REX 100 — THE NEW ETHERNET ROUTER

Compact and flexible remote access to machines!

REX 100, ETHERNET ROUTER

The new REX 100 industrial routers have a compact design: Not even as big as the palm of your hand, the devices can be snapped into the control cabinet on any standard DIN rail. Nevertheless, they offer all the features you expect from a state-of-the-art remote maintenance solution.

Regardless of the manufacturer, Ethernet participants such as PLCs can be reached with the REX 100.

On the connection side, REX 100 variants for the transmission standards 3G (GSM) or WAN (DSL) are currently available. The Ethernet variant of the router is equipped with a 3-port switch, and the cellular network variant with a 4-port switch. The model series REX 100 is systematically designed to operate in conjunction with the VPN portal myREX24:

All programming and remote maintenance is carried out on the portal. Data transmission is via encrypted VPN tunnel on the basis of the secure OpenVPN protocol.

In addition, the new routers have digital inputs: One serves as the trigger for establishing the connection to the portal server. Another input can be assigned to a function for issuing alarms. In this way, appropriately equipped REX-100 routers can send alarm SMS and e-mails. The data packets are directly forwarded to the automation network.

Another new feature is what is known as shSMS wake-up. This triggering function makes it unnecessary to send an SMS text message or press the "DIAL OUT" button to initiate the connection to myREX24 with cellular network routers. The SMS text message is instead sent to the defined cellular network number autonomously by the myREX24 portal using shSMS. Then the previously selected REX router connects with the myREX24 portal. This allows the online times of the routers to be reduced,

along with the transmission costs.

The router is also configured exclusively on the myREX24 portal. After you have created a configuration, you can choose between three transmission methods:

a) The configuration file is saved and then transferred to the REX 100 using a USB stick.

b) The configuration is downloaded from the myREX24 portal using the REX 100 router's Internet connection (Configuration Transfer Manager = CTM).

c) The configuration is transferred to the REX 100 on the local LAN connection of the PC on which shDIALUP is running.
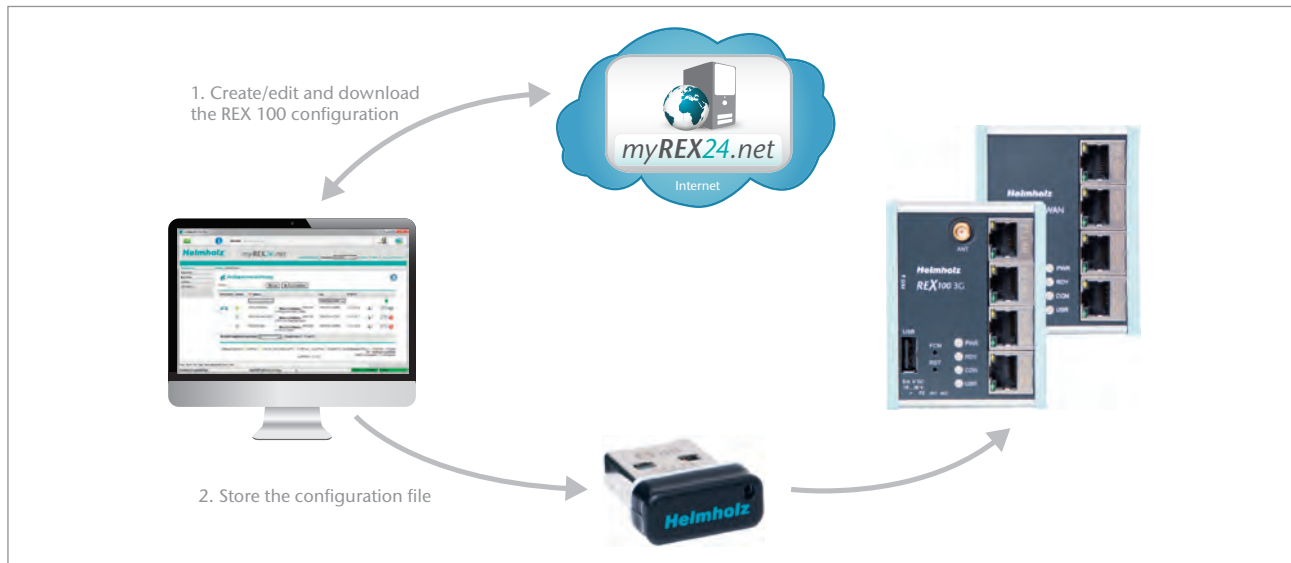
FEATURES

