

## PM1401MA / MB Personal Radiation Detectors

	PM1401MA	PM1401MB
<b>Detector</b>		
gamma	CsI(Tl)	CsI(Tl)
neutron	✘	✘
<b>Sensitivity</b>		
for <sup>137</sup> Cs, no less	100 (s <sup>-1</sup> )/(μSv/h) (1.0 (s <sup>-1</sup> )/(μR/h))	100 (s <sup>-1</sup> )/(μSv/h) (1.0 (s <sup>-1</sup> )/(μR/h))
for <sup>241</sup> Am, no less	100 (s <sup>-1</sup> )/(μSv/h) (1.0 (s <sup>-1</sup> )/(μR/h))	100 (s <sup>-1</sup> )/(μSv/h) (1.0 (s <sup>-1</sup> )/(μR/h))
<b>Energy range</b>		
gamma	0.033 – 3.0 MeV	0.033 – 3.0 MeV
neutron	✘	✘
<b>Dose Rate</b>		
gamma	0.01 – 99.99 μSv/h (1 – 9999 μR/h)	0.01 – 99.99 μSv/h (1 – 9999 μR/h)
neutron	✘	✘
<b>Dose</b>	✘	✘
<b>Accuracy</b>	±30% (in range 0.1 – 70 μSv/h (10 – 7000 μR/h) )	±30% (in range 0.1 – 70 μSv/h (10 – 7000 μR/h) )
<b>Response time</b>	0.25 s	0.25 s
<b>Radionuclide identification using Bluetooth communication with external Pocket PC or smartphone</b>		
Special nuclear materials (SNM)	✘	<sup>233</sup> U, <sup>235</sup> U, <sup>237</sup> Np, Pu
Medical radionuclides	✘	<sup>18</sup> F, <sup>67</sup> Ga, <sup>51</sup> Cr, <sup>75</sup> Se, <sup>89</sup> Sr, <sup>99</sup> Mo, <sup>99m</sup> Tc, <sup>103</sup> Pd, <sup>111</sup> In, <sup>123</sup> I, <sup>131</sup> I, <sup>153</sup> Sm, <sup>201</sup> Tl, <sup>133</sup> Xe
Naturally occurring radioactive materials (NORM)	✘	<sup>40</sup> K, <sup>226</sup> Ra, <sup>232</sup> Th and daughters, <sup>238</sup> U and daughters
Industrial radionuclides	✘	<sup>57</sup> Co, <sup>60</sup> Co, <sup>133</sup> Ba, <sup>137</sup> Cs, <sup>192</sup> Ir, <sup>226</sup> Ra, <sup>241</sup> Am
<b>Standards compliance</b>	ITRAP/IAEA requirements, ANSI N42.32, ANSI N42.33(1), IEC 62401	ITRAP/IAEA requirements, ANSI N42.32, ANSI N42.33 (1), ANSI N42.34, IEC 62401
<b>Alarm type</b>	visual, audio, vibration	visual, audio, vibration
<b>Data recording</b>	1000	1000

<b>Environmental protection</b>	IP65	IP65
<b>Drop test on concrete floor</b>	1.5 m (4.9 ft)	1.5 m (4.9 ft)
<b>Power supply</b>	one AA battery	one AA battery
<b>Battery life time</b>	up to 1000 hours	up to 1000 hours
<b>Operating temperature</b>	-30°C to 50°C (-22°F to 122°F)	-30°C to 50°C (-22°F to 122°F)
<b>Size (without cover)</b>	92 x 57 x 32 mm (3 5/8" x 2 1/4" x 1 1/4")	103 x 57 x 32 mm (4" x 2 1/4" x 1 1/4")
<b>Weight</b>		
(without cover)	250 g (8.8 oz)	280 g (9.9 oz)
(with cover)		
<b>Low battery warning</b>	LCD	LCD
<b>Overload indication</b>		
gamma	OL	OL
neutron	✘	✘
<b>PC Communication</b>	IRDA	IRDA, Bluetooth