



Dosimeter dose gamma-neutrons DDGN-02 (ДДГН-02)

Dosimeter is designed for use as the means of the individual radiation control (IRC) for the purposes of receiving the latest updates on the accumulated radiation dose at any moment in time without application of additional devices for reading the information.

The data reading is achieved by visual inspection (through the dosimeter ocular).

ДДГН-02 Dosimeter is resistant to the effects of electromagnetic fields, does not require the use and periodic replacement of batteries (uses autonomous charger). The autonomous 3V-250 charger with no batteries makes the device convenient and indispensable for field applications.

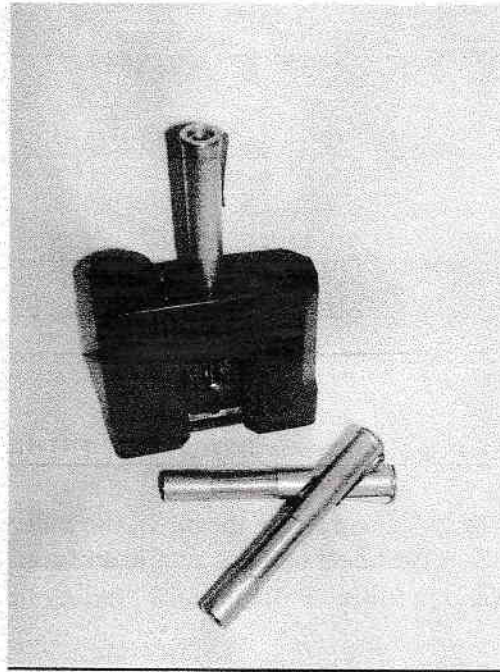
The instrument is airtight and shock resistant, it can be in service for the period of up to 15 years, and then only 10% of its parts actually need replacement.

Currently ДДГН-02 dosimeters are produced by «MR- Kvant» Company in Kyiv.

DDGN-02 Dosimeter features the following advantages:

- ❖ Sensitive to pulsed radiation and neutrons
- ❖ Easy in use
- ❖ Reliable
- ❖ Durable
- ❖ Airtight
- ❖ No need of batteries
- ❖ Can be used in the field
- ❖ Resistant to shock and vibrations of various amplitude

- ❖ Priced lower compared to its counterparts
- ❖ Long-term of operational life and storage



Specifications of DDGN-02 Dosimeter

- Energy range of photon emission registered by the dosimeter covers from 0,05 to 2,5 MeV
- Measurement range for photon and neutron radiation comprises 0,1 to 2 mGy
- The dependence DDGN-02 dosimeter sensitivity on 1250 keV of gamma radiation of ^{60}Co radionuclide in the range of photon energies from 0,05 to 2,5 MeV is from minus 25% to plus 25%
- Operational conditions:
 - Ambient temperature from minus 50 °C to plus 50 °C
 - Rate of temperature change at least 10°C/h
 - Relative humidity up 95 % (upper threshold) at +35°C
 - Ambient pressure in the range 66-106,7 kPa

Operating principle of DDGN-02 Dosimeter

- Ionizing radiation produces in the ionization chamber of the charged dosimeter ionization current which reduces the condenser potential and induces the deviation of the electroscopes fiber which also serves as the needle of the dosimeter scale
- The decrease in the potential is proportional to the radiation dose

- The potential is measured through the use of electroscopes
- Measurements reading is achieved visually through the optical ocular placed inside the dosimeter and fitted with a scale
- Upon reading the autonomous charger restores the dosimeter to service

Applications

- Radiology services
- Specialized departments of production companies
- Specialized military units
- Operational rescue teams
- R&D laboratories
- Sanitation and epidemiological services
- Health care institutions
- Nuclear energy enterprises

ДДГН-02 dosimeters can be supplied in sets of 10 pieces with 3Y-250 charger or in lots of 10, 20 ... pieces with one 3Y-250 charger.

The price of one DDCN-02 set (10 dosimeters+1 charger) is 980 USD.

Contact information (mail address, website, e-mail, phone, fax, English speaking contact person):

mail address: «MR-KVANT», LLC, 07300, Sholudenko Str.1, VYSHGOROD city, UKRAINE

website: <https://mrkvant5.wixsite.com/website>

e-mail:

mr_kvant@ukr.net

mma2006.78@gmail.com

phone: +380674015224, +380963282524

fax: +380444973671

English speaking contact person: **MARIIA MITROKHINA +380963282524**