- WAN/LAN and 3G/LAN variants are available
- Integrated 3- or 4-port LAN switch
- Digital inputs for establishing a connection and issuing alarms
- Space-saving compact size
- Integrated firewall
- Easy and quick configuration using the myREX24 VPN portal
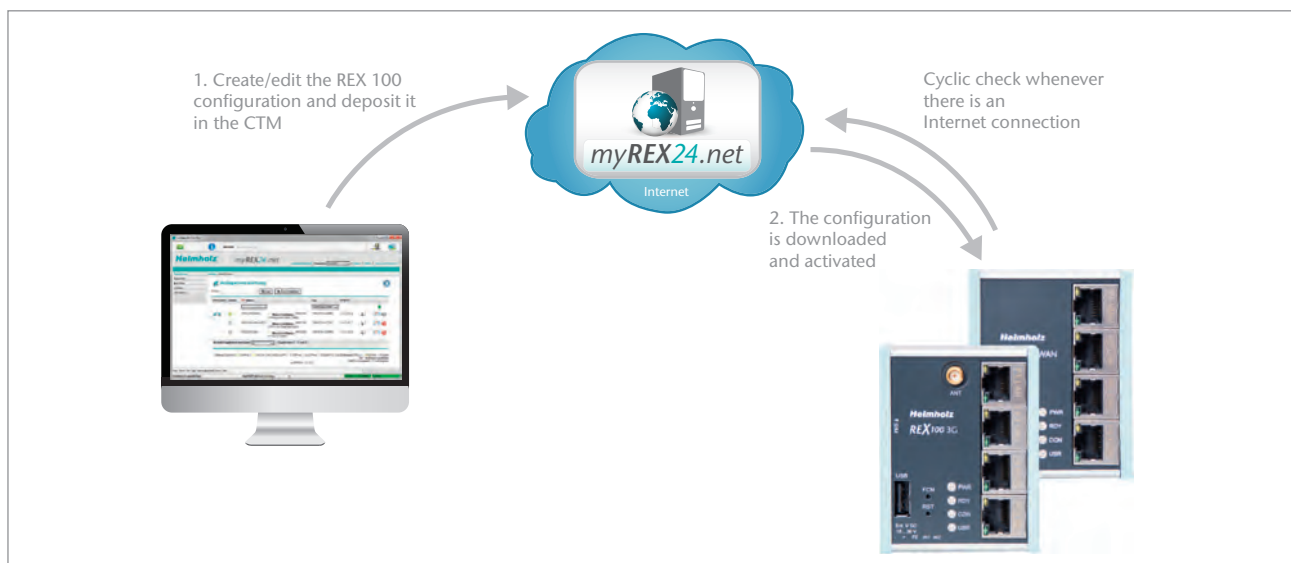- 3G; GSM; GPRS; EDGE; UMTS; HSPA

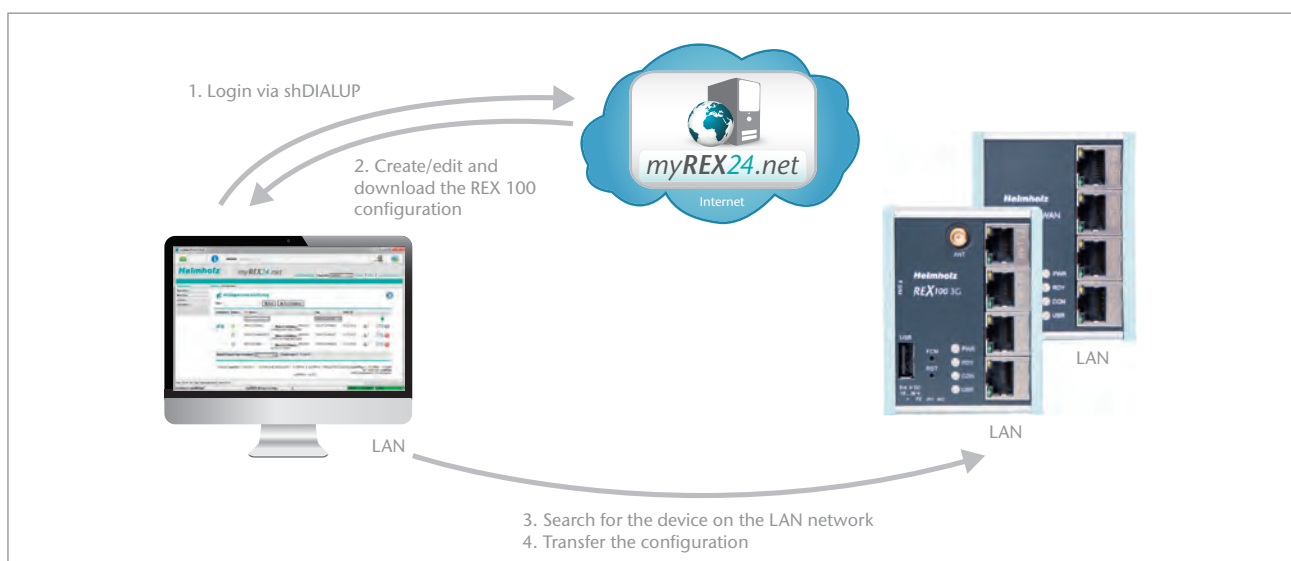The REX 100 is currently available as a 3G or WAN variant.

