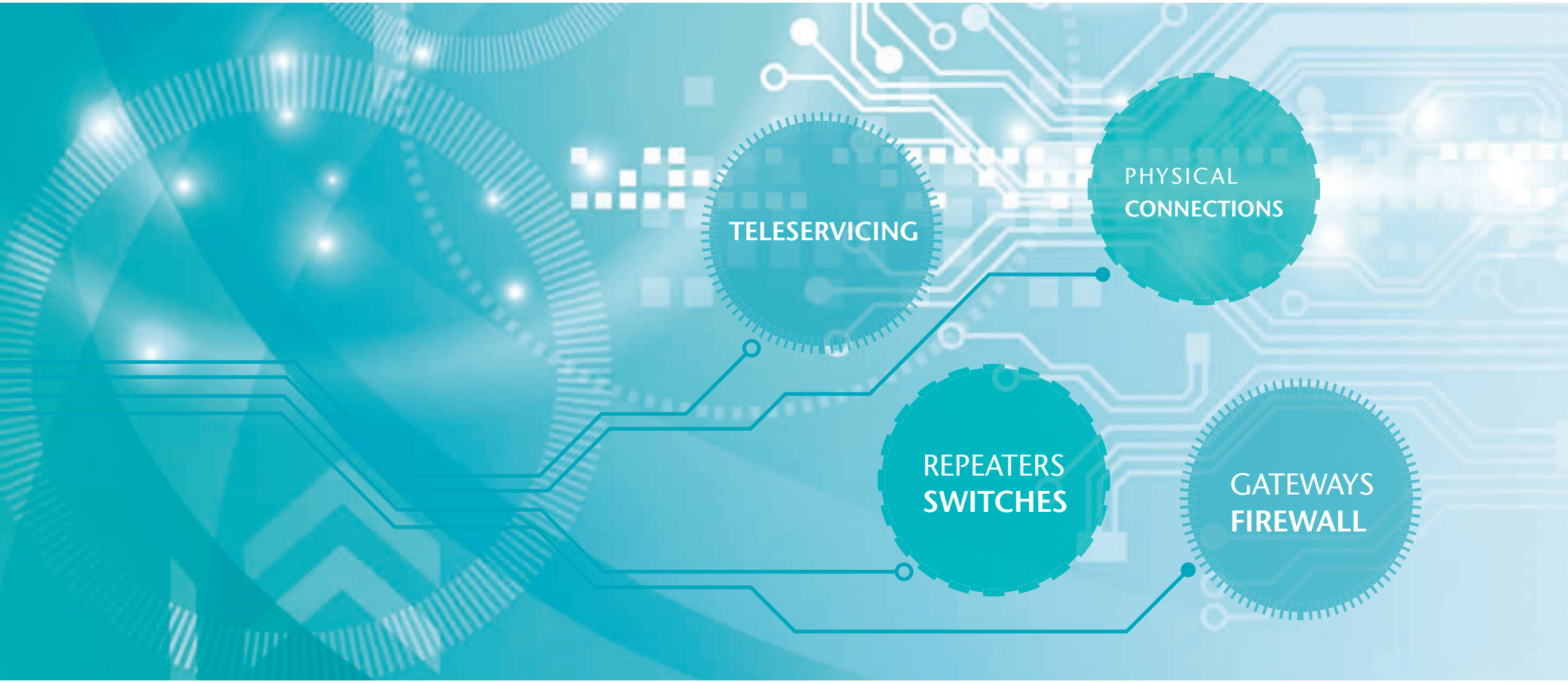
Helmholz®
COMPATIBLE WITH YOU



INDUSTRIAL COMMUNICATION AND INFRASTRUCTURE

Everything from one source!

THE FOUR LEVELS OF COMMUNICATION

Teleservicing

The REX Ethernet routers are specially designed for use in industrial environments; they enable reliable and secure Internet teleservicing of machinery and equipment.

The VPN portal myREX24 serves as a mediation server for VPN communication between the provider of remote maintenance and the customer facility:

Gateways | OPC server | Firewall

Whether implementation on other fieldbus systems, retrieving data from various control systems or access limitations and organization of production networks – Helmholz offers you everything you need for your infrastructure.

Switches | Repeaters

Repeaters and switches form the backbone of a system. They not only save cable and improve the signal quality, but also enable modern wiring concepts with diagnostics options.

