



FWR 520 4G/LTE router with remote control function

NEW
4G-Router
with **PLC coupling**
and **large data**
storage

NEW: The SCHRAML 4G / LTE router for VPN communication to the control centre

With the FWR 520 LTE router, the focus is on secure communication via VPN tunnel to the AQASYS control system. Your advantage: In this way you can program the coupled **PLCs remotely**. You have full flexibility in the VPN configuration: Choose freely between the **VPN services OpenVPN, IPsec and Wireguard**. The VPN tunnel can **either be set to be permanently active or only temporarily activated from the control system**. These configuration variants are also available for **VPN Forwarding** so that, for example, you can only activate access to the connected PLC (e.g. for remote programming) temporarily and thus optimally protect it.

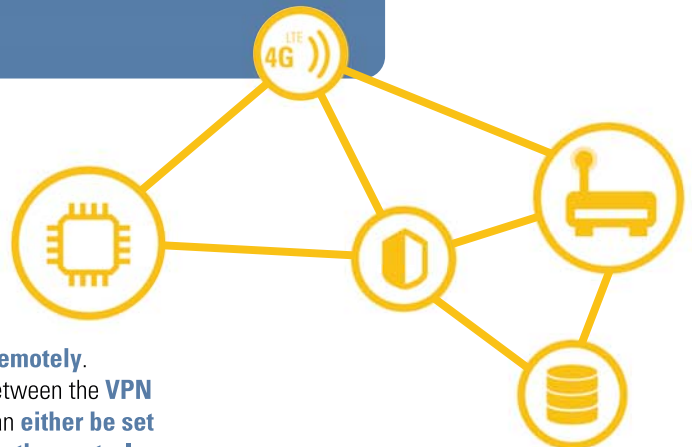
"Router Plus": PLC coupling with data storage

The FWR 520 LTE router is the new, inexpensive communication component from SCHRAML, which at the same time enables the **direct coupling of all commercially available PLCs via TCP / IP**. In contrast to software communication modules that are installed in the PLC, there is no need to intervene in existing PLC libraries (warranty).

At the same time, you can rely on the proven security of the **intermediate data storage over several days** for long-term archives of report data and high-resolution measured values and are not limited to the limited PLC memory.

High-performance webcam connection

Thanks to webcams, visual surveillance can now be implemented in a technically high quality. However, only **embedding the image recordings directly in the AQASYS control system** brings real added value. This is now possible with the powerful FWR 520 LTE router, which can conveniently connect webcams via VPN. Including webcam monitoring in the AQASYS dashboard and process image as well as **archiving** the webcam images for an **image gallery embedded in the line chart**, which enables a time and event-related "running of the image sequences".



Technical specifications

Performance features

Data transmission FWR 520 <-> control system via LTE	●
Simple coupling of PLCs without intervening in the PLC program and without changing or expanding PLC libraries (warranty, uncomplicated PLC change)	●
NEW: Now also with a flexible S7-TCP / IP driver for free PV addressing on the FWR 520 LTE router	●
Comprehensive, loss-free storage and processing of all measured values and alerts in the event of unavailability of the data transmission	●
VPN tunnel (with / without VPN forwarding) permanently active or temporarily activated from the control system -> e.g. for safe and convenient remote PLC programming	●
IT security: SSL / TLS encryption of data transmission with X.509-based certificates from the router to the control system is possible	●

General information

Operating System	Linux
Compatible from AQASYS version	10

Data transmission

Integrated LTE modem	●
VPN services: OpenVPN, IPSec, Wireguard	●

Interfaces

LAN	1
Serial / RS232	1 for Terminal
USB	1

PLC coupling

PLC coupling via TCP / IP (e.g. S7, Modbus TCP, Panasonic Mewtocol TCP etc.)	all common PLCs
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Storage

Storage capacity	for 14 days archive depth (report archive); for measured value archive entries max.: AI: 1 million I DI: 500.000 C: 500.000
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Installation and operation

Dimensions (width x height x depth in mm)	81 x 145 x 52
Power supply	24 V DC
Other	DIN rail mounting buffered real-time clock

1

Integrated LTE modem (Mini-SIM) for future-proof data transmission in the 4G network

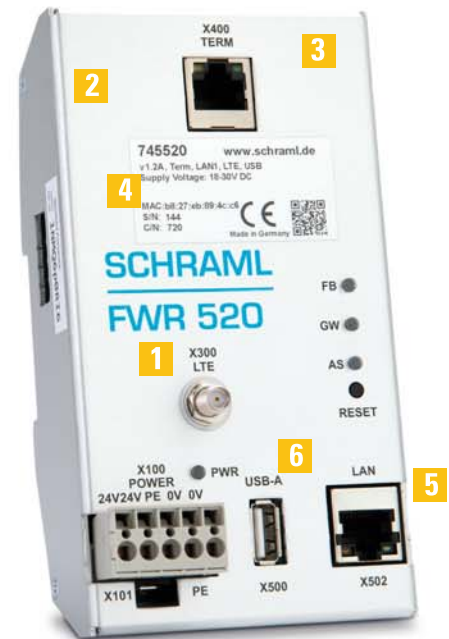
2

VPN tunnel can be activated remotely from the AQASYS control system, enabling direct and convenient PLC programming in the control centre

3

Webcam monitoring

- Direct integration into AQASYS
- Archiving in image gallery and time / event-related display in line charts
- Current webcam image in the dashboard



4

High-performance ARM Quad core processor

5

LAN interface

6

USB interface

