



Rohde & Schwarz Networks and Cybersecurity Product Overview 2026 / 2027



Rohde & Schwarz Networks and Cybersecurity GmbH
Adenauerstr. 20/B2
52146 Wuerselen | Germany
info.rs-nc@rohde-schwarz.com
rohde-schwarz.com/networks-and-cybersecurity

R&S and Rohde & Schwarz are trademarks of Rohde & Schwarz GmbH & Co. KG, registered or used, among others, in Germany, the EU, the USA, China, and other countries. Other names or designations used may be registered trademarks of different companies or owners. This document contains forward-looking statements regarding products and product features. The publisher reserves the right to change these at any time without stating reasons. No liability is accepted for technical inaccuracies or omissions. 10/2026

ROHDE & SCHWARZ
Make ideas real



ROHDE & SCHWARZ
Make ideas real





Networking and cybersecurity solutions for demanding applications

As Rohde & Schwarz Networks and Cybersecurity, we bring together networking and cybersecurity expertise for customers and partners who require secure, scalable, and highly available infrastructures.

Our mission is to empower companies, public-sector organizations, and security-critical industries with high-performance solutions for sovereign connectivity, resilient networks, and digital transformation.

Rohde & Schwarz Networks and Cybersecurity stands for solutions designed to meet these exact needs: customer-centric, sovereign and secure, powerful and scalable.

CUSTOMER-CENTRIC



SOVEREIGN & SECURE



POWERFUL & SCALABLE



Our solutions are developed with a clear understanding of our customers' and partners' requirements. They combine technological performance with a strong commitment to security, reliability, and digital sovereignty.

We rely on standardized, scalable solution components that can be flexibly adapted to different deployment scenarios, from enterprise networks and public institutions to highly sensitive infrastructures.

Table of contents

04	Solutions Overview, Built-in Security & IT Security Ecosystem
08	R&S®LANCOM Management Cloud
12	Routers & Secure SD-WAN Gateways
14	Gateways of the 1800 Series
17	Rugged Gateways for demanding Infrastructures
18	Gateways with Multi-WAN
19	Central Site & Virtual Gateways (vRouter)
20	Access Routers & Accessories
22	R&S®LANCOM Advanced VPN Client
24	Firewalls
24	Desktop, Rack & Virtual Unified Firewalls
26	Feature Overview: UTM & Secure Edge Computing
28	Management Tools & Accessories
30	Switches
32	Enterprise-Class Core Switch with Accessories
34	Enterprise-Class Aggregation & Access Switches with Accessories
38	SME- & Industrial-Class Access Switches & Unmanaged Switches
42	Wireless LAN
42	Wi-Fi 7 Indoor Access Points
45	Wi-Fi 6 Indoor Access Points
46	Outdoor Access Points
48	WLAN Controllers & Accessories
50	Software Options
52	Trainings & Workshops (R&S®NC Academy)
54	Service & Support (R&S®NC Support)
56	Network & Hard Disk Encryption incl. Management
56	R&S®SITLine
58	R&S®Trusted VPN
60	R&S®Trusted Disk
62	R&S®Trusted Objects Manager

Digitally sovereign. Highly secure.

Secure, scalable, and fully integrated solutions

IT networking is rarely about individual devices or simply acquiring technical components. Instead, it is about how hardware, software, and technology work together, supported by thoughtful planning, precise implementation, day-to-day operations, and long-term network maintenance.

Our solutions for **corporate, public-sector, critical infrastructure, and defense applications** enable partners to implement standardized yet tailored deployment scenarios for different industries and security requirements.



From requirements to practical network solutions

How can complex networking requirements be implemented securely and in line with actual needs? Explore practical use cases and IT reference architectures that show how to build high-performance, scalable networks, protect critical infrastructures, and plan for future growth from the outset.

Simply scan the QR code or read more free of charge at:
www.rohde-schwarz.com/networks-and-cybersecurity → Solutions



IT security that is considered, built-in, and delivered as standard.

Security is not an add-on. It is an integral part of every organization. That is why our network components are designed to meet demanding security requirements from the very beginning.

Under the term **Built-in Security**, we bring together all security mechanisms integrated into our products at the factory. Every component and every software release therefore stands for high network security, reliability, and resilience — **engineered in Germany**.