Physical connections

Fieldbus plugs (Ethernet, PROFINET, PROFIBUS, LWL) may represent the lowest level of industrial communication, but high quality connections are absolutely necessary for smooth machine operation. The product spectrum of Helmholz here encompasses plug connections for PROFIBUS, PROFINET, and CAN, as well as converters of PROFIBUS to LWL.

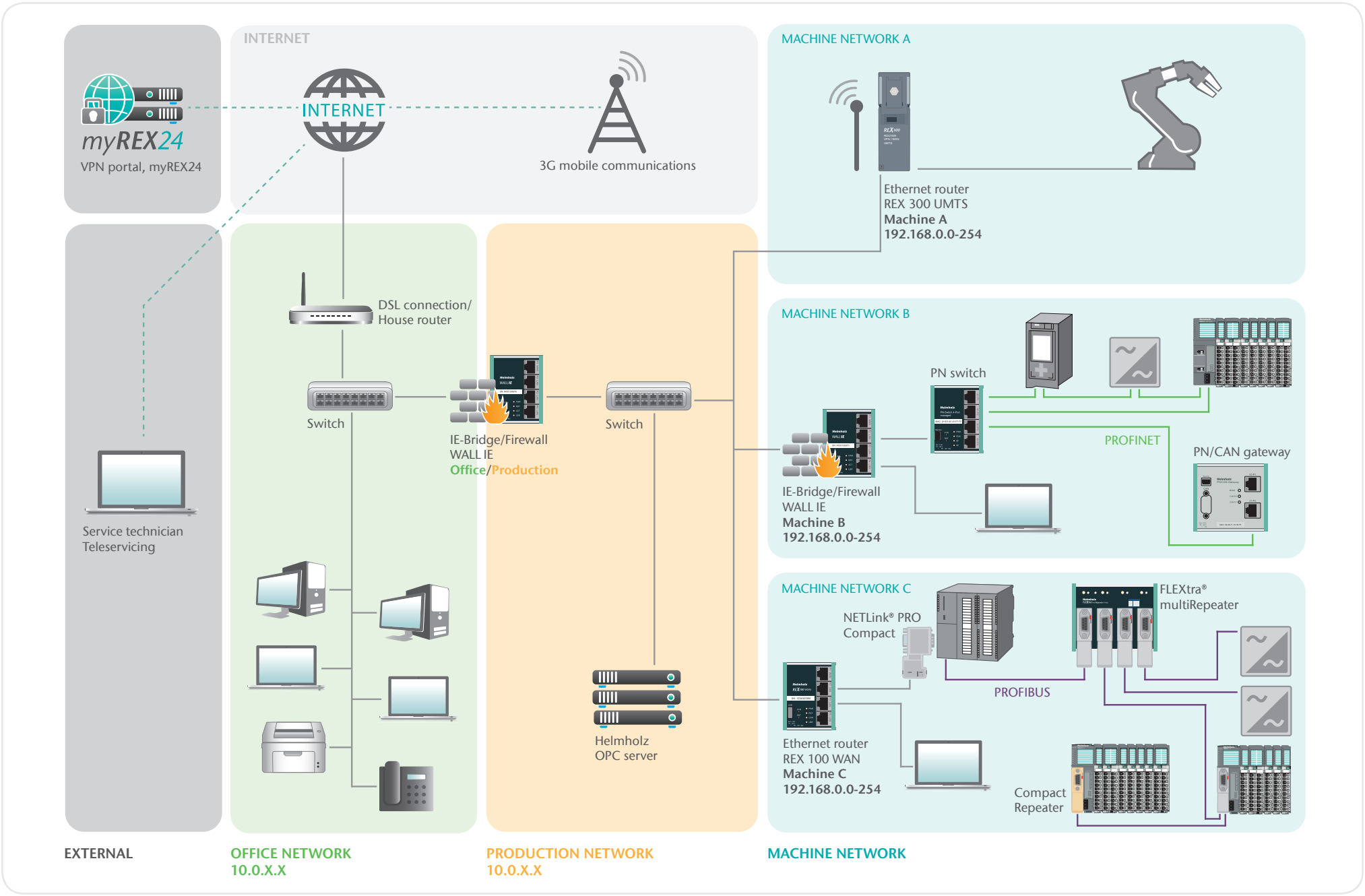
COMPATIBLE WITH YOU

This slogan describes the company philosophy of Systeme Helmholz in a brief and concise manner. Since its foundation in 1988 to this day, customer orientation and proximity to customers have been key factors in the development and success of our company.

