SECURE IOT REMOTE MAINTENANCE ACCESS

Remote maintenance | Visualization | Alarming | Logging

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Helmholz®
COMPATIBLE WITH YOU

THE RIGHT SOLUTION FOR EACH SECTOR

Mechanical and plant engineering

REX industrial routers enable manufacturers of machines to directly access the network of their customers' systems in a secure and flexible manner.

In this way the technicians at the headquarters remain connected with the machines for maintenance and service in spite of world-wide deployment of the machines.

The extensive monitoring and alarm functions of the myREX24 V2 portal enable quick reaction to problems in the systems and help to minimize machine downtimes. Predictive maintenance is thus possible for any systems manufacturer and mechanical engineer.

Energy and environment

Wind energy is a participant in the generation of renewable energy that is more important than any other renewable energy source. But wind turbines are technically complex systems that are exposed to very high loads during operation.

Regular review of their condition and maintenance of safe operation is therefore essential. However, this is difficult because wind turbines are often erected in hard-to-reach areas or in the ocean.

The solution is a connection to the myREX24 V2 portal, which ensures a flexible and reliably connection with the control center, thus enabling permanent monitoring. Alarm functions triggered at an early point in time can prevent damage to expensive systems in critical situations.

Water supply/infrastructure

Networking of pumping stations or remote monitoring of water treatment plants can be implemented easily and safely with the modern industrial router system REX. In this way it is possible to monitor data in real time and facilitate easier resolution of problems in case of operational disturbances or deviations in the parameters.

Likewise, it is also possible to connect distributed stations to a higher-level system.

Alarm functions and extensive visualizations over the cell phone or the tablet enable undisrupted and secure operation even with large and decentralized systems.

Building automation

In modern industrial and office buildings, many activities now run automatically, such as switching on of lights and controlling the heating and ventilation system as required and on a schedule. An intelligent control system that regulates everything saves energy, protects the environment, and conserves resources.

The industrial routers of the REX family can be used together with the myREX24 V2 portal to monitor the control system at any time and take corrective action when necessary. With the Ethernet routers it is possible to access building automation conveniently from your desk or on a mobile basis with tablet PC or smartphone.

REX 100, ETHERNET ROUTER

- Secure OpenVPN remote maintenance access via myREX24 V2 portal
- Integrated 3 or 4-port LAN switch
- WAN, LTE or WiFi variants available
- Digital inputs for establishing a connection and issuing alarms
- Integrated firewall
- Space-saving compact size
- Supports all of the usual mobile communications standards and is downwards-compatible where network coverage isn't present
- USB-over-IP

Ethernet participants, such as PLC control systems, can be reached with the REX 100 industrial routers, irrespective of the manufacturer.

The REX 100 routers are systematically designed to operate in conjunction with the myREX24 portal: All programming and remote maintenance is carried out exclusively through the portal. Data transmission takes place via an encrypted VPN tunnel on the basis of the secure OpenVPN protocol.

With the digital inputs, alarms can be sent via the myREX24 V2 portal as SMS and e-mail.

The USB host port present in all devices enables the connection of USB devices (e.g. programming port of a motor) via the remote maintenance tunnel (USB-over-IP).

REX 200/250, ETHERNET ROUTER

- Secure OpenVPN remote maintenance access via myREX24 V2 portal
- Remote maintenance of PROFIBUS (RS232/RS485) and Ethernet-compatible devices (PROFINET-compatible)
- Integrated 4-port LAN switch
- Additional WAN interface also as a fallback for LTE and WiFi devices
- WAN, LTE or WiFi variants available
- Data server for data access to SPS via RFC1006 (ISO on TCP), MPI, PROFIBUS, Modbus TCP/RTU, Allen Bradley, etc.
- Directly connect S7-MPI/PROFIBUS devices
- S7-MPI/PROFIBUS driver included
- Integrated firewall
- Serial-over-IP and USB-over-IP

The compact REX 200/250 Ethernet routers are specially designed for use in an industrial environment. They enable reliable and secure Internet remote maintenance of machines and systems. Thanks to the integrated Firewall, remote access is allowed only for authenticated users.

The routers are also characterized by an integrated 4-port switch, as well as by additional interfaces, such as serial, PROFIBUS, and USB. The WAN interface also integrated as a standard enables a fallback connection for LTE and WiFi devices.

The REX 250 routers make it possible to incorporate serial devices into your remote maintenance (Serial-over-IP). The USB host port present in all devices enables the connection of USB devices (e.g. programming port of a motor) via the remote maintenance tunnel (USB-over-IP).

