

# 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+ provides the ultimate in radiation monitoring, measurement and management for those working in challenging environments. Ideal for use by industrial NDT workers, emergency services and first response teams (CBRNe).

### Features

- An extended dose rate range of up to 1Sv/h
- Weather, shock and drop-proof housing – ideal for rugged environments.
- Large clear display.
- Portable – can be used as both a personal dosimeter, and a handheld dose rate survey meter.
- Pop-up message alarms when dose limits are reached.



**Tracerco**

Providing Insight Onsite

# Specifications

## Mechanical

<b>Case Material</b>	Tough polymers with antistatic surface properties
<b>Size</b>	10 x 6 x 2 cm
<b>Weight</b>	160 g approx.

## Radiological Performance

<b>Radiation Detected</b>	X-rays and gamma rays in range 33 keV to 1.25 MeV
<b>Sensor</b>	Single, energy compensated Geiger Müller tube
<b>Units</b>	Sieverts or Rem (may be selected in DoseVision software)
<b>Radiation Dose Rate</b>	Bargraph display 0 to 100 mSv/h or 0 -10 Rem/h Digital numeric 0 to 100 mSv/h or 0 -1000 Rem
<b>Accumulated Dose</b>	Dose 'man' display 0 to 10 Sv or 0 -1000 Rem Digital numeric 0 to 10 Sv or 0 -1000 Rem
<b>Peak Radiation Dose Rate</b>	Digital numeric 0 to 100 mSv/h or 0 -10 Rem/h
<b>Alarms</b>	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.
<b>Overload Response</b>	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.
<b>Variation with Temperature</b>	Less than $\pm 10\%$ over temperature range -20°C to +50°C.
<b>Dose Rate Linearity</b>	$\pm 16\%$ over the range 2 $\mu$ Sv/h to 100 mSv/h

## Battery

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

## Environmental

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

## Data Logging

<b>Memory</b>	125,000 data point capacity. Includes dose measurements and alarms/fault events
<b>Memory Retention</b>	Serial non-volatile memory. 10 year data retention.
<b>Dose Data Log Interval</b>	Intelligent Mode: log every 0.01 $\mu$ Sv 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](http://www.tracerco.com)



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Version 1.0 May 2020