Our core competence is the development and production of system components for automation technology. The product spectrum ranges from infrastructure components to remote maintenance concepts and fieldbus products through to decentralized fieldbus I/O systems.

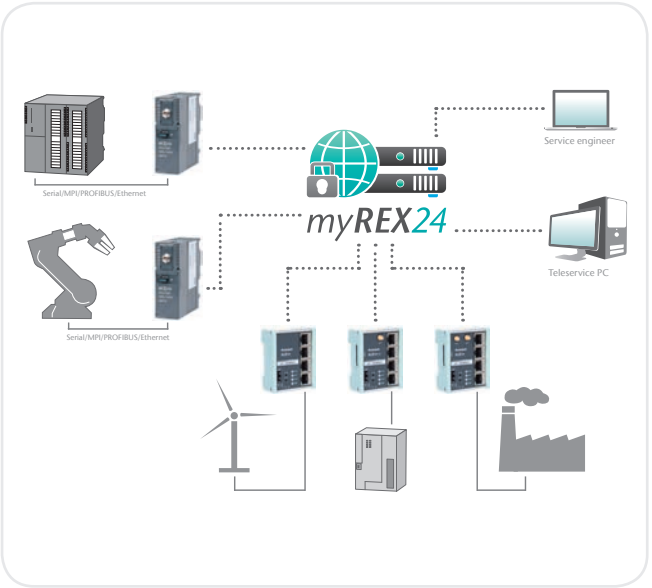
From the very beginning, we were able to grow our company and expand internationally. Helmholz has been growing organically and now employs around 100 staff at the head office, and worldwide we our operating with five branch offices and 46 distributors.

“COMPATIBLE WITH YOU” also means to us: The customer is at the focus of what we do on a daily basis. It is our aim to develop user-friendly products, to put customer-oriented service in the foreground, and to guarantee uncomplicated, fast delivery.



Industrial communication with infrastructure components from Helmholz

WORLDWIDE ACCESS TO MACHINES AND EQUIPMENT



REX 100, Ethernet router

- 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

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

The REX 100 router 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 Open-VPN protocol.

REX 300, Ethernet router

- Remote access to Ethernet-enabled devices
- Directly connect S7-MPI/PROFIBUS devices
- Service RS-232/RS-485 devices remotely via Internet
- Integrated firewall
- S7-MPI/PROFIBUS driver included

The REX 300 Ethernet routers are specially designed for use in industrial environments; they enable reliable and secure Internet teleservicing of machinery and equipment. Thanks to the integrated Firewall, remote access is allowed only for authenticated users.

An additional serial port in router versions with a WAN connection makes it possible to incorporate serial devices into your remote servicing network.

In combination with the VPN portal myREX24, you get the full service range of the industrial routers.

myREX24, VPN portal

- Redundant portal hosting (>99 % availability)
- Configuration of the REX routers in the myREX24 VPN portal
- User and permissions management system
- myREX24 company edition – exclusive server with high reliability and its own IP address

The VPN portal myREX24 serves as a mediation server for VPN communication between the provider of remote maintenance and the customer facility.

In order to use the myREX24 system, all that is required is an Internet connection and an access account, which is set up once. The configuration of the REX routers is also created in the portal and can then be easily transferred to the router.

The myREX24 VPN portal is hosted at a high-performance data center. A redundant connection with 365/24/7 monitoring guarantees an average annual network availability of at least 99%.

PROGRAM, VISUALIZE, TELESERVICING

NETLink® gateway, PROFIBUS Ethernet gateway

NETLink® gateways enable users to establish direct contact between a computer and a PLC with MPI/PPI/PROFIBUS using Ethernet, WLAN, or Hi-Speed USB as a transmission channel and standard Ethernet TCP/IP as a protocol.

The modules on the control system side enable the full 12 Mbps bit rate. The NETLink® product family encompasses five devices and covers the complete range of applications.

