

myREX24
V2

REX 100

REX 200
REX 250



INDUSTRY 4.0
PREDICTIVE MAINTENANCE
INDUSTRIAL INTERNET OF THINGS
DIGITAL FACTORY

SECURE IOT REMOTE MAINTENANCE ACCESS

Remote maintenance | Visualization | Alarming | Logging

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 worldwide 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.

The REX Global SIM can be used to implement this global connectivity easily with cost control.



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 reliable 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 uninterrupted 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

SOON ALSO AVAILABLE WITH
SECURE M12 CONNECTION!

- Secure OpenVPN remote maintenance access via myREX24 V2 portal
- Integrated 3 or 4-port LAN switch
- WAN, 3G, 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 3G, LTE, and WiFi devices
- WAN, 3G, 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
- Series-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 series, PROFIBUS, and USB. The WAN interface also integrated as a standard enables a fallback connection for 3G, LTE, and WiFi devices.

The REX 250 routers make it possible to incorporate serial devices into your remote maintenance (Series-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.



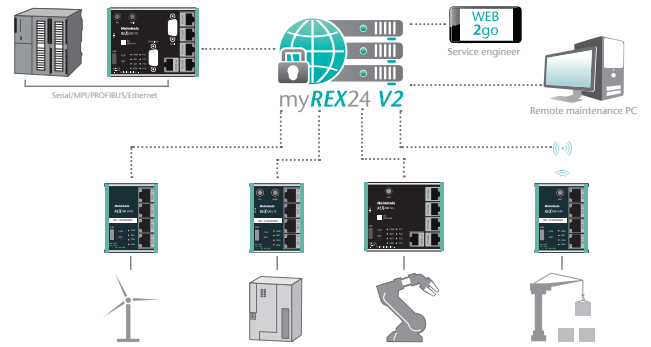
MYREX24 V2 PORTAL

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

- Protocolling 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)



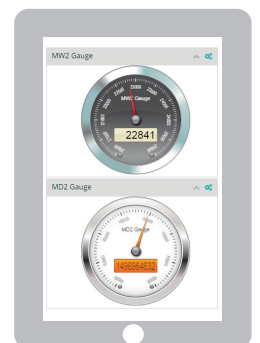
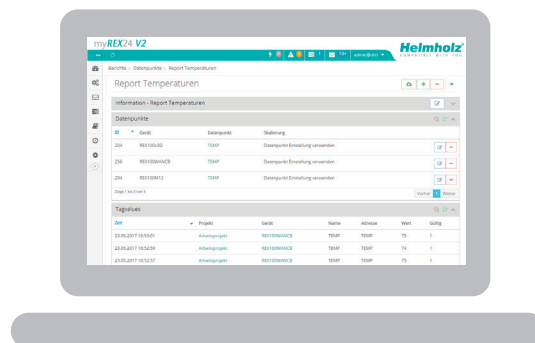
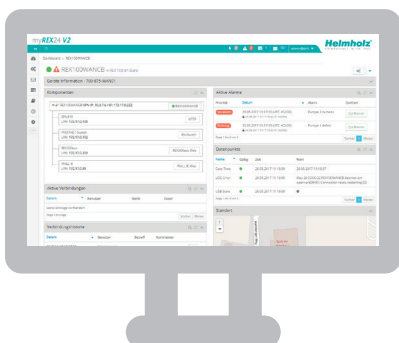
Alarming

- 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

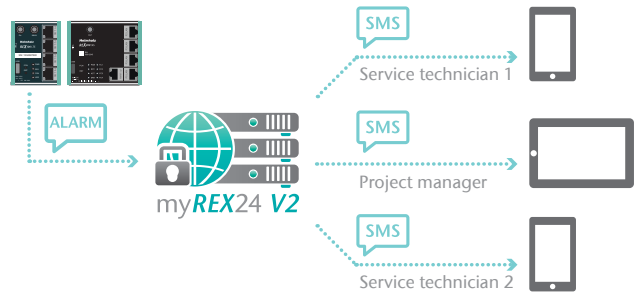
- Freely configurable dashboards for the individual representation of the PLC data
- Extensive library of display elements, for example, pointer instruments and bar graphs
- Mobile and secure web access via HTTPS, also for smartphones and tablets
- Display of live and protocol data
- Easy login with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

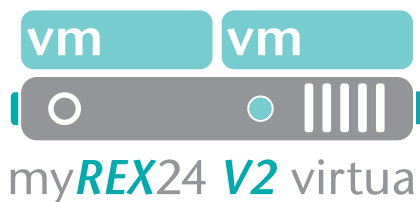


REX Global SIM

- Network coverage in more than 50 countries worldwide
- Two possible rate zones (Europe and worldwide)
- Support for GSM services (3G data and SMS)
- Simple, transparent pricing with no hidden costs
- Convenient management of multiple SIM cards

MYREX24 V2 VIRTUAL

- Can be installed in your own server infrastructure
- Completely autonomous server management
- Front end in own design possible
- For “power users” with more than 250 devices and many active connections
- All data in your hand
- Scalable system that grows flexibly with your requirements
- M2M possible
- Permanent VPN access to all routers
- Maximum performance



myREX24 V2 virtual

For “power users” (e.g. more than 250 devices planned, with many active connections) and “self-hosters”, 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.

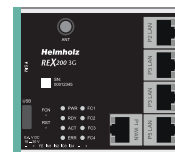
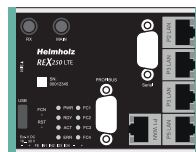
We would be happy to create an offer for you.