This is how we promote digital sovereignty in Europe!



Examples of Built-in Security product features

- ▶ Certification for verified trustworthiness by the German Federal Office for Information Security (BSI)
- ▶ High availability through redundancy mechanisms and cellular backups
- ▶ DPI engine for data inspection
- ▶ IKEv2/IPSec VPN support for secure site-to-site connectivity
- ▶ BSI approval for VS-NfD, RESTREINT UE/EU RESTRICTED, and NATO RESTRICTED

Benefits in practice

- ▶ **Secure operations**
Predictable updates and high availability prevent outages and consequential costs.
- ▶ **Transparency and control**
Proprietary operating systems and clear responsibilities create a verifiable security architecture.
- ▶ **Investment protection**
Long-term lifecycle maintenance and predictable updates extend device service life.
- ▶ **Maintaining digital sovereignty**
Transparent development and control instead of opaque black boxes.



Learn more at:
www.rohde-schwarz.com/networks-and-cybersecurity
→ Company → IT Security



IT Security Ecosystem

A strong network for your security

Increasing cyberattacks, hybrid clouds, and compliance requirements call for more flexible IT security solutions. With our IT Security Ecosystem, we offer a strong network of specialized security experts and interoperable European components from multiple vendors. Its primary objective is to reduce the risks of cyber incidents and operational disruptions.

Tested, integrated solutions that work in real-world projects

The IT Security Ecosystem brings together specialized solutions that complement our portfolio and address a wide range of requirements:

- ▶ **Rohde & Schwarz Networks and Cybersecurity as curator**
Analyzing market requirements and assembling the right IT security specialists.
- ▶ **IT Security partners for specialized technologies**
For example, security components such as Network Access Control (NAC), Security Information and Event Management (SIEM), and IT network redundancy solutions.
- ▶ **System integrator partners for customer projects**
Combining project experience to ensure reliable implementation and seamless operation of multi-vendor solutions.

Become part of the IT Security Ecosystem!

For further information, scan the QR code or visit:
www.rohde-schwarz.com/networks-and-cybersecurity → Company → IT Security



Why join an IT Security Ecosystem?



Benefits for IT Security partners

- ▶ **Synergies:** Joint solutions that meet customers' cybersecurity requirements
- ▶ **Greater visibility:** Recommendations in networking projects
- ▶ **Quality assurance:** Validation for defined application areas
- ▶ **Go-to-market support:** Joint marketing and training
- ▶ **Long-term collaboration:** Continuous development of the ecosystem



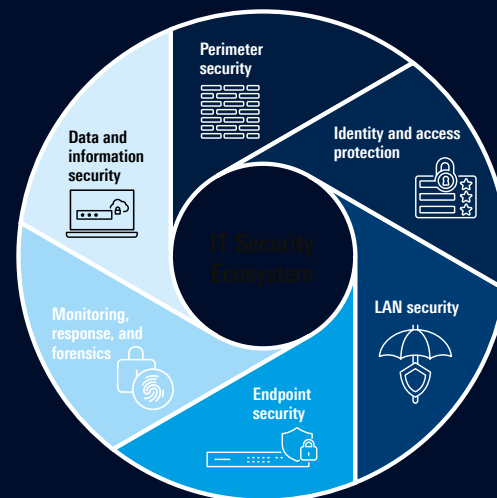
Benefits for system integrator partners

- ▶ **Integrated approach:** Projects built around tested digital components
- ▶ **Increased trust:** Positioning as an implementation partner
- ▶ **Planning certainty:** Validated solutions with clearly defined services
- ▶ **Go-to-market:** Co-branding with Rohde & Schwarz Networks and Cybersecurity and technology partners
- ▶ **Stable customer relationships:** Validated architectures and clearly defined responsibilities



Benefits for end customers

- ▶ **Risk reduction:** Lower risk of cyber incidents and business interruptions
- ▶ **Faster time to value:** Standardized integration paths, templates, and best practices for accelerated rollouts
- ▶ **Greater efficiency:** Fewer errors and more efficient operational processes
- ▶ **High level of security:** Prevention, detection, and response
- ▶ **Clear responsibilities:** We ensure the validated scope of functionality, while partners handle implementation.