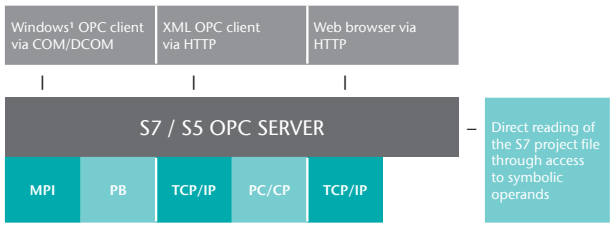
- Support for all common S7 engineering tools
- Dynamic address assignment using DHCP
- Security functions for securing TCP/IP access
- PLC write protection feature can be enabled and disabled
- Easy configuration via web interface
- Variables can be monitored on a browser window
- Support for configuring slave parameters

OPC server

There are a variety of options available for connecting your controllers to the S7/S5 OPC server, such as TCP/IP, PROFIBUS, MPI, PPI, or AS511. In the S7/S5 OPC server configuration menu, up to 16 communication devices can be activated, with which parallel data exchange can then be implemented.

Using the communication protocol TCP/IP (RFC1006), simultaneous access to up to 256 controllers is also possible in the maximum expansion stage.

- Quick access to S7/S5 data with 32/64-bit PC architecture
- Flexible connectivity
- Integrated web server

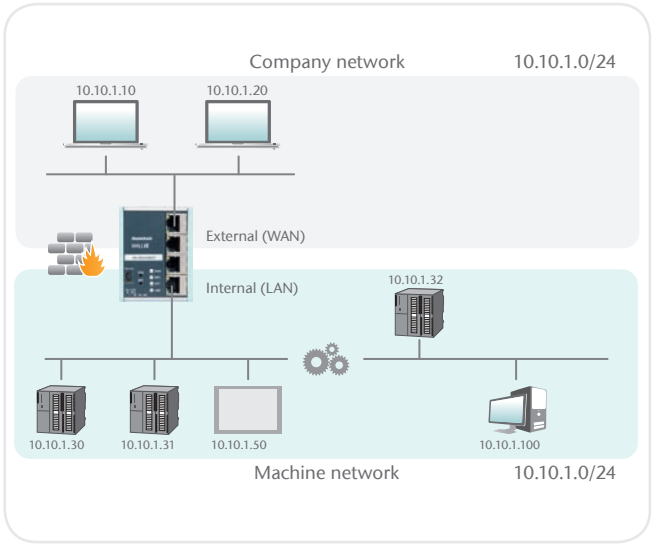


PROTECT AND CONNECT INDUSTRIAL NETWORKS

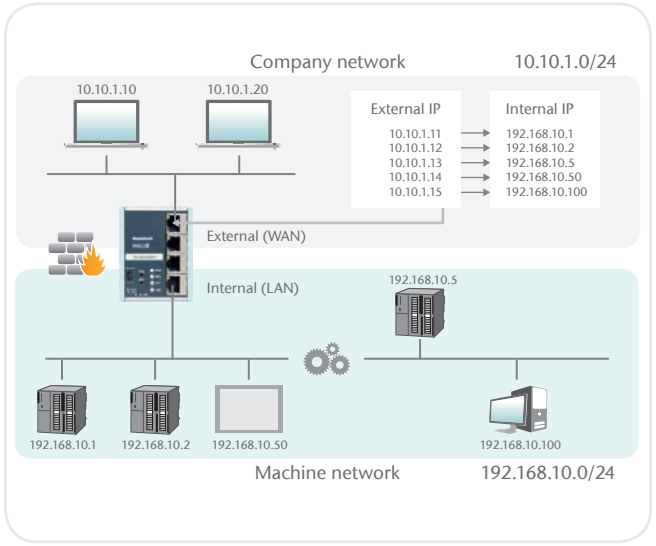
WALL IE, industrial Ethernet bridge and firewall

- Integration of machine networks into the higher-level production network
- Bridge function for identical IP address ranges
- NAT: Basic NAT, NAPT, port forwarding
- Access restriction through packet filters
- 100 Mbps industrial Ethernet
- Industry-compatible design for installation on DIN rails

