Tracerco™ PED-ER

Personal Electronic Dosimeter

Tracerco's range of personal electronic dosimeters (PEDs) are suitable for oil and gas, medical and life sciences, nuclear, CBRNe and emergency services, NDT, manufacturing and industrial, and environmental and waste management industries. We offer both intrinsically safe and non-intrinsically safe options for all needs.

The PED-ER is a rugged, robust, lightweight and easy-to-use, personal electronic dosimeter, for effectively monitoring, measuring and managing radiation exposure.

Features

- An extended dose rate range of up to 1 Sv/h.
- Large, clear display and intuitive graphical user interface (GUI).
- A reliable dosimeter for the most challenging radiation monitoring situations.
- Designed to keep things simple, with one-button operation and easy-to-follow menu system.
- Easily operated, with no training required.
- Audio and visual alarms (with vibration functionally), if a set dose rate is reached.

Tracerco

Providing Insight Onsite

Specifications

Mechanical	
Case Material	Tough polymers with antistatic surface properties
Size	10 x 6 x 2 cm
Weight	160 g approx.

Radiological Performance	
Radiation Detected	X-rays and gamma rays in range 33 keV to 1.25 MeV
Sensor	Single, energy compensated Geiger Müller tube
Units	Sieverts or Rem (may be selected in DoseVision software)
Radiation Dose Rate	Bargraph display 0 to 100 mSv/h or 0 -10 Rem/h Digital numeric 0 to 100 mSv/h or 0 -1000 Rem
Accumulated Dose	Dose 'man' display 0 to 10 Sv or 0 -1000 Rem Digital numeric 0 to 10 Sv or 0 -1000 Rem
Peak Radiation Dose Rate	Digital numeric 0 to 100 mSv/h or 0 -10 Rem/h
Alarms	Two alarm levels for both dose and dose rate. Alarm levels set via DoseVision software. Dedicated LEDs for dose and dose rate will flash amber for first alarm level and red for second alarm level. Loud beep and powerful vibrate alerts occur during alarm.
Overload Response	PED gives clear indication of overload when above 100 mSv/h. A special feature of the Tracerco PED is continued indication of possible accumulated dose inaccuracy due to overload. This indication is provided on both the PED and in the data in DoseVision.
Variation with Temperature	Less than ± 10% over temperature range -20°C to +50°C.
Dose Rate Linearity	± 16% over the range 2 µSv/h to 100 mSv/h

Battery	
Battery	Rechargeable lithium ion
Battery Life (with screen saver on)	Greater than 300 hours typical battery charge with background radiation and room temperature. Tested and passed according to EN61526.
Low Battery Indication	Approximately 8 hours available life left with background radiation. Tested and passed according to EN61526.
Time to Recharge	2 hours from flat

Environmental	
Operating Temperature Range	-20 to 50°C Temperature stability tested and passed according to EN61526.
Humidity Range	Up to 95% Tested and passed according to EN61526.
Vibration	20 ms^{-2} for 15 mins in each of 3 orthogonal directions in the range 10 to 33Hz. Tested and passed according to EN61526.
Shock	6 x 1 m drops onto concrete, 1 drop on each face of TRACERCO PED. Tested and passed according to EN61526.
Microphonics	60 x 10cm drops onto hard steel surface, 10 shocks on each of the main 6 faces. Tested and passed according to EN61526.
Ingress Protection Rating	IP67

Data Logging	
Memory	125,000 data point capacity. Includes dose measurements and alarms/fault events
Memory Retention	Serial non-volatile memory. 10 year data retention.
Dose Data Log Interval	Intelligent Mode: log every 0.01 µSv Periodic Mode: log every 1 minute Logging mode selected in DoseVision. Tested and passed according to EN61526.

Specifications are subject to change without notice.
For the most up-to-date specifications, please visit www.tracerco.com

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