R&S®LANCOM Management Cloud

Centralized network management for R&S®LANCOM devices

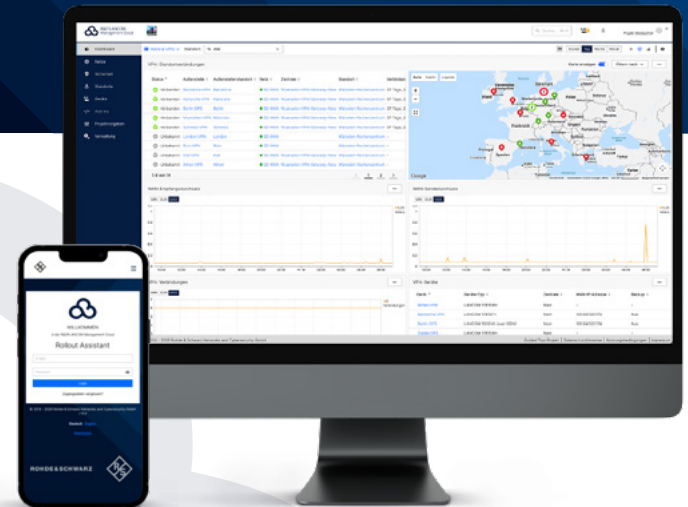
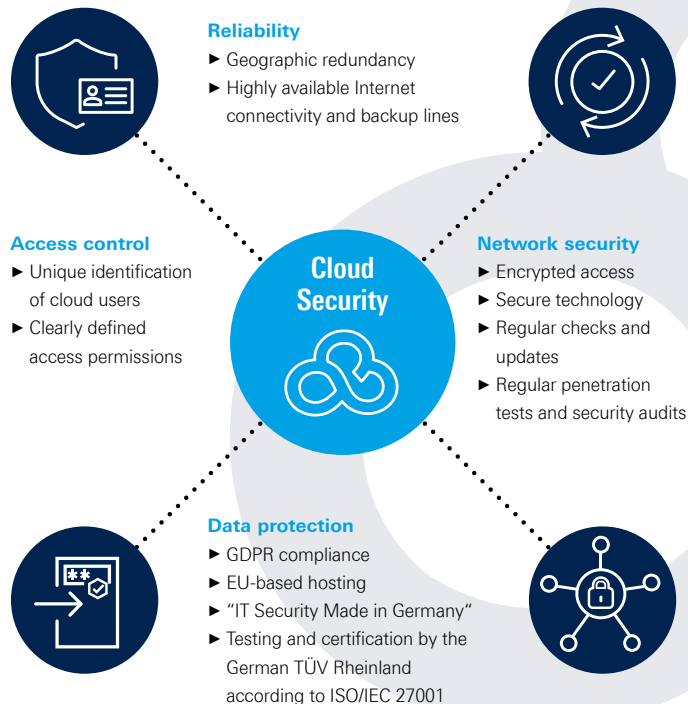
A securely and efficiently managed network is essential for every organization. R&S®LANCOM Management Cloud (R&S®LMC) combines security, automation, and centralized control. It supports compliance with regulatory requirements, including NIS2, reduces operational complexity, and protects your entire network — from WAN, LAN, and Wi-Fi to remote access and security. This out-of-the-box solution enables you to manage and operate your entire infrastructure efficiently, scalably, and with confidence in the future.

Digital sovereignty with R&S®LMC

With R&S®LANCOM Management Cloud, you benefit from robust, integrated security based on sovereign technology, ensuring a high degree of data control and full compliance with EU requirements.

Deep integration of all network components simplifies workflows, maintenance, and operations. Centralized data enables comprehensive analysis and predictive diagnostics and lays the foundation for future AI-assisted network operations.

One of the most secure and trusted network management clouds on the market!



75% time savings for greater productivity

- ▶ Manage multiple network projects from one centralized platform
- ▶ Reduce on-site visits through remote troubleshooting
- ▶ Deploy entire sites with zero-touch provisioning
- ▶ Automate and schedule updates and rollouts
- ▶ Reduce errors through standardization
- ▶ Rapidly deploy new networks and services



Management System
ISO/IEC
27001:2022
www.tuv.com
ID 3000031906



We invest in IT security and quality!