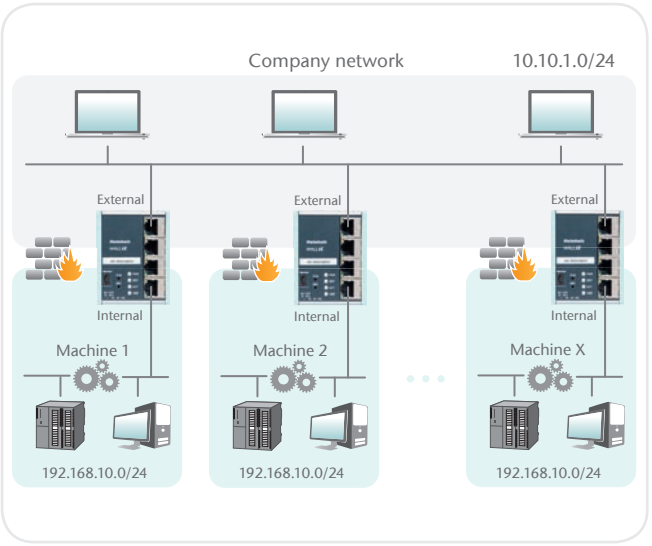
WALL IE, the new Industrial Ethernet Bridge and Firewall, simply integrates your machinery network into the higher-level production network. A package filter protects the networks from unauthorized access. If identical IP address ranges are to be realized, WALL IE functions as a bridge.



WALL IE, bridge operating mode with access restriction



WALL IE, Basic NAT



WALL IE, NAT functionality – same machines in the production network

INNOVATIVE NETWORK AUTOMATION

PN/CAN gateway, PROFINET/CANopen®

With the new PROFINET/CANopen® gateway, a simple and uncomplicated connection of CANopen® devices to PROFINET is possible.

The I/O data of the CANopen® participants is transparently displayed in a freely configurable manner in the PROFINET network and can thus be processed directly in the PLC.

- USB interface for diagnostics and updates
- DIN rail mounting
- Full-fledged CANopen® master
- Up to 127 CANopen® slaves possible
- SDO communication, emergency messages, participant monitoring with heartbeat and node guarding
- Easy configuration via GSDML file, no handling blocks or parameterization software necessary

PROFINET Switch, 4-port, managed

Connect up to four network participants to save time and costs with the new PROFINET switch. The managed real time Switch supports PROFINET according to Conformance Class B and offers transmission security through ring redundancy as an MRP client.

One of the most important functions of a PROFINET switch is the prioritizing of the PROFINET frame traffic in the machine network. It can differentiate whether the frame is a web query, an FTP file transmission, a media stream or a PROFINET frame. In the case of a high transmission load, the important frames can thus be prioritized in order to prevent frame losses .

- Prioritizing of PROFINET frames
- Neighborhood detection/ topology
- Integration into the automation network with GSDML file
- Quick, simple configuration and diagnosis via PROFINET and web interface
- Media redundancy: MRP client
- Port mirroring and diagnosis alarms for network analysis
- Conformance class B
- Managed switch with 4x100 Mbps RJ45 ports

MORE EFFICIENCY AND FLEXIBILITY FOR SOPHISTICATED PROFIBUS NETWORKS

FLEXtra® PROFIBUS repeater 2/4/6-way

The FLEXtra® repeaters are multi-PROFIBUS repeaters designed for mounting on a DIN rail. They regenerate the incoming electrical signal on a bus line and retransmit it (bit reshaping and retransmission). The signals are restored in level, slope, and duty cycle.

The multiRepeater also allows the setting up of a star network with independent segments.

- System expansion by up to six segments with one device
- Setup of star networks
- Status LEDs for each segment
- Increase the number of participants
- Repeating function for each segment or totally disabled
- Electrical isolation of all segments

PROFIBUS compact repeater

The PROFIBUS Compact Repeater can be used extraordinarily well for bus extension (up to 1 km with 2 PROFIBUS compact repeaters), to increase the number of participants, and to expand the system.

As a special application option, the PROFIBUS compact repeater allows the setup of stubs as separate segments. For this it can be plugged directly into the PG connection of an existing PROFIBUS connector.

- No additional space required in the control cabinet
- Can be used for bus extension or as a stub
- Increasing the number of participants, expansion of the system
- Status LEDs
- No 24 V supply required
- Electrical isolation

OTHER FIELDBUS SOLUTIONS FROM HELMHOLZ...

The compact, decentralized I/O system TB20 offers you the appropriate solution for many applications.

Are you also looking for a specific solution for your project? Talk to us. We are happy to help.

PROFINET® PROFIBUS® CANopen® Modbus EtherCAT® EtherNet/IP™

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