

thermo scientific

Portable, rugged survey meters for any application



Thermo Scientific RadEye G Series
Personal Survey Meters



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Quick, reliable gamma dose rate measurements

Thermo Scientific™ RadEye™ Series of Personal Survey Meters are light-weight, rugged instruments designed for quick and reliable measurement of gamma dose rates. Modern electronic circuitry guarantees excellent linearity over many decades of radiation intensity: from background level to 10 R/h with the standard version, 300 R/h with the high range versions, and over range indication up to 1000 R/h. The RadEye G-10 version incorporates a different energy filter in order to achieve a Sievert response curve according to ambient equivalent dose rate $H^*(10)$.

- Menu driven interface can be optimized to application
- Large, clear, backlit display for error free readings
- High range versions accommodate turnback levels up to 300 R/h (3 Sv/h)
- Intrinsically safe versions for potentially explosive environments
- Large energy compensated GM tube for precise dose rate measurement of gamma and X-ray
- Compact and rugged design for use in harsh environments
- Durable – shock resistant design
- 900 hour operation with 2 AAA batteries
- Bright LED allows for operation in smoke and darkness
- One hot and four advanced buttons – easy to use Alarm relay output – for area monitor application
- Designed to exceed ANSI N42.33 standard

The high-quality counter tube and non-metal instrument housing enable superior detection with accurate response to low energy isotopes including medical isotopes, Am-241, and other gamma energies associated with special nuclear material (SNM). The intelligent ratemeter algorithm (ADF mode) helps ensure that even small changes in radiation rates will be displayed immediately, while statistical count rate fluctuations in a stable radiation field will be effectively suppressed.



The four versions of RadEye G Ex radiation detectors are intrinsically safe and intended for industrial environments that may contain flammable and explosive materials like gases, dust and fibers. They



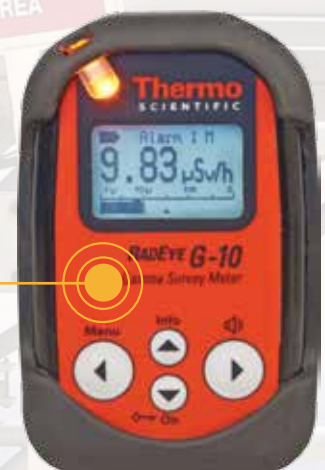
are designed according to the latest ATEX standards to meet the needs of their operator in and around hazardous areas.

RadEye PC-Software for training and analysis

All settings and the data analysis can be done by an optional Windows™-based PC-software and an accompanying reader device. Changes in configuration, occurring alarms and errors are saved in the RadEye memory. These events can be read out via the option “logbook”. In order to allow retrospective analysis of any event, the latest 1600 dose rate values are stored in the internal data memory. For each time interval both the mean and the maximum measurement values are stored.

Menu operation

All factory-set parameters can be easily modified on the RadEye Personal Survey Meters or using optional software. These menu operations can also be partially or fully blocked to simplify the instrument and to avoid any faulty operation. Navigation is made easy by a clear and intuitive user concept.




All essential functions can be easily accessed even while wearing protective gloves. The alarm-LED can be seen while the instrument is worn in a belt-holster. The instrument is also equipped with a built-in vibrator and an earphone output for silent alarming or use in very noisy environment.

Specifications

Description	RadEye G, RadEye G-Ex	RadEye GF, RadEye GF-Ex	RadEye G-10, RadEye G-10-Ex	RadEye GF-10, RadEye GF-10-Ex
Detectors	Energy-compensated Geiger-Mueller tube			
Measurement Units	R and R/h		H*(10) in Sv and Sv/h	
Dose Rate Display Range*	5 µR/h to 10 R/h	50 uR/h to 300 R/h	0.05 µSv/h to 100 mSv/h [5 urem/h-10 rem/h]	0.5 µSv/h to 3 Sv/h [50 urem/h-300 rem/h]
Dose:	up to 1000 R		H*(10) up to 10 Sv	
Count Rate for Cs-137 (622keV)	17 cps per mR/h	1.3 cps per mR/h	1.7 cps per µSv/h	0.13 cps per µSv/h
Energy Range	45 keV to 1.3 MeV (+/-30%)		50 keV to 3 MeV in accordance with IEC 60846-1 (incl. angular dependency)	
Overrange Indication	1000 R/h		up to 10 Sv/h	
Dimensions HxWxD	3.78 x 1.25 x 2.4 in. (9.6 x 3.1 x 6.1 cm)			
Weight	6.6 oz. (160g)			
Protection Degree	IP 65 according to EN 60529			
ATEX Classification (Ex Versions Only)	II 2G Ex ia IIB T4 IBExU10ATEX1096			
Battery type and life	2 AAA; 900 hours			
Part Number	4250674 RadEye G with Black Label 425067401 RadEye G with Yellow Label 425067460 RadEye G-Ex with Orange Label	425067475 RadEye GF with Yellow Label 425067470 RadEye GF-Ex with Orange Label	4250676 RadEye G-10 with Red Label 425067602 RadEye G-10 with White Label 4250675 RadEye G PTB type tested 425067660 RadEye G-10-Ex with Orange Label	425067675 RadEye GF-10 with Yellow Label 425067670 RadEye G-10-Ex with Orange Label

*Measurement range according to IEC 60846 starts at 0.5uSv/h for the RadEye G-10 and 5uSv/h for the RadEye GF-10

ATEX Certification RadEye G Ex Instruments II 2G EX ia IIB T4

	ATEX examination mark. This sign is required on all devices used in European hazardous areas.
II 2G	Classification of zones. II = device is approved for all non-mining areas. 2 = category of the device, here it means that the device is rated for the second most hazardous areas. G = designates atmosphere, in this case gas, vapors and mist.
Ex	Explosion protection based on European Ex-regulations.
ia	Explosion protection type, „ia“ is the highest level of protection.
IIB	Gas group for average reactive gases (except hydrogen, acetylene or carbon disulfide)
T4	Temperature class gives the user the maximum temperature of a surface that may be in contact to the Ex atmosphere under fault conditions. T4 is rated at 135°C.

Find out more at thermofisher.com/radeyeg

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