This product is available through:

JRT Associates

5 Nepperhan Avenue, Suite 2B Elmsford, NY 10523 800-221-0111 The EPD-G combines unequalled radiological performance for gamma dose and dose rate measurement with advanced software and hardware features.

Thermo Scientific EPD-G

Electronic Personal Dosimeter



Key Features

- Advanced radiological performance, 15 keV to 10 MeV, in a small, lightweight design
- Multi-detector technology
- Excellent response to gamma and X-radiation
- Improved power management and battery monitoring
- · Loud configurable audible alarm
- Excellent immunity to electromagnetic interference
- Enhanced, easy-to-read display with optional backlight
- Rugged battery cap and enhanced clip retention
- Improved reliability of LCD and case
- Additional software features provided
- Compatible with Thermo Scientific EPD teleadapter for wireless operations
- · Single AA battery powers the unit



The Thermo Scientific EPD-G is the gammaonly variant of the original Mk2 beta/gamma electronic personal dosimeter; incorporating essentially the same design and features, but with the beta detector and window removed. The EPD-G is suitable for use where there is no requirement for beta detection and measurement. The EPD-G provides a costeffective design, advanced radiological performance and enhanced unit ruggedness due to the removal of the beta window.

The Thermo Scientific EPD-G dosimeter is perfect for utilities, agencies, medical facilities, research laboratories and other applications where only gamma doses and dose rates need to be monitored and recorded. The EPD-G has inherited the excellent mechanical, sealing, thermal, and

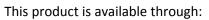
EMC performance of the beta/gamma unit. The G-variant also boasts a ruggedized battery cap and an improved display.

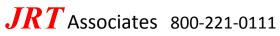
The unit is powered by a single standard AA cell, either 1.5V alkaline or 3.6V Lithium Thionyl Chloride for maximum battery life. Pre-use integrity checks may be initiated over the IR (Infra-Red) communications link as part of the EPD Issue process of Access Control or Dosimetry Management systems. These checks include detector test, battery test and battery voltage read. Display and function are controlled by a single button on the front of the unit, recessed to prevent inadvertent operation.



Options & Specifications

Radiological	
Sensitive to X and gamma radia	tion
	nts Hp (10) [deep/whole body] and Hp (0.07) [shallow/skin]
Display Units:	Sv and rem (with prefixs) OR scaled in Sv and cGy (with prefixes)
Neutron Response:	< 2%
Dose Display and Storage:	0 μSv to > 16 Sv (0 mrem to > 1600 rem)
Display Resolution:	1 μSv (0.1 mrem), up to 10 Sv
Storage Resolution:	1/64 µSv (=1.5 µrem)
Dose Rate Display:	0 μSv/h to >4 Sv/h (0 mrem/h to >400 rem/h); auto ranging
Energy Response:	Photon: Hp(10): [All ref. ¹³⁷ Cs]: ±50% 15keV to 17 keV; ±20% 17 keV to 1.5 MeV; ±30% 1.5 MeV to 6 MeV;
Lifergy nesponse.	±50% 6MeV to 10 MeV Photon: Hp(0.07): [All ref. 137Cs]: ±30% 20keV to 6 MeV; ±50% 6 MeV to 10 MeV
AI D	FIGURE IN INJUSTY. [All 18]. CS]. ±30% 2008 VIO 0 MBV 150% 0 MVV 10 10 MVV
Angular Response:	Hp(10) 137 Cs ±20% up to ±75°; Hp(10) 241 Am ±50% up to ±75°; Hp(0.07) 137 Cs ±20% up to 75° 241 Am ±50% up to 60° Hz (40) 127 Cs ±20% up to 75° 241 Am ±50% up to 60°
Accuracy:	Hp(10) ¹³⁷ Cs ±10%; Hp(0.07) ¹³⁷ Cs ±10%
Dose Rate Linearity:	Hp(10) 137 Cs: $\pm 10\% < 0.5$ Sv/h (<50 rem/h); $\pm 20\%$ 0.5 to 1 Sv/h (50 to 100 rem/h); $\pm 30\%$ 1 to 2 Sv/h (100 to 200 rem/h); $\pm 50\%$ 2 to 4 Sv/h (200 to 400 rem/h); Between 4 and 50 Sv/h continues to accumulate dose at a rate 1 Sv/h
	Hp(0.07) ¹³⁷ Cs: ±20% <1 Sv/h (<100 rem/h); Between 1 Sv/h and 50 Sv/h continues to accumulate dose at a rate > 1Sv/h
Electrical and Mechanical	
	by a single button on front of unit (recessed to prevent inadvertent operation)
Power Supply:	Single AA battery, 1.5V alkaline cell, OR 3.6V lithium thionyl chloride; battery voltage is displayable (subject to display configuration settings); ON/OFF modes switchable over IR communications link or from button (when enabled), for power-saving in intermittent usage application:
Typical battery life:	1.5V alkaline - 45-50 days continuous, extending to 70-80 days with typical use of OFF mode 3.6V lithium - 5 months continuous, extending to ~ 10 months with typical use of OFF mode
Alarm:	Fully-sealed audible and LED visual alarms for dose, dose rate, count down time, read time, and failure
7.001111.	mode; Time to Dose alarm display, based on current dose rate; audible alarm typically 98dB(A) at 20 cm with multiple modes; Hp(10) dose chirp settable from 0.01 to 100 μSv/chirp (1 μrem to 10 mrem/chirp); optional acoustic coupler/earpiece
Communications:	Infra-red (IR) interface up to 1 meter range (39"); compatible with Thermo Scientific EPD Teleadapter for wireless operations
Dimensions:	85 x 63 x 19 mm (3.3" x 2.5" x 0.8"), excluding clip
Weight:	95 g (3.2 oz), including battery and clip
Case Material:	High-impact polycarbonate/ABS blend
	Tight impact polyour bonder, the blond
Memory 10 year data retention without b	atterv
Short term dose registers for H	
Additional total-dose stores for	
Peak dose rates with time of oc	
All stored times have 1 second	
Selectable fast dose rate respo	
	nse semil
Dose clear events recorded	1 hour 20 minutes E0 accords maximum resolution 1 accord
Count down timer:	1 hour, 39 minutes, 59 seconds maximum, resolution 1 second
Event Log:	23 entries for time recording of alarms, etc., for incident assessments
Dose Profile History:	Settable interval from 2 seconds to 35 hours, store transitions of Hp(10) and Hp(0.07) at a resolution of 1 μ Sv (0.1 mrem); will store up to 579 records for transitions up to 127 μ Sv or less
Environmental	
Environmental	1000 5 - 1000 1 4400 5 - 40000
Operating Temperature:	-10°C to +50°C (+14°F to +122°F)
Humidity:	20% to 90% RH, non-condensing
Vibration:	IEC 1283: 2g, 15 minutes, 10 to 33 Hz
Shock:	1.5 m (5') drop on each surface onto concrete
EMI/EMC (incl. static discharge): Exceeds IEC 61526 requirements; exceeds more onerous MIL Standard 461D RS103







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