

MARSS Responder Specifications

Detector Unit

Physical

Size: 3.6 in x 4.9 in x 8 in (width x height x length)

Weight: 4.5 lbs

Power (Selectable)

Battery: 10 high-capacity "AA" NiMH, option to operate with "AA" standard Alkaline batteries

Optional External Power: 1 2V DC

Communication (Selectable)

Wired: 9-pin RS-232 serial port

Wireless: via Bluetooth™ - internally powered, FCC compliant, with external antenna



Visual (LED) and Audible Indicators

-Power On

-Charging

-External power supply

-Neutron warning/alarm

-Gamma warning/alarm Warning alarms indicated by blinking, alarm levels by solid on

Audible, switched speaker and earphone

Detectors

Gamma: Co-Planar Grid (CPG) Cadmium Zinc Telluride (CZT) Detector

Size: 15mm x 15mm x 7.5mm

Resolution: 3.2-4.2% @ 662 keV

Neutron: Cylindrical ³He Neutron Detector

Gas Pressure: 15,200 (Torr)

Cathode Material: Stainless Steel

Maximum length: 4.41/111.9 (inch/mm)

Effective Length: 2.50/63.5 (inch/mm)

Maximum Diameter: 0.50/12.7 (inch/mm)

Effective Diameter: 0.45/11.4 (inch/mm)

Operating Temperature: -40 to +100 (F)

Effective Volume: 6.51 (cm³)

Thermal Neutron Sensitivity: 15.5 (cps/nV)

Optional External Detector:

A MHV connector allows for a pulse-based detector (such as NaI) to be used in lieu of the internal detector.

Rugged PDA

Physical

Size: 16.5 cm x 9.5 cm x 4.5 cm (6.5 in x 3.75 in x 1.75 in)

Weight: 0.49/17 (kg/oz)

Processor: 400 MHz Intel PXA255 Xscale CPU

Memory: 64 MB high-speed SD-RAM

Battery: Internal 3800 mAh NiMH

Operating Temperature: -30° C to +60° C

