

RMS

RADIATION MONITORING SYSTEM



MAIN ADVANTAGES

- Modular system
- Interconnection with environmental, air and liquid monitoring probes
- Software application provides complete management of radiation monitoring system
- Availability of current and archive values
- Single-channel and multi-channel tables and graphs
- User-friendly graphical interface

PURPOSE

RMS is a standardized system for monitoring the radiation situation. Various radiation monitors, display units and signaling units can be connected to the system.

Radiation detectors can be connected to the RMS server in two basic ways:

- Directly via the LAN or RS-485 ports installed in the server.
- Through the RPU/RDU display units, which enable the local presentation of data from the connected detectors, and which are connected to the server via LAN or RS-485.

Data from RMS server are presented on workstations using RMS Client application. Among other things, the application allows you to set selected RMS parameters, such as alarm levels.

Data are displayed in a user-friendly way in the form of tables or three different types of graphs (line, bar, ladder). The application also allows printing of reports.

The RMS radiation monitoring system consists of three basic components:

- Radiation detectors and display units
- Server, which includes:
 - ORACLE database, in which measured data and system settings are stored

- Services ensuring the collection of data at regular intervals and their storage in the database. They also ensure the transmission of selected parameters to the detectors.
- Workstations with the RMS Client application ensuring the presentation of measured values and the implementation of user commands.

The RMS Client includes the following main modules:

- Measurement - displays a summary of all measurement channels, their current status, and measured values, with the option of displaying the values in the form of graphs or tables
- Archive – displays stored values in the form of tables and graphs for selected measurement channels, displays alarms and events with a time stamp in the form of tables
- Channels – a summary of the connected measurement channels and their preset parameters (units, alarm levels, description)
- Reports – printing of protocols (shift report, daily report and other reports)

Name:	OG-8 Gamma	7.8.1. 00	rdch
Date:	5/10/2004	7.8.2. 00	rdch
Time:	13:00:00 PM	Value:	14.776.7 rdch
Description:	n. C. 0.0		
OG-8 Control Room 141.9 nGy/h	OG-8 (Gamma) 14,776.7 nSv/h	OG-8 (Neutrons) 10.0 μGy/h	
Laboratory - Sump 11.7 MBq/m³	Terabalt Control Room 110.3 nGy/h	Terabalt 83.6 nGy/h	RA waste storage 124.7 nGy/h
IR sources storage 1.4 μGy/h	Shaft 103.8 nSv/h	Laboratory 126.9 nGy/h	

