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NUCLEAR
MEDICINE

RDU-02, RDU-02R

RADIATION DISPLAY UNIT



MAIN ADVANTAGES

- Compact local display unit
- Wide range of connectable detectors
- User-friendly colour touchscreen display
- Integrated visual and audible alarms
- Local archive of values for up to 5000 values with an adjustable storage period from 10 s.
- Possibility of sending preset commands from the display unit directly to the connected detectors
- Connection to the host system using the Ethernet interface
- External alarm units can be connected
- A robust RDU-02R version is available

PURPOSE

RDU-02 is a compact display unit intended for use in radiation monitoring systems. It provides local displaying of measured values, and signalling when preset alarm levels are exceeded. Up to four detectors can be connected directly to this unit by Ethernet or RS-485.

The basic functions of the device are:

- displaying current values from 1-4 measuring channels,
- storing of measured values into the archive,
- indicating when the set alarm levels have been exceeded acoustically, optically on the display, and optionally also with a relay output signal,
- fault and alarm visual and audible signalling,
- setting of parameters in connected detectors via touch screen (alarm levels etc.),

The measured values from the connected detectors and the status of the unit are displayed on the local display and can simultaneously be transmitted to the host system using the Ethernet interface (RJ-45 connector).

Parameter setting is also possible from a connected PC via the user-friendly RMS UserSetup software.

A robust, industrial version RDU-02R is also available, featuring a metal enclosure and integrated signal beacons. Optionally, it can be equipped with a probe for measuring gamma dose equivalent rate.

SPECIFICATIONS

Display	touchscreen, colour LCD
Display diagonal	4.3"
Dimensions (W × H × D)	
RDU-02	(160 × 90 × 52) mm
RDU-02R	(221 × 240 × 80) mm
Power supply	PoE +48 V (IEEE 802.3af) (optionally power adaptor 12/24 VDC)
Weight	
RDU-02	approximately 1 kg
RDU-02R	approximately 3 kg
Operating temperature range	from -20°C to 55°C
Ingress protection	
RDU-02	IP 42
RDU-02R	IP 65
Detector interfaces	Ethernet, optionally RS-485
Host system interface	Ethernet, optionally also RS-485 and relay outputs

RDU-02, RDU-02R

RADIATION DISPLAY UNIT

OPTIONAL FEATURES

RDU-02	Integrated signal tower with 3 strong optical elements (green, amber, red)
RDU-02	One or two cable glands with RS-485 interface, relay outputs, and +12/24 V power supply (pointing downwards or to the back side)
RDU-02	One or two Fischer 11-pin connectors with RS-485 interface, relay outputs, and +12/24 V power supply (pointing downwards)
RDU-02R	Smart Gamma Detector SGD-01e for measuring gamma dose equivalent rate with a measuring range of (5E-8 to 2.5E-1 Sv/h)
RDU-02R	Two or three cable glands at the bottom panel with RS-485 interface, relay outputs, and +12/24 V power supply
RDU-02R	Two or three ECTA 12-pin connectors at the bottom panel with RS-485 interface, relay outputs, and +12/24 V

OPTIONAL ACCESSORIES

1-0214-00165	Stabilized PoE power adapter (injector) with output voltage +48 V
50-A-0017314	Frame for fixed wall mounting of RDU-02 (necessary for models with the cable glands at the back side and/or for models with the integrated signal tower)

RELATED PRODUCTS

RDU-22	Display Unit for 16 measurement channels
ASU-50	Alarm Slave Unit
RMS	Radiation Monitoring System



RDU-02 with integrated signal tower



RDU-02 with two cable glands pointing downwards



RDU-02R with the SGD-01e gamma detector and three ECTA connectors



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Specification subject to change without prior written notice.

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