

# ERK-525+ EMERGENCY RESPONSE KIT/ 3 Probes

The ERK-525+ 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+ 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	<b>Halogen-Quenched GM Pancake Tube</b>
CPM Range	0-999.9 Kcpm or Kcps
Dose Range	<b>0-200 mR/hr (Cs<sup>137</sup>) - Requires linearization above 50 mR/hr</b>
Window	<b>1.7 ± 0.3 mg/cm<sup>2</sup> mica, protected by a Copper screen (79% open)</b>
Window Area	Active – 15.5 cm <sup>2</sup> (2.4 in <sup>2</sup> ) Open – 12.3 cm <sup>2</sup> (1.9 in <sup>2</sup> )
Efficiency (4π)	C <sup>14</sup> – 5%, SrY <sup>90</sup> – 22%, Tc <sup>99</sup> – 19%, P <sup>32</sup> - 32%
Energy Response	Energy Dependent
Sensitivity (Cs <sup>137</sup> gamma)	≈ <b>3300 cpm/mR/hr</b>
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	<b>2.74" (7cm) Dia x 11" (28cm) L</b>
Weight	<b>1lbs (0.45 kg)</b>

### MRSP-1 SPECIFICATIONS:

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

### GP-1003 SPECIFICATIONS:

General Use	Gamma Dose Rate Measurements
Detector Type	<b>Energy Compensated, Halogen-Quenched GM Tube</b>
CPM Range	0-999.9 Kcpm
Dose Range	<b>100 μR/hr - 10 R/hr (Cs<sup>137</sup>)</b>
Energy Response	± 20% (60keV – 3 MeV)
Sensitivity (Cs <sup>137</sup> gamma)	≈ <b>90 cpm/mR/hr</b>
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	<b>1" (2.5cm) Dia x 4" (10cm) L</b>
Weight	<b>4 oz (0.11 kg)</b>