Measurement module - Summary

RMS

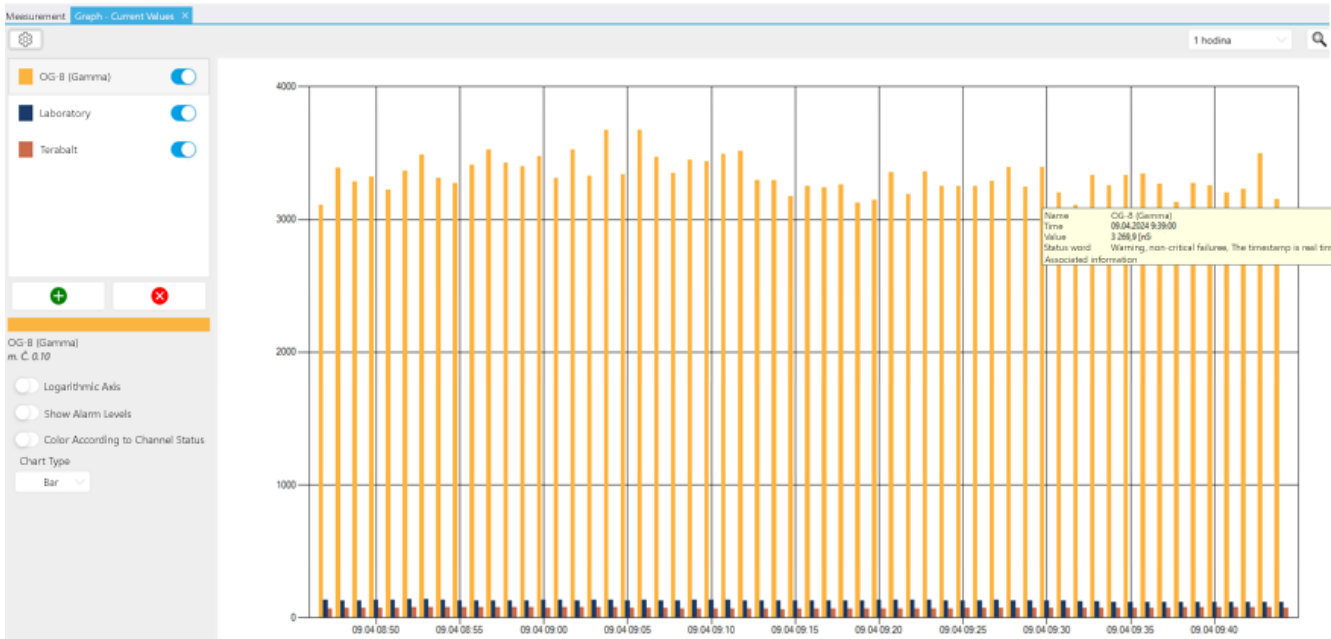
RADIATION MONITORING SYSTEM

SERVER CONFIGURATION

Processor	Intel i5
Operation memory	RAM 8 GB
HDD	2x 1 TB HDD (RAID 0)
Operating system	Microsoft Windows Server 2018 or higher
Database	Oracle version 11 or higher
UPS	Min. performance for secure server shutdown. On-line communication with the server providing server shutdown in case of battery UPS (protection against damage and data loss database).
Design	RACK 19“

WORKSTATION CONFIGURATION

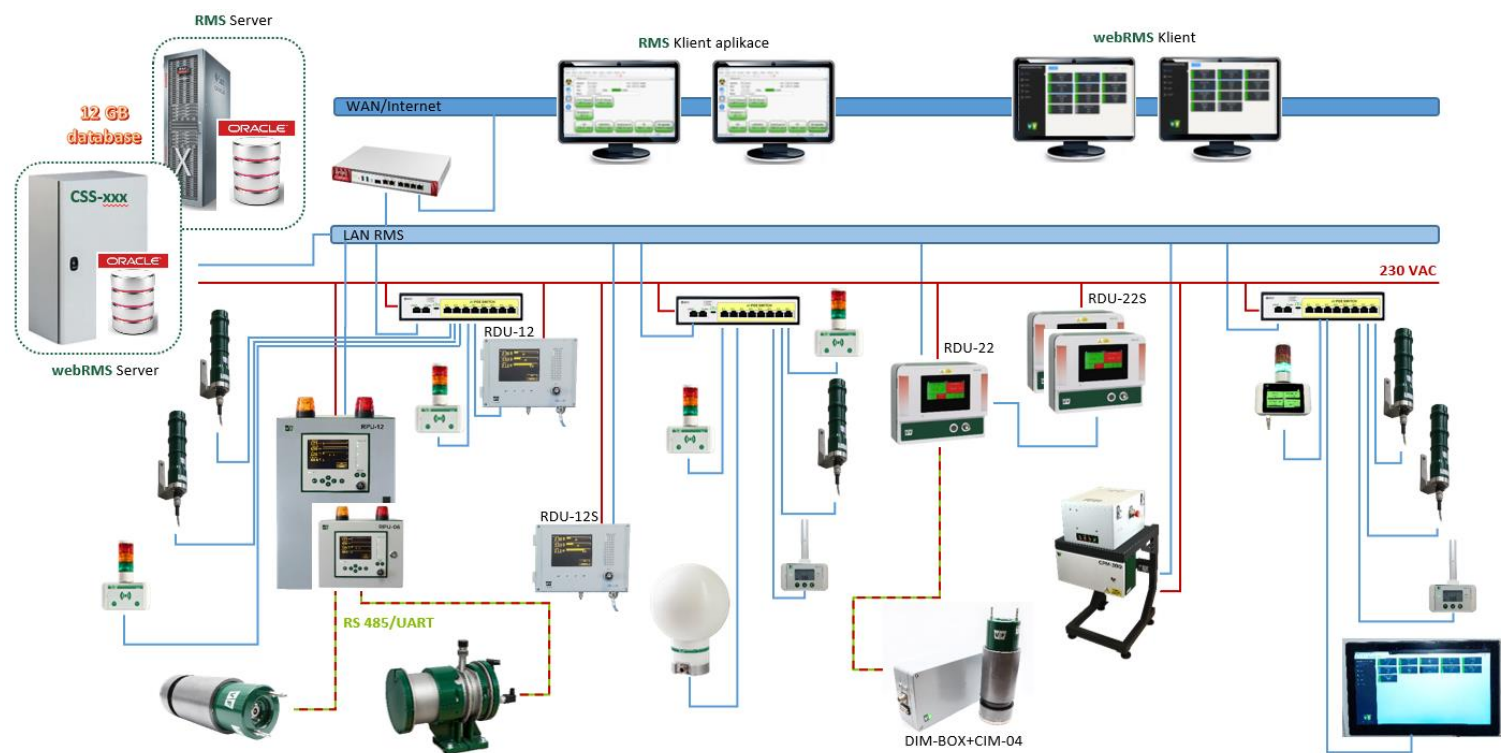
Processor	Intel i3
Operation memory	RAM 8 GB
HDD	128 GB HDD
Monitor	HD 1920 ×1080
Operating system	Microsoft Windows 10 or higher
Languages	Czech, English, Russian
Reports printing	PDF Creator, Report Viewer 2010



