic clamp making it easy yet robust to fix to the outside of a mud circulation system
- Intrinsically safe so no need for a hot work permit †
- Unaffected by hostile processes
- Continuous background radiation measurement with a very clear alarm if it detects an increase in background radiation
- The monitor is flexible in that it can be integrated into your DCS or SCADA system or used as a stand-alone unit
- Alarm system lets you know if the detector is failing

† Please refer to specification table over the page.

Monitors & Servicing

TRACERCO™ Mud Monitor

PRI 150-A-3 Detector

Power supply	Powered by the hazardous area repeater power supply from a 20-35Vdc, 24Vdc (nom.) supply @ 75mA.
Operating temperature	-20°C to 70°C (-4°F to 158°F).
Environmental sealing	Designed to conform to IP 67 IEC 144.
Cable entry	Integrated connector or cable gland option.
Casing dimensions	Length - 510mm Diameter - body 63.5mm (top flange ~85mm dia.).
Material	316L stainless steel.
Hazardous area certification	Complies with the ATEX code II 1 G and equipment code Ex ia IIC T4 Ga. Cert No. BAS01ATEX1344. (-40°C < Ta < 70°C) Suitable for - hazardous area zones 0, 1 and 2.

T209 Stand Alone Alarm Unit

Power supply	110v – 250v 50/60 Hz.
Power consumption	Typically 25 VA.
Indicator/output	Audible and visual alarms. 4-20mA HART Signal - Serial output for logging/interrogation.
Range	Typically 0-10 µSv/h 0-1 mRem/h or 0-9999 CPM.
Alarms	Dual programmable high trip alarms.
Operating temperature	0°C to 50°C (32°F to 122°F).
Mounting	IP55 desktop.

S A 12/2 Integrated Calibration Unit

Power supply	110v – 250v 50/60 Hz.
Power consumption	Typically 20 VA.
Indicator/output	4-20mA HART Signal.
Range	Typically 0-10 µSv/h or 0-1 mRem/h.
Alarms	4-20mA HART custom outputs available.
Operating temperature	0°C to 50°C (32°F to 122°F).
Mounting	IP55 wall mounting.
Standard compliance	The monitor meets the following EU directives: 2004/108/EC Electromagnetic Compatibility

Monitors & Servicing

Tracerco Radiation Monitors can be supplied with accessories on request. We have a number of accessories available to assist with carrying, storing and using your monitors.

Accessories for TRACERCO™ NORM Monitor-IS

- Spare scintillator probe with embedded calibration
- Spare GM probe with embedded calibration
- Spare handset
- Replacement harness (pictured)
- Extension poles for GM Probe
- Running tool for scint probe (pictured)

Running tool

Replacement harness

Accessories for TRACERCO™ Personal Electronic Dosimeter (PED)

- Car charger
- Lanyard
- Multi region mains charger
- Travel Pack: portable dock, multi region charger, car charger and USB cable
- Desktop Dock (supplied as standard with the PED) (pictured)
- Portable Dock (pictured)
- Travel Charger (pictured)

Desktop Dock

Portable Dock

Travel Charger

Monitors & Servicing

Extension Kits for Handheld Monitors

Specially designed extension kits are available for use with our range of handheld Radiation Monitors. These can be attached to the handset or probe to take measurements at a distance. Extension kits can be supplied with a robust transit case to store and protect the extension poles and your monitor.

Protective Leather Holders

Uniquely designed protective leather holders are available for our Contamination and Dose Rate Handheld Monitors and our Personal Dosimeter.

Transit Cases

Robust, weatherproof storage and transportation cases are available to complement the range of Tracerco Radiation Monitors. Complete with a bespoke foam insert provide additional protection for your Radiation Monitors or PED when not in use.

Monitor Check Sources

For use with Contamination Monitors and our TRACERCO™ NORM Monitor-IS Check Sources are used to perform invaluable basic function tests on radiation monitors.

Safety Signs & Labels

We offer a range of radiation warning signs and adhesive labels to ensure compliance with regulations and to safeguard your workforce.

Monitors & Servicing

Setting the Standard… Awards and Accreditations

Over 50 years we have achieved a variety of awards and accreditations including those shown below and EN 60846:2004, EN 80079-34 and EN 60325:2004.

MS ISO/IEC 17025
CALIBRATION
SAMM NO. 638

Did you know…?

- As well as supplying your monitor we can also service, repair and calibrate it.
- We also offer monitors for hire.
- Please contact us to discuss your requirements.

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