

LTE VPN-Firewallrouter

With the **LTE VPN firewall router** (Article no. A-FW53), a high-performance router is available for industrial Ethernet networks, enabling the secure transmission of sensitive data via mobile networks. The integrated firewall and VPN support protect your application from unauthorized access. Remote locations can be easily, securely, and conveniently integrated into a VPN network via mobile connection.

If LTE is unavailable, the router automatically switches to UMTS, GPRS, or EDGE. Additionally, two SIM cards from different providers can be used to ensure high availability. Regardless of where your system or controller is located, process data and plant visualizations are available to you from anywhere via a secure VPN connection. Two configurable digital inputs enable the sending of alarm SMS or alarm emails – also to multiple recipients. The two integrated digital outputs can be controlled via a password-protected SMS message or via our web portal.

With the **LTE VPN firewall router**, system status can be monitored remotely, measurement values transmitted, and devices switched on or off.

When used in combination with an **ISONA Automation WebCenter** (web portal), the full feature set of these VPN routers comes into play. For example, alarm messages triggered by digital inputs can be sent directly to the WebCenter, where the alarm can be forwarded by SMS, fax, or email to any recipient and archived in a journal. In addition, data (e.g. meter readings) from the controller behind the VPN router can be transmitted to the central database of the **WebCenter**. This VPN firewall router also features an innovative and secure offline configuration concept via USB stick, used together with the **ISONA Automation WebCenter**. This eliminates the need to connect a laptop/PC to the router during commissioning and avoids time-consuming and error-prone configuration via the local web interface. This product is based on specially adapted VPN routers from our German technology partner, exclusively customized for **ISONA**. The devices are “Made in Germany.”



Features

- LTE 7-band
- HSDPA 4-band
- GPRS/EDGE quad-band
- Integrated firewall
- OpenVPN / IPsec
- Persistent outgoing VPN tunnel or temporary VPN tunnel controllable via key switch or password-protected SMS command
- Configurable digital inputs and outputs; email alert in case of a fault signal at the digital input
- Wide input voltage range from 10 V DC to 30 V DC
- Extended temperature range
- Integrated surge protection
- Offline configuration via USB stick in combination with an ISONA Automation WebCenter
- Fully compatible with the ISONA Secure Automation Gateway (SAG) and the ISONA Automation WebCenter (web portal), allowing for automatic firmware updates and configuration changes to be initiated from the WebCenter
- Innovative: Access to web-based frontends of controllers, etc., via the router's LAN port also possible via HTTPS – an alternative for sites where VPN tunnels are not permitted

Technical Data

Power supply

- **Supply voltage:** 10- 30 V DC (via pluggable screw terminals)
- **Rated current consumption:** < 250 mA @ 24 V, < 600 mA @ 10 V
- **Standby consumption:** < 90 mA @ 24 V
- **LED-Displays:** Power, VPN, LEVEL, P-DATA, NET, SIM 1, SIM 2

Interfaces

• Net-Interfaces

- **LTE Frequencies:** 800, 850, 900, 1800, 1900, 2100, 2600 MHz (LTE)
- **Transmission power:** 23 dB
- **UMTS Frequencies:** 850, 900, 1900, 2100 MHz (UMTS/HSPA)
- **Transmission power:** 23 dB
- **GSM Frequencies:** 850, 900, 1800, 1900 MHz (GPRS/EDGE)
- **Transmission power:** max. 32 dB
- **SIM-Interfaces:** 2 Slots for 1,8 or 3 Volt SIM-Cards
- **Antenna port:** 2 x 50 Ω Impedance of SMA antenna connector
- **VPN:** Secure data encryption using OpenVPN to the ISONA Secure Automation Gateway (SAG), outgoing VPN connection, no external IP address required.

• Ethernet-Interfaces

- **LAN-Ports:** 4 Port-Switch, RJ45-Sockets, isolated
- **Transmission rate:** 10/100 MBit/s
- **Supported protocols:** TCP/IP, UDP/IP, FTP, HTTP, HTTPS
- **LED indicators:** ACT (yellow): Ethernet data transmission; ACT (green): Ethernet link established

• Serial Interfaces, I/Os

- **Serial Interfaces:** optional: RS232-, RS485-Interface
- **Digital I/Os:**
 - 2 digital inputs (10–30 V DC, shared GND)
 - 2 digital outputs (24 V DC, short-circuit proof, max. 150 mA)
 - Connection via pluggable screw terminals

Physical characteristics

- **Dimensions:** 101x116x22,5 mm
- **Ambient temperature range:** Operation -25 to +75°C, Storage -40 to +85°C
- **Relative humidity:** 0 - 95% (not condensed)
- **Protection rating:** IP20

CE compliance according to R&TTE Directive 1999/5/EC

- **EMV:** EN 61000-6-2. EN55022 Class B
- **Safety:** EN60950
- **Radio:** EN 301511