Display of values of three selected measuring channels in the form of a bar graph, in a one-hour interval

RMS

RADIATION MONITORING SYSTEM



RMS System diagram (RS-485 + Ethernet)

Archive Values x

Start02.04.2024 0:00-09.04.2024 9:53

Channelm. C. 0.10 OG-8 (Gamma)Show Values

Time	Value	Status	Associated information
09.04.2024 9:52	3 498.4	Warning, non-critical failure: The timestamp is the real time	
09.04.2024 9:51	3 216.0	Warning, non-critical failure: The timestamp is the real time	
09.04.2024 9:50	3 397.5	Warning, non-critical failure: The timestamp is the real time	
09.04.2024 9:49	3 372.8	Warning, non-critical failure: The timestamp is the real time	
09.04.2024 9:48	3 173.1	Warning, non-critical failure: The timestamp is the real time	
09.04.2024 9:47	3 294.3	Warning, non-critical failure: The timestamp is the real time	
09.04.2024 9:46	3 280.5	Warning, non-critical failure: The timestamp is the real time	
09.04.2024 9:45	3 154.1	Warning, non-critical failure: The timestamp is the real time	
09.04.2024 9:44	3 150.5	Warning, non-critical failure: The timestamp is the real time	

Table of archive values of the selected measurement channel

RMS 5/16/2024 9:06:31 AM

Shift protocol
16.05.2024 00:00 - 16.05.2024 23:59
Date and time of issue: 5/16/2024 9:06:31 AM Issued by: System

Table No. 1 / 1			
Time	OG-8 (Gamma) nGy/h	Laboratory nGy/h	Terabalt nGy/h
5/16/2024 12:00:00 AM	142.0	128.4	77.2
5/16/2024 12:01:00 AM	142.0	128.4	77.2
5/16/2024 12:02:00 AM	142.0	128.4	77.2
5/16/2024 12:03:00 AM	142.0	128.4	77.2
5/16/2024 12:04:00 AM	142.0	128.4	77.2
5/16/2024 12:05:00 AM	142.0	128.4	77.2

Shift report

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RELATED PRODUCTS

MDG-04/08e Gamma Dose Rate Meters

MDG-08e Gamma Dose Rate Meters

AGM-03 Area Gamma Monitor

MDN-01 Neutron Dose Rate Meter

CPM-300 Continuous Particulate Monitor

CIM-303 Continuous Iodine Monitor

NGM-300 series Noble Gas Monitors

RDU-02 Radiation Display Unit for 4 measurement channels

RDU-22 Radiation Display Unit for 16 measurement channels

RPU Radiation Processing Unit

ASU-50 Alarm Slave Unit



ASU-50



AGM-03



MDG-04/08e



RDU-22



MDN-01



CPM-300