In combination with the myREX24 V2 portal, the complete scope of performance of industrial routers with the functions of remote maintenance, visualization, WEB2go, alarm and logging of the PLC data is possible.

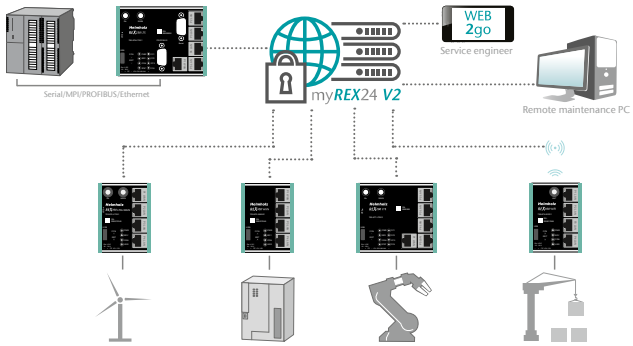
MYREX24 V2 PORTAL

The myREX24 V2 portal is a coherent system for access to the components of your machine or system, for remote maintenance and remote diagnostics.

Check the data of your system via web browser – directly with your smartphone or tablet.

All data and statuses available to you as an external signal or as a value in a control system can be evaluated and monitored with the myREX24 V2 portal.

Protocol operating data directly in the myREX24 V2 portal and create your own reports.



Remote maintenance

- Diagnosis, configuration and programming of the machine via the Internet
- Worldwide end customer support from your experts
- Quick availability of service
- Income through new service offerings and maintenance agreements
- Saving of travel costs, reduction of personal absence
- Secure encoding through OpenVPN
- Standard OpenVPN clients also accessible through the portal
- Several simultaneous connections to one system

Logging

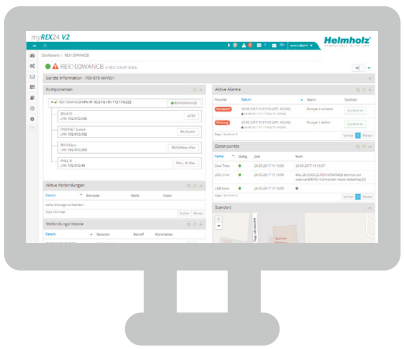
- Protocoling and reporting of PLC data
- Configuration, analysis, and evaluation via standard browser
- Planning of maintenance measures in keeping with actual usage of the system
- Continuous information on down times and production figures
- Connection of self-hosted databases
- External access to protocol data via WEB-API
- Automatic sending of reports (HTML, PDF, CSV)

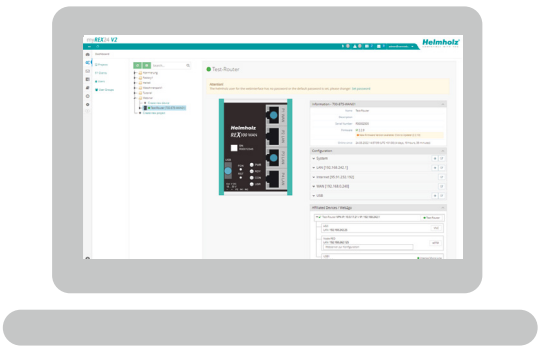
Alarming

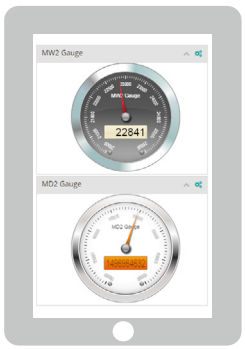
- Monitoring of limit values and error incidents
- Flexible alarm messages, also with acknowledgment
- Alarm messages via SMS, e-mail, voice call or via the integrated message system
- User-dependent reporting profiles
- Calendar function for taking personnel deployment times into account

Visualization

- Freely configurable dashboards for the individual representation of the PLC data
- Extensive library of display elements, for example, pointer instruments and bar graphs
- Mobile and secure web access via HTTPS, also for smartphones and tablets
- Display of live and protocol data
- Easy login with user ID and password

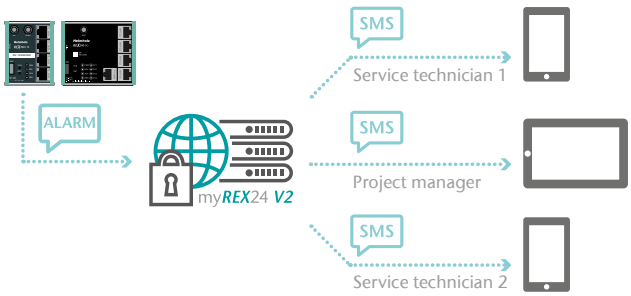






shSMS

- Sending of SMS messages directly from the portal
- Sending of alarm SMS from devices without mobile connectivity
- Activating connections from myREX24 V2
- Simple cost control