Learn more by scanning the QR codes or visiting:
www.rohde-schwarz.com/networks-and-cybersecurity

→ Products → Management systems

Highlight features of R&S®LMC

The R&S®LANCOM Management Cloud is continuously evolving. Discover the latest highlights of our cloud development!

Everything at a glance: monitoring tailored to your needs

- 
- **Flexible dashboard views**

The preconfigured “R&S®LMC Dashboards” provide a quick start and cover key monitoring functions organized by topic. “My Dashboards” complements these with a customizable overview that allows monitoring parameters to be combined, prioritized, and analyzed according to project-specific requirements.
- 
- **Visual network topology**

The topology view provides a clear visualization of device cabling and network connections within a site. This makes it easier to understand network relationships, trace connection paths, and identify potential sources of errors.
- 
- **Client explorer**

The client explorer simplifies targeted troubleshooting for wired and wireless clients. Quick search functionality, detailed status and connection data, and historical connection records enable efficient analysis and early detection of potential issues.
- 
- **Clear floor plan view**

A clear floor plan view helps visualize the physical locations of devices and their status within a site.

Network management made easy

- 
- **Zero-touch deployment**

Entire sites can be commissioned centrally through R&S®LMC, eliminating time-consuming and costly on-site visits.
- 
- **Advance planning of configuration rollouts and firmware updates**

Rollouts and updates can be scheduled in advance and performed automatically within defined maintenance windows. Progress reports and alerts provide complete transparency.
- 
- **Wi-Fi optimization in seconds**

R&S®LANCOM Active Radio Control 2.0 reduces Wi-Fi setup and optimization costs by up to 99%. This self-learning automation solution optimizes deployments based on actual usage data and reduces administrative effort.

Secure business processes and minimize costs

- 
- **Greater transparency throughout the device lifecycle**

The End of Sale and End of Life status are clearly visible in the R&S®LMC. Filters and automatic notifications help you plan modernization activities in good time.
- 
- **Secure administrator management via identity providers**

Login and role assignment can be managed centrally through your organization’s identity provider (IdP), consolidating authentication and authorization of access and usage rights.
- 
- **Dynamic energy-saving solution**

Active Power Control provides transparency into power consumption by R&S®LANCOM devices, offers savings opportunities through sustainability mode, and provides monthly and annual reports on key consumption figures.
- 
- **Flexible licensing models**

R&S®LMC offers flexible license and cost management. Device licenses are available with terms of one, three, or five years for transparent up-front budgeting. Alternatively, usage-based monthly billing is available under an SPLA agreement.



Stay up to date!

Discover all the latest features in the R&S®LMC news by scanning the QR code or visiting:
www.rohde-schwarz.com/networks-and-cybersecurity
→ Products → Management systems → R&S®LANCOM Management Cloud



Secure SD-WAN

Trusted SD-WAN from Germany for secure, scalable, and efficient networks

Organizations looking to connect locations for the future and integrate cloud applications into their IT infrastructure can benefit from cloud-managed SD-WAN. Its advantages over manually managed wide area networks (WANs) quickly become apparent:



Centralized management, standardization, automation, high availability, and efficient resource and cost management at a time of IT skills shortages

In addition to familiar SD-WAN benefits such as time savings and optimized bandwidth utilization, our Secure SD-WAN solutions offer **two particular differentiators**:

Engineered in Germany



Our SD-WAN solutions use BSI-tested hardware and software components to help European businesses meet GDPR and NIS2 requirements, thereby strengthening digital sovereignty.

One-box solution



We combine the SD-WAN underlay (the physical layer of Internet connections) and SD-WAN overlay (virtual network control, security, and optimization) in a single device. This reduces costs and simplifies management during rollout and ongoing operations.



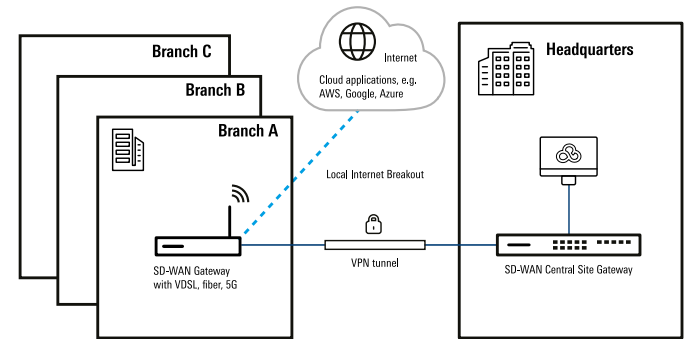
Get your network ready for SD-WAN!

