



Thermo Scientific™ RadEye™ B20 / B20-ER Multi-Purpose Survey Meter

Thermo Scientific™ RadEye™ instruments for contamination and dose rate measurements are the perfect solution for:

- First responders
- Homeland security
- Fire service
- Emergency response personnel
- Hospitals
- Nuclear industry
- Pharmaceutical industry

The Thermo Scientific™ RadEye™ B20 and B20-ER models are the next generation line of improved quick survey and precision scaler measurement meters.

These modern and compact survey meters measure alpha, beta, gamma and X-ray surface contamination. In addition, these pocket-sized instruments can also be used for accurate dose rate surveys, if used with optional energy compensated filters (17 keV – 3 MeV).

For emergency response applications, the alpha and beta contamination measurements can be discriminated using the optional alpha blocker filter.

The RadEye B20 will automatically switch to the proper measuring unit via built-in detection of any of the optional filters fitted to the face of the instrument.

This automatic function helps to avoid accidental misuse and to quickly change from one measurement to the next. These instruments are part of the Thermo Scientific™ RadEye™ family of high-end stand-alone meters, which are designed to exceed the most demanding user experience.

Application	Contamination $\alpha\beta\gamma$	Contamination $\beta\gamma$	Dose rate H*(10)	Dose rate H'07
Autodetection filter	No filter	Alpha blocker 425068581	H*(10) Filter 425068582	H'07 Filter 425068583
RadEye B20 / B20-ER				
Filter code displayed at the LCD	No code	(α blocker)	(H*(10))	(H'07)
Related units	cps cpm Bq/cm ² Bq dpm dps	cps cpm Bq/cm ² Bq dpm dps	Sv/h rem/h	Sv/h rem/h

Spec table

Product	RadEye B20	RadEye B20-ER
PN	4250685	425068510
Radiation type	Alpha, Beta, Gamma, X-ray	
Detector	1 pancake GM-tube; window dia. 44 mm (1.7"); 1.8 – 2.0 mg/cm ²	
Measuring range, IEC 60846-1	0.2 μ Sv/h - 2 mSv/h [20 μ rem - 200 mrem/h]	0.2 μ Sv/h - 100 mSv/h [20 μ rem/h - 10 rem/h]
Measuring range, contamination	0 - 10 kcps	0 - 500 kcps
2 π Efficiency	Am-241: 28%; Co-60: 25%; Sr/Y-90: 36%; C-14: 19 %	
Energy Range, IEC 60846-1	17 keV – 3 MeV	
Weight	300g (0.7lb)	
Dimensions	13 cm x 7 cm x 6 cm (5.2" x 2.8" x 2.4")	
Battery	2x AAA, >500 hrs	
Alarm notifications	LED, sound, vibrator	
Temperature range	-20 °C to 50 °C (-4 °F to 122 °F)	
Environmental rating	IP32	
Field calibration	Lutetium Adapter	

Learn more at thermofisher.com/radiationmeasurement

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