Security

- Regular security updates
- Separate VPN channels
- High password security/2-factor authentication
- Extensive access management
- Separate database (optional)
- Own server (optional)

WEB2go

- Easy access through an HTML5-enabled web browser
- Access to websites (HTTP/HTTPS), RDP, VNC, SSH, Telnet clients
- HTTPS encryption
- No additional software or app needed
- Ideal for mobile remote diagnostics via smartphone or tablet computers
- Monitoring and visualization

Flexible administration

- Project administration, also suitable for large projects
- Flexible user management with access rights
- Client administration
- Internal messaging system
- Task management

MYREX24 V2 VIRTUAL

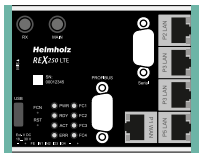
- Can be installed in your own server infrastructure
- Completely autonomous server management
- Front end in own design possible
- All data in your hand
- Maximum performance
- Scalable system that grows flexibly with your requirements
- M2M possible
- Permanent VPN access to all routers

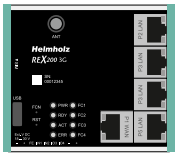
For complete independence and maximum performance, we recommend using the myREX24 V2 portal as a virtual server.

The virtual server can be configured individually and grows in a linear progression along with your requirements.

We would be happy to create an offer for you.

FUNCTION OVERVIEW OF ROUTER PORTFOLIO





PORT FUNCTIONS ON THE ROUTER

	REX 250	REX 200	REX 100
LAN	4x	4x	4x REX 100 LTE/WiFi 3x REX 100 WAN
WAN (ext. router)	√	√	√*
LTE (4G)	√*	√*	√*
WiFi	√*	√*	√*
MPI/PROFIBUS (up to 12 Mbps)	√	–	–
Serial port RS232/RS485 (serial-over-IP)	√	–	–
USB host (USB-over-IP)	√	√	√
Digital In	4	4	2
Digital Out	2	2	1

SOFTWARE FEATURES IN THE ROUTER

	REX 250	REX 200	REX 100
WAN (connection via external router)	√	√	√*
PPPoE/PPTP WAN (connection via external DSL modem)	√	√	–
OpenVPN connection with myREX24 V2 portal	√	√	√
DHCP server LAN	√	√	–
DHCP server WAN	√	√	–
DHCP client WAN	√	√	√
SMTP client (mail)	√	√	√
Dyn DNS	√	√	–
DNS server	√	√	–
NTP client	√	√	√
Firewall with IP filter, NAT and port forwarding	√	√	√
Simple NAT	√	√	√
Simatic[1]/SCADA access via RFC1006	√	√	–
Simatic[1]/SCADA access via MPI/PROFIBUS	√	–	–
Modbus TCP client over LAN	√	√	–
Access to Allen Bradley CPUs	√	√	–
Modbus RTU via serial connection	√	–	–
Virtual COM-port	√	–	–
Virtual USB interface	√	√	√
WEB2go	√	√	√
Triggering of VPN connection to the portal (via digital input, dial-out button, shSMS)	√	√	√
Routing WAN<>LAN, VPN<>LAN	√	√	√
Extended Routing	√	√	–
Execution of LUA-scripts	√	√	–
Protocolling Syslog/USB-Stick	√	√	√

[1] Simatic is a registered trademark of the Siemens AG

* depends on the specific model

FUNCTION OVERVIEW OF MYREX24 V2

ROUTER FUNCTIONS WITH MYREX24 V2

	REX 250	REX 200	REX 100
Secure encoding with OpenVPN	√	√	√
Router configuration in the portal	√	√	√
Routed VPN connection (with shDIALUP)	√	√	√
Connection reports	√	√	√
Data server for PLC connection	√	√	–
Data protocolling	√	√	Only digital inputs
Alarm incidents	√	√	Only digital inputs
Visualization/monitoring	√	√	Only digital inputs
WEB2go (HTTP/HTTPS/RDP/VNC/SSH/Telnet)	√	√	√
shSMS (wakeup SMS)	√	√	√
Several active connections on one device	√	√	√
Access restriction for components	√	√	√
Firmware update via portal	√	√	√
Serial-over-IP	√	–	–
USB-over-IP	√	√	√
Search-over-IP	√	√	√

