

The last survey meter
you will ever need



Thermo Scientific RadEye G Series
personal dose rate meters




Thermo Scientific RadEye G Series personal dose rate meters

The RadEye G is a light-weight and very rugged instrument designed for quick and reliable measurement of gamma dose rates. Modern electronic circuitry guarantees excellent linearity over 6 decades of radiation intensity: from background level to 10 R/h - with overrange 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 for high turn back levels greater than 10 R/h (100m Sv/h)
- Intrinsically safe versions for potentially explosive environments
- Large energy compensated GM tube for precise dose rate measurement of gamma and X-ray
- High sensitivity to low energy gamma radiation 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 meet relevant NATO standards and exceed ANSI 42.33

The high-quality counter tube in conjunction with the non-metal instrument housing allows detection and reliable measurements down to very low gamma energies - a crucial feature in respect to accidents involving medical isotopes or Am-241 (a component of smoke detectors). The intelligent ratemeter algorithm (ADF mode) guarantees that even the smallest change in radiation rates will be displayed immediately, while coincidentally occurring fluctuations will be effectively suppressed.



In emergency response, and in industry flammable and explosive materials like gases, dust and fibers can occur. In such potentially explosive atmospheres it is necessary to use ATEX certified devices for your measurements. The Thermo Scientific RadEye G Ex radiation detector series comprises 4 versions of intrinsically safe handheld devices for gamma and dose rate measurements. They are designed according to the  latest ATEX standards to meet the needs of their operator in and around hazardous areas.



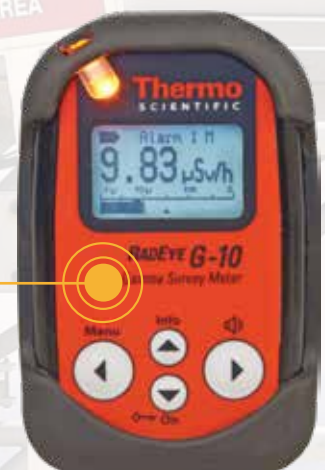
RadEye PC-Software for training and analysis

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 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	
Measurement Ranges	50 µR/h to 10 R/h	500 uR/h to 300 R/h	0.5 µSv/h to 100 mSv/h [50 urem/h-10 rem/h]	5 µSv/h to 3 Sv/h [500 urem/h-300 rem/h]
Dose:	up to 1000 R		H*(10) up to 10 Sv	
Count Rate for Cs-137 (662keV)	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, according to IEC 60846-1	45 keV to 1.3 MeV (G version), 50 keV to 3 MeV (Ex version)	45 keV to 3 MeV (GF version) 50 keV to 3 MeV (Ex version)	50 keV to 1.3 MeV (G-10 version), 50 keV to 3 MeV (Ex version)	50 keV to 3 MeV (both versions)
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

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 www.thermofisher.com/radeyeg

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