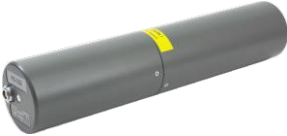

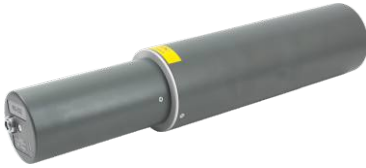


SPECTROMETRIC GAMMA RADIATION DETECTION UNITS

for use as part of stationary and mobile monitoring stations and robot devices



DETECTION UNIT		BDKG-05M	BDKG-11M	BDKG-19M
Detector		Scintillator, NaI(Tl) Ø40x40 mm	Scintillator, NaI(Tl) Ø63x63 mm	Scintillator, NaI(Tl) Ø63x160 mm
Energy range		20 keV – 3 MeV	20 keV – 3 MeV	20 keV – 3 MeV
Measurement range of ambient dose equivalent rate		30 nSv/h – 300 µSv/h	30 nSv/h – 150 µSv/h	30 nSv/h – 50 µSv/h
Limits of tolerable intrinsic relative error		±20%	±20%	±20%
Energy dependence relative to 662 keV (¹³⁷ Cs)		±15% (50 keV – 3 MeV)	±15% (50 keV – 3 MeV)	±15% (50 keV – 3 MeV)
Typical sensitivity to gamma radiation	²⁴¹ Am	cps/(µSv·h ⁻¹) 5400	cps/(µSv·h ⁻¹) 13500	cps/(µSv·h ⁻¹) 37000
	¹³⁷ Cs	800	2200	6000
	⁶⁰ Co	420	1200	2500
Response time for dose rate change from 0.1 to 1 µSv/h [accuracy error ≤±10%]		≤2 s	≤2 s	≤2 s
Spectrometry (Instrument spectrum)		+	+	+
Typical resolution at 662 keV (¹³⁷ Cs)		7.5%	7.5%	8%
Burn-up life		≥100 Sv	≥100 Sv	≥100 Sv
Number of ADC channels		1024	1024	1024
Protection class		IP54	IP54	IP54
Interface		USB / RS232 / Bluetooth (via interface adapter)		
Power supply		USB – USB port of a personal computer or other device; RS 232 – 5–9 VDC power source; Bluetooth – interface adapter		
Mean operating life		≥15 years	≥15 years	≥15 years
Operation temperature range		-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
Relative humidity with air temperature ≤35°C without condensation		≤95%	≤95%	≤95%
Overall dimensions, weight		Ø60x291 mm, 0.9 kg	Ø76x315 mm, 1.7 kg	Ø76x425 mm, 3.0 kg
Image				



Design and specifications are subject to change without notice

CapeScintTM

Standard and Custom
Radiation Detectors

CapeScint
6 Huron Dr. Suite 1B
Natick, MA 01760 | +1 (508) 653-7100
www.capescent.com | sales@capescent.com