ACCOUNT OVERVIEW

	FREE ACCOUNT	OPTIONS	ORDER NO.
Number of accounts	1	–	–
Number of devices	Unlimited	–	–
Active simultaneous VPN connections	1	Up to 250	800-874-ACT01
Active WEB2go connections	5	50	800-874-WEB50
Number of users	Unlimited	–	–
Number of user groups	5	250	800-874-USR01
Number of clients	1	250	
Access restriction for components	–	Bookable one time	
Dashboards	10	Up to 260	800-874-DSH50
Alarms	10	260	800-874-ALM25
Tasks for scheduler	1	6	800-874-TSK05
Data points per device	250	–	–
Data point memory	50 k	Up to 5 M	800-874-DPS01
Standard VPN clients (incorporation of OpenVPN routers)	0	Up to 50	800-874-VPN10
Own front logo possible	–	Bookable one time	800-874-CMB01
Complete individualization (colors + logo)	–	Bookable one time	800-874-CMA01
External data point memory (own SQL database)	–	Bookable one time	800-874-EXT01
SMS	10	Unlimited	800-872-SMS25
Telephone calls	10	Unlimited	800-872-CAL25

ORDERING DATA

REX 100		ORDER NO.
REX 100 WAN	3x LAN (switch) / 1x WAN port*	700-875-WAN01
REX 100 LTE	4x LAN (switch) / 1x LTE modem*	700-875-LTE01
REX 100 LTE	3x LAN (switch) / 1x WAN / 1x LTE modem*	700-875-LTE51
REX 100 LTE	4x LAN (switch) / 1x LTE modem **(North America Version / "NAG")***	700-875-LTE11
REX 100 LTE	3x LAN (Switch) / 1x WAN / 1x LTE modem **(Nordamerika-Version / „NAG")***	700-875-LTE61
REX 100 WiFi	4x LAN (switch) / 1x WiFi*	700-875-WIF01
REX 100 WiFi	3x LAN (switch) / 1x WAN / 1x WiFi interface*	700-875-WIF51

REX 200		ORDER NO.
REX 200 WAN	4x LAN (switch) / 1x WAN port*	700-877-WAN02
REX 200 LTE	4x LAN (switch) / 1x LTE modem*	700-877-LTE02
REX 200 WiFi	4x LAN (switch) / 1x WAN / 1x WiFi*	700-877-WIF02

REX 250		ORDER NO.
REX 250 WAN	4x LAN (switch) / 1x WAN, 1x PROFIBUS, 1x serial interface*	700-878-WAN02
REX 250 LTE	4x LAN (switch) / 1x LTE modem, 1x PROFIBUS, 1x serial interface*	700-878-LTE02
REX 250 WiFi	4x LAN (switch) / 1x WAN, 1x WiFi, 1x PROFIBUS, 1x serial interface*	700-878-WIF02

* To get started easily with our REX routers, you can find the comprehensive **Quick Start Guides** on the individual product pages of our website – **www.helmholz.com** – in PDF format under the tab "DOWNLOAD".

Depending on the device, antennas and antenna cables might be required. The appropriate accessories, specifications and order data can be found on our website as well.
We will be glad to assist you personally, please dial +49 9135 7380-0

OPTIONS AND ORDERING DATA FOR MYREX24 V2			ORDER NO.
Free account for the myREX24 V2 portal			–
Active VPN connection	1x	annual license	800-874-ACT01
WEB2go connections	+ 50 pieces	annual license	800-874-WEB50
LDAP connector	1 license	annual license	800-874-LDAP1
Dashboards	+ 50 pieces	annual license	800-874-DSH50
Alarms	+ 250 pieces	annual license	800-874-ALM25
Tasks for taskmanager	+ 5 pieces	annual license	800-874-TSK05
Expanded user access control	250 user groups, 250 clients, access restriction for components	annual license	800-874-USR01
Integration of external data point storage	1 license	annual license	800-874-EXT01
Extension of data point storage	+ 1M	annual license	800-874-DPS01
Standard VPN clients	+ 10 pieces	annual license	800-874-VPN10
Own front logo	1x	annual license	800-874-CMB01
Complete individualization (colors + logo)	1x	annual license	800-874-CMA01
SMS	+ 250 pieces	provision	800-872-SMS25
Voice calls	+ 250 pieces	provision	800-872-CAL25
myREX24 V2 virtual (on request)	–	–	–

The licenses for the service myREX24 V2 have a minimum term of 12 months. Billing takes place in January for one year. When acquiring a license during the current year, the fee will be charged in monthly rates for the rest of the year.

The term extends automatically for another 12 months when no cancellation in writing is submitted by September 30th.

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We reserve the right to make changes without notice. Errors and omissions excepted. 02-2026