

ERK-525-3 EMERGENCY RESPONSE KIT / 3 PROBES

The ERK-525-3 is a complete portable radiation monitoring system designed to measure a broad range of radioisotope contamination under field conditions. The DSM-525 is a dual probe (connected at the same time) survey meter that measures contamination and dose levels from micro-R to 200 mR/hr plus the kit contains a GP-1003 that can measure gamma up to 10 R/hr. The ERK-525-3 does not require changing probes to obtain the full operational benefits of the system except when using the GP1003 (the probe can be “Hot Swapped”); the user needs only to turn the selector switch to the desired probe and the rest of the operation is automatic. The instrument and accessories are contained in a very durable water resistant carrying case for easy storage and portability.

FEATURES:

- ◆ **LARGE DIGITAL DISPLAY**
- ◆ **AUTO RANGING UNITS**
- ◆ **DUAL MODE CAPACITY FOR DOSE RATE & COUNT RATE**
- ◆ **HP-265, MRSP-1 and GP-1003 PROBES**



DSM-525 SPECIFICATIONS

Dose/Counts Switch	Change Dose Rate to Count Rate by Toggling an External Switch
Display	LCD 4-Digit x .75" LCD w/LED Backlight
Two External Probe Inputs	Kit Includes 3 Probes – HP-265 (GM), MRSP-1 (Scintillation), GP-1003 (Energy Compensated GM)
Dose Range	See Probe Specifications Below
Energy Range	See Probe Specifications Below
CPM Range	0-999.9 Kcpm or Kcps
Probe Linearization	Internal adjust for calibration constant and dead time
Scaler Ranges	0-999.9 Kcounts
Scaler Count Time Ranges	10-2550 Seconds (10 second increments)
Alarms	5-95% of Range
Diagnostics	Low Battery, Over-range - Audible & Visual Alarms
Range Adjustment	Auto-Ranging All Scales
Electrical Non-Linearity	< 5% Full Scale
Response Time	Fast - 10-2550 Seconds (adjustable) Slow 10-250 seconds (adjustable)
Drift	< 5%
Environmental	-20°F [-28°C] to 140°F [60°C] 5-95% RH IPX4 Housing
High Voltage Adjustable	400-1250 VDC Regulation +-1%
Battery	6 - "AA" Alkaline (nominal 200hrs Operation)
Dimensions	6.25" (16cm) H x 4" (10cm) W x 7" (18cm) L
Weight	2.5 lbs. (1.2 Kilos)

HP-265 SPECIFICATIONS:

General Use	Alpha, Beta, Gamma Detection
Detector Type	Halogen-Quenched GM Pancake Tube
CPM Range	0-999.9 Kcpm or Kcps
Dose Range	0-200 mR/hr (Cs¹³⁷) - Requires linearization above 50 mR/hr
Window	1.7 ± 0.3 mg/cm² mica, protected by a Copper screen (79% open)
Window Area	Active – 15.5 cm ² (2.4 in ²) Open – 12.3 cm ² (1.9 in ²)
Efficiency (4π)	C ¹⁴ – 5%, SrY ⁹⁰ – 22%, Tc ⁹⁹ – 19%, P ³² - 32%
Energy Response	Energy Dependent
Sensitivity (Cs ¹³⁷ gamma)	≈ 3300 cpm/mR/hr
Operating Voltage	900 vdc
Dead Time	80 μsec
Normal Background	≈ 60 cpm
Environmental	-20°F [-28°C] to 140°F [60°C] 5-95% RH
Connector	BNC (other types available)
Dimensions	2.74" (7cm) Dia x 11" (28cm) L
Weight	1lbs (0.45 kg)

MRSP-1 SPECIFICATIONS:

General Use	Low Level Gamma Dose Rate Measurements
Detector Type	1.5" dia x 1" Plastic Scintillator
CPM Range	0-999.9 Kcpm
Dose Range	1 μR/hr - 10 mR/hr (Cs¹³⁷)
Energy Response	40keV – 2 MeV (near tissue equivalent)
Sensitivity (Cs ¹³⁷ gamma)	≈ 100 cpm/μR/hr
Efficiency (4π)	≈ 2%
Background (10 μR/hr)	≈ 900 cpm
Operating Voltage	600 - 1100 vdc
Dead Time	≈ 35 μsec
Compatibility	All Johnson Rate Meters
Environmental	-20°F [-28°C] to 140°F [60°C] 5-95% RH
Connector	BNC (other types available)
Dimensions	1.7" (4.25cm) Dia x 6" (15cm) L
Weight	4 oz (0.11 kg)

GP-1003 SPECIFICATIONS:

General Use	Gamma Dose Rate Measurements
Detector Type	Energy Compensated, Halogen-Quenched GM Tube
CPM Range	0-999.9 Kcpm
Dose Range	100 μR/hr - 10 R/hr (Cs¹³⁷)
Energy Response	± 20% (60keV – 3 MeV)
Sensitivity (Cs ¹³⁷ gamma)	≈ 90 cpm/mR/hr
Operating Voltage	500 vdc
Dead Time	≈ 15 μsec
Compatibility	All Johnson Rate Meters
Environmental	-20°F [-28°C] to 140°F [60°C] 5-95% RH
Connector	BNC (other types available)
Dimensions	1" (2.5cm) Dia x 4" (10cm) L
Weight	4 oz (0.11 kg)