

# DMC-2000S



- operational dosimetry for the nuclear industry
- operational dosimetry for personnel working with ionizing radiation sources

**pass-by data  
exchange**

**compact**

**rugged**

**economical**

- can be used in autonomous mode or integrated into a dosimetry system
- shared or individually-assigned use
- tracking by area or sub-area
- history including locating data
- audible and visual alarms
- detection self-test
- commercially-available battery
- remote dosimetry & extremity measurements; can also be used as an area monitor
- compatible with DMC 100/90\*, LDM 91/101\*, CDM 21\*



**X and gamma > 50 keV**

**Hp(10) individual dose  
equivalent**

**Individual dose rate  
equivalent**

## Physical Characteristics

- complies with CEI 1283, ANSI 42 20A
- display units:  $\mu\text{Sv}$ , mSv, mrem or cGy
- measurement range:
  - dose: 1  $\mu\text{Sv}$  to 10 Sv (0.1 mrem to 1000 rem)
  - rate: 0.1  $\mu\text{Sv/h}$  to 10 Sv/h (0.01 mrem/h to 1000 rem/h)
  - (display: 0.01 mSv/h to 10 Sv/h; 1 mrem/h to 1000 rem/h)
- linearity:
  - < +/- 10 % up to 1 Sv/h (100 rem/h)
  - < +/- 25 % up to 10 Sv/h (1000 rem/h)
- energy response:
  - detects from 50 keV to 6 MeV
- accuracy:
  - < +/- 5 % (  $^{137}\text{Cs}$ , 0.2 mSv/h; 20 mrem/h )

## Electrical Characteristics

- $\text{LiMnO}_2$ , CR2450 battery, 1 year battery life

## Mechanical Characteristics

- dimensions: 84 x 48 x 17.5mm (3.3" x 1.9" x 0.7")
- weight: < 70 g; 2.5 oz (with battery)
- worn by a detachable clip

## Environmental Characteristics

- temperature: -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
- EMC: complies with and exceeds CE standards

## Customization

- setup can be accessed by user with DOSIMASS\* software

## Options, Accessories

- waterproof version
- photo holder
- LDM 91/101\* adapter sleeve

## Related Products\*

MGP Instruments offers a range of products which can be used with the **DMC 2000 S** to create integrated dosimetry systems including:

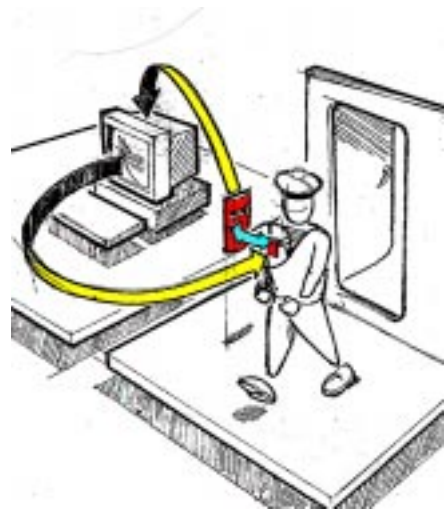
- LDM 2000 pass-by data exchange
- DOSIVIEW dosimetry centralization and access control software
- DOSIMASS dosimeter configuration software
- LDM 91/101 dosimeter readers

(\*literature available on request)

The **pass-by data exchange feature** gives unequalled operational flexibility:

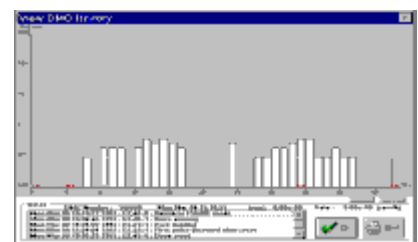
sub-area tracking plus real-time worker location, without imposing any restrictions on the dosimeter wearer.

- dosimeters can be read even when placed under clothing
- bi-directional transmission and protection against disturbances
- identifies and transfers dosimeter data on up to 3 people crossing the LDM 2000\* reader's field
- typical range 1.2 m; 4' ( 2.4 m; 8' with LDM 2000\* + external antenna)



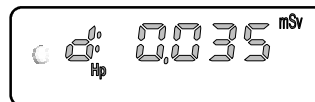
The **history** enables detailed event reconstruction for efficient analysis of incident situation circumstances.

- save to EEPROM
- dose increments 10s, 1 min., 10 min., or 24 hours with compression of null periods.
- event log (alarms, faults, status changes) which posts events in accordance with the time period selected: 1s, 1 min. or 1 hr.
- entry/exit date and time plus location
- stores several utilization periods (up to 700 steps)

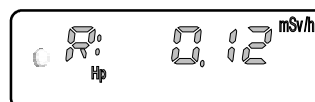


- graphic representation using DOSIMASS\* software

Alphanumeric **display directly readable** by the wearer, providing easy access to many functions.



dose

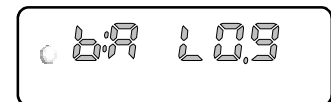


dose rate

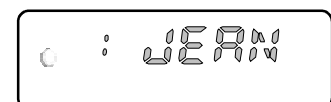


dose and alarm

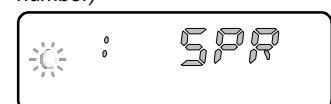
- alternating dose and rate display by pressing pushbutton
- alternating dose and rate display or display switch by pressing pushbutton
- alarm symbols or alternating messages
- alarm threshold checks



battery low: 9 hour life



dosimeter assigned (name or number)



message

- last-use result check when paused
- wearer identification display when paused in "assigned" mode
- Message reception when reader crossed (emergency call function)

Due to evolutions in standards and equipment, the information provided is subject to change without notice. Please contact us for confirmation.