



VF NUCLEAR



WASTE
MANAGEMENT



CALIBRATION
LABORATORIES



RESEARCH
CENTRES



INDUSTRY
& MANUFACTURING



NUCLEAR
MEDICINE

webRMS

RADIATION MONITORING SYSTEM



KEY FEATURES

- Modular system
- Suitable for environmental, air and liquid monitors
- The end user can configure the connected detectors
- Availability of actual and archive values
- Single-channel and multi-channel tables and graphs
- User-friendly graphical interface

PURPOSE

webRMS is a standardized system for radiation monitoring with the display of measurement results in a web browser. Various radiation monitors, display units and alarm units manufactured by VF can be connected to the webRMS system.

The entire system consists of three basic parts:

1. Radiation detectors
2. The data server: collecting data from detectors and the archiving of this data in the SQL database.
3. Workstations: on which a web browser is running to display the results.

The key component of the webRMS radiation monitoring system is the data server, on which several software modules are installed:

- ORACLE database, in which measured data and system settings are stored
- Services ensuring collection of data in regular intervals and its storing in the database. Also, secure uploading of selected parameters into the detectors, for example alarm levels.
- A web server, which generates the webRMS web pages for communication with users (display of data from detectors and implementation of user commands).

Distributed radiation detectors can connect to the webRMS server in 2 basic ways:

- Via LAN or RS-485 ports installed in the server to which the radiation detectors are connected.
- Through the RDU-22 unit, which is connected to the server via LAN. Radiation detectors are connected to the RDU-22.

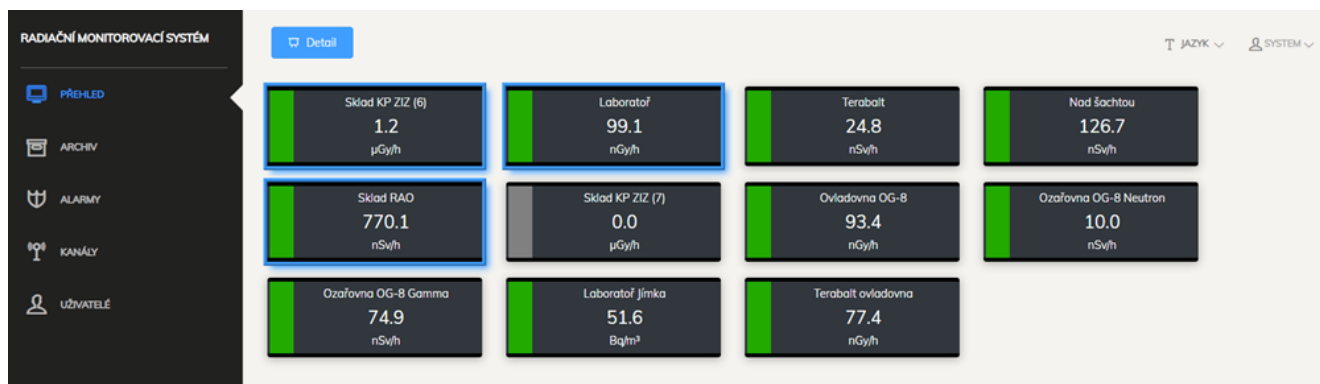
After starting the web browser (Windows Edge or Google Chrome as standard), the user must first log in with a username and password.

After logging in, an overview of the connected detectors (measurement channels) and menu will be displayed.

In the menu you will find the following items:

- Overview – an overview table of actual values (updates by default every 20 s), the option to display minute or hourly averages from selected 1 to 4 channels in the form of a graph
- Archive – display of stored values in the form of tables and graphs for selected measurement channels
- Alarms – display of alarms and events with a time stamp in the form of a table
- Channels – an overview of connected measurement channels with basic parameters (units, alarm levels, description), the possibility to change parameters and the display order of individual channels
- Users – overview of authorized users

The data displayed on the screen can be exported to a .csv file.