FUNCTION OVERVIEW OF ROUTER PORTFOLIO

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	√	√	√
SMTP client	√	√	√
DNS server	√	√	—
NTP client	√	√	√
DHCP server LAN	√	√	—
DHCP server WAN	√	√	—
DHCP client WAN	√	√	√
Dyn DNS	√	√	—
Firewall with IP filter, 1:1 NAT and port forwarding	√	√	√
RFC1006	√	—	—
Triggering of VPN connection to the portal (via digital input, dial-out button, shSMS)	√*	√*	√*
Routing WAN<->LAN, VPN<->LAN	√	√	√
Extended Routing	√	√	—
Local status/information port via integrated web server	√	√	√



PORT FUNCTIONS IN THE ROUTER

	REX 250	REX 200	REX 100
LAN	4x	4x	4x REX 100 3G/LTE/WiFi 3x REX 100 WAN
WAN (ext. router)	√	√	√*
UMTS/HSDPA (3G)/LTE (4G)	√*	√*	√*
WiFi	√*	√*	√*
MPI/PROFIBUS (up to 12 Mbps)	√	—	—
Series port RS232/RS485 (Series-over-IP)	√	—	—
USB host (USB-over-IP)	√	√	√

* 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 at the component level	✓	✓	✓
Firmware update via portal	✓	✓	✓
Series-over-IP	✓	–	–
USB-over-IP	✓	✓	✓
Search-over-IP	✓	✓	✓

ACCOUNT OVERVIEW

	BASIC	INDIVIDUAL	EXPANDABLE TO
Number of accounts	1	1	–
Number of devices	50	250	–
Active simultaneous VPN connections	1	1	5
Several active connections on one device	No	Yes	–
Active Web2Go connections:	2	50	–
Number of users	Unlimited	Unlimited	–
Number of user groups	5	250	–
Number of clients	1	250	–
Dashboards	10	10	260
Alarms	10	10	260
Tasks	1	1	11
Data points per device	10	250	–
Data point memory	50 k	50 k	5 M
Standard VPN clients (incorporation of OpenVPN routers)	0	0	500
Guaranteed bandwidth	-	1 Mbps	–
Access restriction at the component level	No	Yes	–
Reports	View	Process + export	–
Own front logo possible	No	Yes	–
Access to data point memory via WEB-API	No	No	Bookable one time
External data point memory (own SQL database)	No	No	Bookable one time
SMS	10	10	Unlimited
Telephone calls	10	10	Unlimited

* Depends on the specific model

ORDERING DATA

ORDERING DATA FOR REX 100

	ORDER NO.
REX 100 WAN, 3 x LAN (switch)/1 x WAN port, incl. Quick Start Guide	700-875-WAN01
REX 100 3G, 4 x LAN (switch)/1 x 3G modem (UMTS), incl. Quick Start Guide	700-875-UMT01
REX 100 LTE, 4 x LAN (switch)/1 x LTE modem, incl. Quick Start Guide	700-875-LTE01
REX 100 WiFi, 4 x LAN (switch)/1 x WiFi, incl. Quick Start Guide	700-875-WIF01
REX 100 M12 WAN, 3 x LAN (switch)/1 x WAN port, incl. Quick Start Guide	700-876-WAN01

ORDERING DATA FOR REX 200

	ORDER NO.
REX 200 WAN, 4 x LAN (switch)/1 x WAN port, incl. Quick Start Guide	700-877-WAN01
REX 200 3G, 4 x LAN (switch)/ 1 x WAN / 1 x 3G modem (UMTS), incl. Quick Start Guide	700-877-UMT01
REX 200 LTE, 4 x LAN (switch) / 1 x LTE modem, incl. Quick Start Guide	700-877-LTE01
REX 200 WiFi, 4 x LAN (switch) / 1 x WAN / 1x WiFi incl. Quick Start Guide	700-877-WIF01

ORDERING DATA FOR REX 250

	ORDER NO.
REX 250 WAN, 4 x LAN (switch)/1 x WAN, 1 x PROFIBUS, 1x series interface, incl. Quick Start Guide	700-878-WAN01
REX 250 3G, 4 x LAN (switch), 1 x WAN, 1 x 3G modem (UMTS), 1x PROFIBUS, 1x series interface, incl. Quick Start Guide	700-878-UMT01
REX 250 LTE, 4 x LAN (switch), 1x LTE modem, 1x PROFIBUS, 1x series interface, incl. Quick Start Guide	700-878-LTE01
REX 250 WiFi, 4 x LAN (switch), 1x WAN, 1x WiFi, 1x PROFIBUS, 1x series interface, incl. Quick Start Guide	700-878-WIF01

Depending upon the version, antennas and antenna cables may be required. You can find the accessories and the order data anytime under helmholz.de.

We would be happy to advise you personally at: 01935-7380-0

ORDERING DATA FOR MYREX24 V2

	ORDER NO.
ACCOUNT BASIC Free basic account with access to myREX24 V2 and a maximum of 50 devices.	–
ACCOUNT INDIVIDUAL (Annual license) (In order to book additional options, the Account Individual" must first always be ordered.)	800-872-INDIV
Annual license for an additional active VPN connection	800-872-ACT01
Annual license for 250 dashboards	800-872-DSH25
Annual license for 250 alarms	800-872-ALM25
Annual license for 5 additional tasks for the task planner	800-872-TSK05
Annual license for 1 M additional data points in the myREX24 V2 data point memory	800-872-DPS01
Annual license for provision of a WEB-API	800-872-API01
Annual license for external database memory	800-872-EXT01
Annual license for standard VPN clients + 25 units	800-872-VPN25
Provision of 250 additional SMS	800-872-SMS25
Provision of 250 additional voice calls	800-872-CAL25

In order to book additional options, the "Account Individual" must first always be ordered.

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.

For larger applications (e.g. more than 250 devices planned), 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.