



FEATURES

The SOR/RF dosimeter is used for residual/ambient gamma neutron measurement

- Assignable electronic dosimeters
- Light, small and waterproof
- Rugged for battlefield use
- Hand free communication, pass-by exchange
- Data communication through clothing layers
- X-ray / gamma energies: 50 keV to 6 MeV
- Qualified Mil-STD-461F RS103
- E Field pulsed modulation greater than 200 V/m

SOR/RF ELECTRONIC DOSIMETER

Ambient/LLR

The SOR/RF is a small and rugged dosimeter that can be used in battlefield, as well as in various international missions where Low Level Radiations (LLR) performance is needed.

The SOR/RF meets and exceeds current military and civil standards, as it was designed to sustain harsh environments

Moreover, the SOR/RF has been specifically designed to resist to EMP and EMC effects, as well as radars and jammers.

health physics

A Mirion Technologies Division

Featuring:



FUNCTIONAL CHARACTERISTICS

- Selectable units:
cGy; cGy/h; mSv; mSv/h; μ Sv; μ S/h;
mrem and mrem/h
- 4 configurable dose and dose rate
alarm levels
- Up to one year battery life under
normal conditions
- User selectable display modes
- Backlit display
- Exhaustive periodic self-testing,
including the detector
- Selectable Historical record of
measurements and events (3800
steps; 10 s; 1 min ;10 min; 1 h; 24 h)
- Data storage in EEPROM
(qualified > 10 years without battery)
- Low battery (16 h left) pre-alarm and
alarm if the battery is removed
- Neck lanyard or clip
- Training mode included**



SOR/RF worn round
the neck



SOR/RF inside the
arm-band pouch
(accessory)

PHYSICAL CHARATERISTICS

- Hp(10) dose equivalent measurements:
from 50 keV to 6 MeV
- Ambient gamma dose measurement range:
1 μ Gy to 10 Gy
- Gamma dose rate measurement range:
from 0.1 μ Gy/h to 10 Gy/h
- Gamma dose rate display:
from 1* or 10 μ Gy/h to 10 Gy/h
- Saturation indication (above 10 Gy/h)
- Relative error of ambient measurement:
 - $\pm 20\%$ over the dose measurement range
- Energy response:
 - $\pm 20\%$ in the range 60 keV to 2 MeV
 - $\pm 50\%$ in the range 2 MeV to 6 MeV

- Accredited factory calibration to IEC 17025
(COFRAC, procedure #127023)
- Cs¹³⁷ (≈ 25 mSv/h), Am²⁴¹ (≈ 35 mSv/h),Co⁶⁰ (≈ 9 mSv/h)
- conformity scope $\pm 10\%$ Cs137 with *uncertainty* (K=2)
= $\pm 5\%$

MECHANICAL CHARACTERISTICS

- Dimensions: 80.4 x 48 x 9 mm (flat housing)
(3.16 x 1.85 x 0.35 in)
- Weight: 55 g (1.94 oz)

ENVIRONMENTAL CHARACTERISTICS

- -20° to + 50°C (-4°F + 122°F) (normal operating range,
standard battery 3V LiMnO₂ CR2450)
- Resistant to EMP and EMC (radars, GSM, jammers,...)
200 V/m pulse modulation, (MiL-STD-461F RS103)
- Resistant to water immersion (IP67: 1 m / 39.3 in),
drops, shocks,vibrations, low pressure,
 - Initial conditions, NBC environmental conditions
- **Complies with the following standards:**
 - Meets MIL-STD-810 and MIL-STD-461 requirements
 - Qualified by most of the NATO military laboratories
 - Complies with IEC 1283, ANSI 42-20 and NATO D104
 - NATO number: 6665 14 563 9423



SOR/RF version
to be clipped on a
pocket

NATO supplier n° F8929

Development status: Series production

* LLR : Low level Radiation

**a specific configuration software is requi-
red for the XOM reader



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