TRANSFER METHODS OF THE CONFIGURATION

1. Create/edit and download
the REX 100 configuration

myREX24.net

Internet

2. Store the configuration file

Variant a) Configuration via USB stick

1. Create/edit the REX 100
configuration and deposit it
in the CTM

Cyclic check whenever
there is an
Internet connection

myREX24.net

Internet

2. The configuration
is downloaded
and activated

Variant b) Configuration via CTM

1. Login via shDIALUP

2. Create/edit and
download the REX 100
configuration

myREX24.net

Internet

LAN

LAN

LAN

3. Search for the device on the LAN network
4. Transfer the configuration

Variant c) Configuration on the LAN network

SECURE DATA TRANSMISSION WITH *myREX24.net*

As before, the data transfer is generally encrypted in a VPN tunnel also with the new REX models. The portal myREX24 serves as a mediation server for VPN communication between the provider of remote maintenance and the customer facility: This means both sides can establish the VPN tunnel as an outgoing connection. Firewalls, as well as restrictions of services or cellular network operators, are therefore not an issue. That's because they restrict data traffic only into the network, not out of the network. The outgoing connections are then briefly on hold until the VPN tunnel is established. The actual communication occurs in the VPN tunnel.

In order to use the myREX24.net system, all that is required is an Internet connection and an access account, which is set up once on the portal.

The configuration is also created on the portal and can then be easily loaded onto the REX router using a USB stick, for example.

THE ADVANTAGES

- shDIALUP software for easily establishing a connection from a PC
- Configuration of the REX router on the myREX24 VPN portal
- Configurations can be downloaded
- User and permissions management system
- SMS text message wake-up with shSMS via myREX24
- Reports on every single connection that is established
- WEB2go makes it possible to keep an eye on your equipment at all times while on the go by using a smartphone or tablet computer
- Redundant portal hosting (>99% availability)
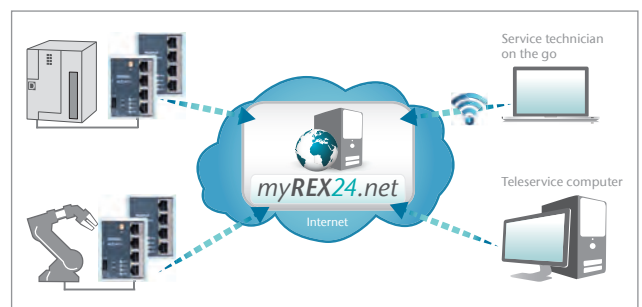
shSMS

You can use myREX24 to activate the REX 100 3G router with an SMS text message. The SMS text message is sent to the defined cellular network number autonomously by the myREX24 portal using shSMS.

FEATURES

- Cost control
- Activate connections from myREX24
- Easy to use
- Phone number stored in the configuration

1st step: Send an SMS text message

2nd step: Establish a connection
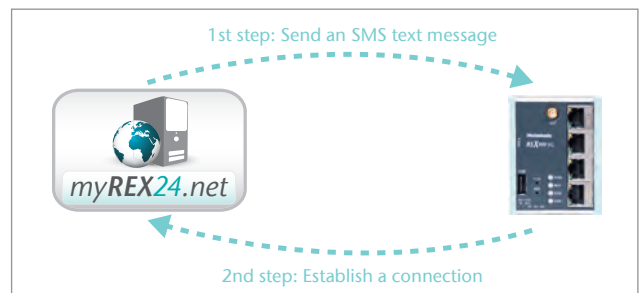
WEB2go

WEB2go is designed to enable you to monitor your machines even when you are on the go by allowing you to retrieve the most important machine data on your smartphone or tablet pc.