Example overview of actual values from detectors

Období od: 25.07.2022 14:33:53 do: 26.07.2022 14:33:53

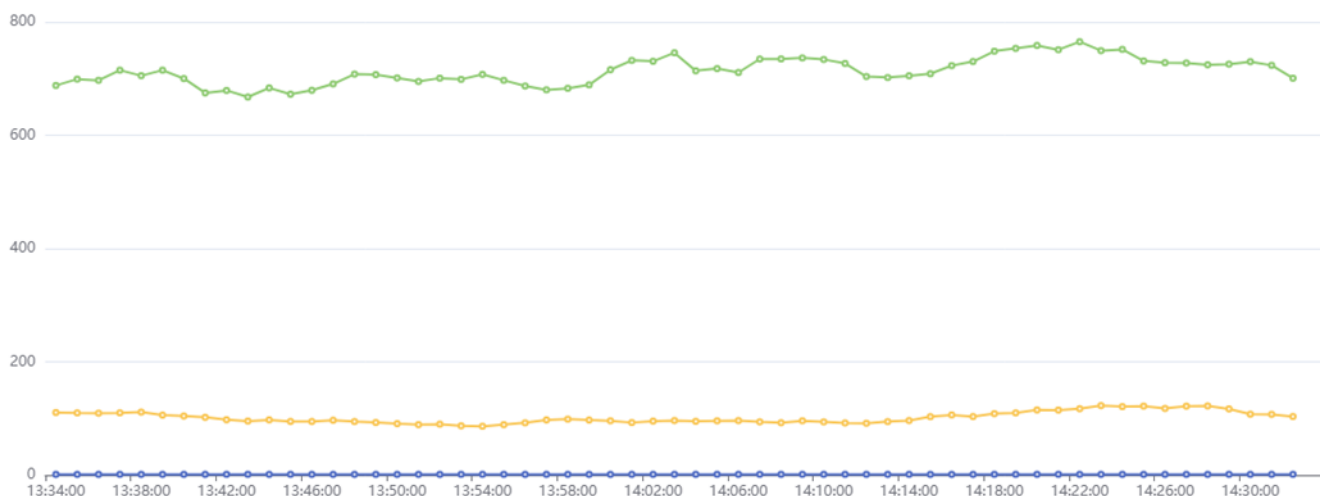
Kanály: Sklad KP ZIZ (6) Sklad RAO Laboratoř Terabalt Nad řachtou Upravit Načíst archiv

Datum a čas	Sklad KP ZIZ (6) µGy/h	Laboratoř nGy/h	Terabalt nSv/h	Nad řachtou nSv/h	Sklad RAO nSv/h
26. 7. 2022 14:32:00	1.3	99.8	35.2	128.0	719.0
26. 7. 2022 14:31:00	1.3	103.4	34.6	120.9	700.7
26. 7. 2022 14:30:00	1.2	107.2	35.0	122.1	723.5
26. 7. 2022 14:29:00	1.2	107.5	34.1	123.3	729.9
26. 7. 2022 14:28:00	1.3	116.9	31.8	125.6	725.5
26. 7. 2022 14:27:00	1.2	122.1	31.7	126.8	724.4
26. 7. 2022 14:26:00	1.2	121.7	29.9	129.8	727.6
26. 7. 2022 14:25:00	1.2	117.7	30.6	124.6	728.1

Navigation: < 1 2 3 4 ... 180 >

Archive values from five measurement channels in the form of a table

RADIATION MONITORING SYSTEM



Display of last values from three measurement channels in the form of a graph.

SERVER CONFIGURATION

Processor Intel Core i7 and more

Operation memory min. 8 GB

Operating system Linux Ubuntu 22 LTS

Database Oracle version 18

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).

WORKSTATION CONFIGURATION

There are no special requirements, it can be any device (PC, tablet, phone, ...) with an installed web browser.

OPTIONAL ACCESSORIES

Server PC with installed webRMS database and data collection software

Workstation PC with an installed web browser



RELATED PRODUCTS

MDG-04	Gamma Dose Rate Meters
MDG-08e	Gamma Dose Rate Meters
AGM-02	Area Gamma Monitor
MDN-01	Neutron Dose Rate Meter
CPM-300	Continuous Particulate Monitor
CPD-14	Continuous Particulate Detector
CID-03	Continuous Iodine Detector
RDU-22	Radiation Display Unit
ASU-50	Alarm Slave Unit



RDU-22



MDG-04/08e



MDN-01



CPM-300

