

PM1703MO-1A / B Personal Combined Radiation Detectors/Dosimeters



	PM1703MO-1A	PM1703MO-1B
Detector		
gamma	CsI(Tl), GM tube	CsI(Tl), GM tube
neutron	✘	✘
Sensitivity		
for ¹³⁷ Cs, no less	200 (s ⁻¹)/(μSv/h) (2.0 (s ⁻¹)/(μR/h))	200 (s ⁻¹)/(μSv/h) (2.0 (s ⁻¹)/(μR/h))
for ²⁴¹ Am, no less	100 (s ⁻¹)/(μSv/h) (1.0 (s ⁻¹)/(μR/h))	100 (s ⁻¹)/(μSv/h) (1.0 (s ⁻¹)/(μR/h))
Energy range		
gamma	0.033 – 3.0 MeV	0.033 – 3.0 MeV
neutron	✘	✘
Dose Rate		
gamma	0.01 μSv/h – 10 Sv/h (1 μR/h – 1000 R/h)	0.01 μSv/h – 10 Sv/h (1 μR/h – 1000 R/h)
neutron	✘	✘
Dose		
	0.01 μSv – 9.99 Sv (1 μR – 999 R)	0.01 μSv – 9.99 Sv (1 μR – 999 R)
Accuracy (at ¹³⁷Cs)	±(20+ K1/H+K2*H)% in measurement range 0.1 μSv/h - 10 Sv/h (10 μR/h-1000 R/h), where H - dose rate value in mSv/h; K1 – coefficient 0.0025 mSv/h K2 – coefficient 0.002 (mSv/h) ⁻¹	±(20+ K1/H+K2*H)% in measurement range 0.1 μSv/h - 10 Sv/h (10 μR/h-1000 R/h), where H - dose rate value in mSv/h; K1 – coefficient 0.0025 mSv/h K2 – coefficient 0.002 (mSv/h) ⁻¹
Response time	0.25 s	0.25 s
Radionuclide identification		
Special nuclear materials (SNM)	²³³ U, ²³⁵ U, ²³⁷ Np, ²³⁹ Pu	²³³ U, ²³⁵ U, ²³⁷ Np, ²³⁹ Pu
Medical radionuclides	¹⁸ F, ⁶⁷ Ga, ⁵¹ Cr, ⁷⁵ Se, ⁸⁹ Sr, ⁹⁹ Mo, ^{99m} Tc, ¹⁰³ Pd, ¹¹¹ In, ¹²³ I, ¹³¹ I, ¹⁵³ Sm, ²⁰¹ Tl, ¹³³ Xe	¹⁸ F, ⁶⁷ Ga, ⁵¹ Cr, ⁷⁵ Se, ⁸⁹ Sr, ⁹⁹ Mo, ^{99m} Tc, ¹⁰³ Pd, ¹¹¹ In, ¹²³ I, ¹³¹ I, ¹⁵³ Sm, ²⁰¹ Tl, ¹³³ Xe
Naturally occurring radioactive materials (NORM)	⁴⁰ K, ²²⁶ Ra, ²³² Th and daughters, ²³⁸ U and daughters	⁴⁰ K, ²²⁶ Ra, ²³² Th and daughters, ²³⁸ U and daughters
Industrial radionuclides	⁵⁷ Co, ⁶⁰ Co, ¹³³ Ba, ¹³⁷ Cs, ¹⁹² Ir, ²²⁶ Ra, ²⁴¹ Am	⁵⁷ Co, ⁶⁰ Co, ¹³³ Ba, ¹³⁷ Cs, ¹⁹² Ir, ²²⁶ Ra, ²⁴¹ Am
Standards compliance	ITRAP/IAEA requirements, ANSI N42.32, ANSI N42.33 (1), ANSI N42.33 (2), IEC 60846, IEC 62401	ITRAP/IAEA requirements, ANSI N42.32, ANSI N42.33 (1), ANSI N42.33 (2), IEC 60846, IEC 62401
Alarm type	visual, audio, vibration	visual, audio, vibration

Data recording	2000	2000
Environmental protection	IP65	IP65
Drop test on concrete floor	0.7 m (2.3 ft)	0.7 m (2.3 ft)
Power supply	one AA battery	one AA battery
Battery life time	up to 1000 hours	up to 1000 hours
Operating temperature	-30°C to 50°C (-22°F to 122°F)	-30°C to 50°C (-22°F to 122°F)
Size (without cover)	75 x 35 x 98 mm (3" x 1 3/8" x 3 6/7")	75 x 35 x 98 mm (3" x 1 3/8" x 3 6/7")
Weight		
(without cover)	250 g (8.82 oz)	250 g (8.82 oz)
(with cover)	290 g (10.23 oz)	290 g (10.23 oz)
Low battery warning	LCD	LCD
Overload indication		
gamma	OL	OL
neutron	✘	✘
PC Communication	USB, Bluetooth	IRDA, Bluetooth