

Tracerco™ Personal Electronic Dosimeters (PEDs)

X-ray and gamma ray measurement

The PEDs have been designed to be the easiest personal radiation monitors on the market to use and understand. Everything on the devices has been designed with the user in mind. The display screen features radiation graph measurements and a simple diagram of a person who fills with colour, depending on the dose of radiation received. All of our PEDs have weather, shock and drop proof housings, a smooth clean design and simple to use software.

Benefits

- Dose rate range of upto 1Sv/h, 100 R/h (PED-ER and PED-ER+)
- Energy range of up to 3 MeV
- Intrinsically safe - no need for a hot work permit (PED-IS)
- Large, clear, easy to read display with one button operation
- Audio and visual alarms with vibration functionality
- IP67 rated
- Can be used as a handheld survey meter with GPS and Bluetooth features (PED+ and PED-ER+)
- Easy dose management with free DoseVision software

Markets

- Oil and Gas
- Emergency services
- First responders
- Military
- NDT
- Mining
- Nuclear Power
- Medical
- Border Controls



PED-IS

PED Blue &
PED-ER

PED+ &
PED-ER+

Accessories

- Transit cases (PED-IS)
- Lanyards
- Desktop and portable dock (PED-IS)
- Travel adapters
- Leather / fabric holders

Tracerco™ PEDs specification

Performance			
Radiation detected	X-rays and gamma rays in range (33 KeV to 3 MeV PED-IS, PED Blue, PED+), (48 KeV to 3 MeV PED-ER, PED-ER+)*	Accumulated dose range	Dose "Man" display 0-10Sv, 0-1000 rem Digital numeric display 0-10Sv, 0-1000 rem
Detector	Single energy compensated Geiger Muller tube	Peak radiation dose rate	Digital numeric display 0-100mSv/h, 0-10 R/h (PED-IS, PED Blue, PED+) Digital numeric display 0-1 Sv/h, 0-100 R/h (PED-ER, PED-ER+)
Units	Sieverts or Rem (may be selected in DoseVision™ software)		
Memory	125,000 data point capacity. Serial non-volatile memory 10 year data retention	Dose rate range	Bar graph display 0-100 mSv/h, 0-10 R/h (PED-IS, PED Blue, PED+), 0-1 Sv/h, 0-100 R/h (PED-ER, PED-ER+) Digital numeric display 0-100 mSv/h, 0-10 R/h (PED-IS, PED Blue, PED+), 0-1 Sv/h, 0-100 R/h (PED-ER, PED-ER+)
Electrical characteristics			
Battery	Rechargeable lithium Ion. Recharge via standard 5V micro USB connection. Can be charged from PC	Low battery indication	On 8 hours battery life remaining
Battery life	300 hours typically with background radiation**		
Mechanical characteristics			
Size	104mm x 64mm x 24mm	Case material	Shock, vibration and drop resistant polymers Antistatic surface properties (PED-IS only)
Weight	190g including belt clip		
Environmental			
Ingress protection rating	IP67 (dust tight and can withstand immersion in water at depth of 1m)	Humidity range	Up to 95%
		Operating temperature range	-20°C to 50°C
Hazardous area classification code (PED-IS only) ATEX & IECEx: Zone 0, 1, 2 gas group IIA, IIB, IIC FM _C : Class I, Zone 0, Group IIA, IIB, IIC FM _{US} : Class I, Division 1, Gps A, B, C and D, Class I, Zone 0, Group IIA, IIB, IIC		Hazardous area certification code (PED-IS only) ATEX: Certification No. Baseefa11ATEX0045 Marking - Ex II 1G Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +50°C) IECEx: Certification No. IECEx BAS11.0027 Marking - Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +50°C) FM _C : Marking - CI I, ZONE 0, Ex ia IIC T3 (-20°C ≤ Ta ≤ +50°C) FM _{US} : Marking - CI I, ZONE 0, AEx ia IIC T3 (-20°C ≤ Ta ≤ +50°C) Marking - IS CI I, DIV 1, GPS ABCD T3 (-20°C ≤ Ta ≤ +50°C)	
Standard compliance BSEN 61526, EN55011, IEC60079-0, IEC60079-11, IEC61010-1, FM Class 3600, FM Class 3610, FM Class 3810, ANSI/IEC 60529, CSA-C22.2 No. 60079-0, CSA-C22.2 - E60079-11, CSA-C22.2 No. 60529, CSA C22.2 No 1010.1			

*For detailed response curve please see report by Radiation Metrology Ltd.

** Battery life on the PED+ and PED-ER+ will be reduced when using Bluetooth and GPS. Typical battery life is based on the use of the screensaver.