

# DMC 2000 GN

## Personal Electronic Dosimeter



The DMC 2000GN is a gamma and neutron dosimeter featuring dose rate and programmable alarms. The DMC 2000GN is user friendly, lightweight and waterproof.

- Real time separate gamma and neutron dose, dose rate and alarms
- Full neutron energy range coverage
- Very good gamma rejection in neutron channel
- Audible and visual alarms
- Hands free, pass-by exchange
- Fully compatible with DMC 2000 hand free readers and dosimetry software



The DMC 2000 GN takes advantage of a unique licensed neutron detection technology based a large single diode. The full energy range of thermal, intermediate and high energy neutrons is covered with a high sensitivity and very good gamma rejection, tested to 6 MeV.

In addition, a gamma section identical to the proven solution of the DMC 2000, allows the user to measure the gamma dose from 50 keV to over 6 MeV gamma range with a unique linearity to over 1,000 R/Hr (10 Sv/Hr).

# DMC 2000 GN



Neutron dose display



Neutron dose rate display



Front view



Rear view with clip

## PHYSICAL CHARACTERISTICS

- Compliant to IEC 61526 Ed2 for gamma and neutron
- Display units: mRem, uSv or mSv

### Neutron Measurement:

- Dose display: 0.1 mRem to 1000 Rem (1  $\mu$ Sv to 10 Sv)
- Dose rate display: 10  $\mu$ Sv/h to 10 Sv/h
- Measurement range: 1 mRem to 1000 Rem (10  $\mu$ Sv to 10 Sv)
- Energy range: 0.025 eV to 15 MeV

### Gamma Measurement:

- Dose display: 0.1 mRem to 1000 Rem (1  $\mu$ Sv to 10 Sv)
- Rate display: 0.01 mRem/h to 1000 rem/h (0.1  $\mu$ Sv/h to 10 Sv/h)
- Energy range: 50 keV to 6 MeV
- Linearity:
  - $\leq \pm 10\%$  up to 100 Rem/h (1 Sv/h)
  - $\leq \pm 25\%$  up to 1000 Rem/h (10 Sv/h)
- Accuracy:  $<10\%$  (137Cs,  $\sim 25$  mSv/h, including  $\pm 5\%$  of extended uncertainty K=2)

## ELECTRICAL CHARACTERISTICS

- Standard calculator battery LiMnO<sub>2</sub> CR2450
- Six (6) month battery life with continuous use

## MECHANICAL CHARACTERISTICS

- Dimensions (l x w x h):
  - 3.4 x 1.9 x 0.82 in (87 x 48 x 21 mm) without clip
- Weight:
  - 2.8 oz (80 g) with battery

## ENVIRONMENTAL CHARACTERISTICS

- Temperature range: -10°C to 50°C (14°F to 122°F)
- Humidity:  $< 90\%$  at 42°C (108°F)
- Storage: -30°C to 71°C (-22°F to 160°F)
- Shock, vibration and drop resistant
- Waterproof



Histogram available with DOSIMASS software

The histogram enables neutron and gamma doses, events, to be reconstructed in detail (4000 steps of 10 s, 1 min, 10 min, 1 h or 24 h). Radiological supervisors can then analyze the data surrounding an incident.