FEATURES

- Easy access through a standard web browser
- No additional software needed
- Ideal for mobile remote diagnostics via smartphones or tablet computers
- HTTPS encryption
- Monitoring and visualization

TECHNICAL DATA/ORDERING DATA

Technical Data	
Dimensions in mm (T x B x H)	35 x 59 x 75 mm
Weight (approx.)	3G: 270 g | WAN: 250 g
Modem	Quad-band GPRS/EDGE data interface
Frequency bands GSM/GPRS/EDGE (MHz) UMTS/HSPA (MHz)	 850, 900, 1800, 1900 800/850, 900, AWS 1700, 1800, 1900, 2100
Data transfer rates Upload Download	HSPA+ 5.76 Mbps 21.0 Mbps
SIM card type	Standard mini-SIM, 1.8 V/3 V
Antenna connection	SMA connector (external thread)
Transmit power	Class 1, E2, 3, 4
Ports LAN/WAN	 3G: Four 10/100 Mbps LAN ports WAN: Three 10/100 Mbps LAN ports + one 10/100 Mbps WAN port
USB	USB 2.0 Type A port
Number of inputs/switching point	2/24 V (DC), as per DIN EN 61131-2 Type 2
Power supply Voltage Current draw	 18 VDC to 30 VDC 250 mA at 24 V
Ambient temperature Operation Storage	 0 °C to +50 °C -20 °C to +60 °C
Humidity	0 to 95 %, non-condensing
Location of use	Dry location
Protection rating	IP 20
Certifications	CE, GCF, FCC, PTCRB, IC

REX 100 – Comparison of variants	3G	WAN
WAN port		√ 1 x
LAN port	√ 4 x	√ 3 x
3G connection (via GPRS/EDGE/3G/HSDPA+)	√ 1 x	
USB port	√ 1 x	√ 1 x
Digital input	√ 2 x	√ 2 x
Configuration using the myREX24 VPN portal	√	√
SMS wake-up functionality	√	√
WEB2go (access from mobile devices)	√	√
Inputs for issuing alarms (alarm SMS text messages and e-mails)	√	√

REX 100 – Ordering Data	Order No.
REX 100 3G, Ethernet router, 4 x LAN (switch)/1 x 3G modem, incl. Quick Start Guide	700-875-UMT01
REX 100 WAN, Ethernet router, 3 x LAN (switch)/1 x WAN port, incl. Quick Start Guide	700-875-WAN01
REX 100 accessories	
Stationary quadband antenna, GSM/UMTS, 2 dBi, 5-m cable	700-751-ANT21
Magnetic base quadband antenna, GSM/UMTS, 2 dBi, 2.5-m cable	700-751-ANT22
Self-adhesive triband antenna, GSM/UMTS, 3-m cable	700-751-ANT23
Portable quadband antenna with knee-joint, GSM/UMTS, 2 dBi	700-751-ANT24

ORDERING DATA

myREX24 – Ordering Data	Order No.
myREX24.net free Access account for myREX24.net with **one** free active connection* and **one** WEB2go connection, plus the option of creating **ten** REX devices for free and using **ten** free SMS text messages (once only). • Number of users allowed: 250 • Number of user groups allowed: 250 • Number of devices allowed: 250 (additional charges apply starting with the 11th device) • Number of device groups allowed: 250 • Number of active connections allowed: 1 (additional charges apply starting with the 2nd active connection)	
myREX24.net REX One-time fee for each additional REX router created after the 10th one.	800-870-REX01
myREX24.net ac1 License for 1 additional active connection*; expires 1 year after the invoice date.**	800-870-ACT01
myREX24.net ac3 License for 3 additional active connections*; expires 1 year after the invoice date.**	800-870-ACT03
myREX24.net ac5 License for 5 additional active connections*; expires 1 year after the invoice date.**	800-870-ACT05
myREX24.net ac10 License for 10 additional active connections*; expires 1 year after the invoice date.**	800-870-ACT10
myREX24.net WEB5 License for 5 additional WEB2go connections; expires 1 year after the invoice date.**	800-870-WEB05
myREX24.net WEB10 License for 10 additional WEB2go connections; expires 1 year after the invoice date.**	800-870-WEB10
myREX24.net WEB25 License for 25 additional WEB2go connections; expires 1 year after the invoice date.**	800-870-WEB25
myREX24.net WEB50 License for 50 additional WEB2go connections; expires 1 year after the invoice date.**	800-870-WEB50
myREX24.net shSMS 50 SMS messaging package with 50 messages	800-870-SMS05
myREX24.net shSMS 100 SMS messaging package with 100 messages	800-870-SMS10
myREX24.net shSMS 200 SMS messaging package with 200 messages	800-870-SMS20
myREX24.net shSMS 300 SMS messaging package with 300 messages	800-870-SMS30
myREX24.net shSMS 500 SMS messaging package with 500 messages	800-870-SMS50

* Active connections
The number of active connections is the number of connections between a user and an REX device.
In other words, all users and REX devices can be connected online to myREX24, but an active connection only counts the moment a user connects to an REX device.

** This license will be automatically renewed for one year unless renewal is cancelled at least four weeks before the license expires.

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