Whether you are a managed service provider (MSP), carrier, business, or public institution, make the move to Secure SD-WAN from Rohde & Schwarz Networks and Cybersecurity and shape the future of your network with us!

Learn more by scanning the QR code or visiting:
www.rohde-schwarz.com/networks-and-cybersecurity
 → Solutions → Corporate Network Solutions → SD-WAN



Your Secure SD-WAN deployment could look like this



Ready for Secure SD-WAN



All R&S®LANCOM Secure SD-WAN Gateways can be **managed centrally via the cloud** (R&S®LMC), including secure network segmentation, automated provisioning, and intelligent path control (Dynamic Path Selection).



Built-in Security features of all gateways include:

- ▶ IPsec VPN (IKEv2) for encrypted site-to-site connectivity
- ▶ Network segmentation with ARF and VLAN
- ▶ Stateful inspection firewall with intrusion prevention and denial of service protection



For extended protection, the global content and URL filters of the **R&S®LANCOM Security Essentials Option** provide additional security.

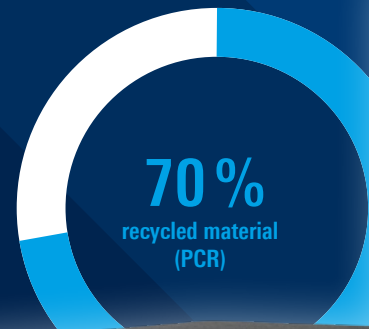
Secure SD-WAN Gateways of the R&S®LANCOM 1800 blackline series

Connect branch offices securely, flexibly, and more resource-efficiently

Whether VDSL, fiber-optics, or cellular connectivity, available connections often vary from site to site during branch rollouts. This router series addresses that challenge with a wide variety of interfaces and integrated security features. The housing is optimized for recycling and requires no coatings, adhesives, or paint. Local production also shortens transport routes, reduces CO₂ emissions, and improves delivery reliability — a particular advantage for large-scale rollouts.



80% less paper documentation and 83% higher airflow volume cooling, resulting in quieter fan noise, compared with the classic R&S®LANCOM CPE housing.



VPN gateways / routers

R&S®LANCOM 1800EFW-5G

- High-speed fiber-optic Internet access (GPON and AON modules available separately) and Gigabit Ethernet for connecting external modems
- Integrated 5G modem with eSIM support
- Dual-band concurrent Wi-Fi 6 with up to 1,200 Mbps at 5 GHz and 575 Mbps at 2.4 GHz
- 5 VPN connections (IPSec and WireGuard, opt. 25)



R&S®LANCOM 1800VA / 1800VA-4G / 1800VA-5G

- VDSL Supervectoring modem (up to 300 Mbps)
- Fiber-optics and Gigabit Ethernet
- 5 VPN connections (IPSec and WireGuard, opt. 25)
- **1800VA-4G** also features a 4G modem with eSIM* for LTE Advanced at up to 300 Mbps
- **1800VA-5G** also features a 5G modem with eSIM* for primary 4G/5G operation or active/active operation alongside other access types



R&S®LANCOM 1800VAW

- Like 1800VA, also features Wi-Fi 6

R&S®LANCOM 1800VAW-4G

- Like 1800VAW, also features a 4G modem

VoIP gateways / routers

R&S®LANCOM 1803VA / 1803VA-4G / 1803VA-5G

- Like 1800VA, also features professional, secure telephony functions (VCM/SBC)
- Continued use of existing ISDN and analog components via 2x ISDN S0 (NT) for multi-device and PBX configuration and 2x analog (internal) / fax
- **1803VA-4G** also features a 4G modem with eSIM*
- **1803VA-5G** also features a 5G modem with eSIM*



R&S®LANCOM 1803VAW

- Like 1800VA, also features Wi-Fi 6

R&S®LANCOM 1803VAW-5G

- Like 1803VAW, also features a 5G modem with eSIM support



Sustainability by design, for future-proof connections.
Scan the QR code to learn more about the 1800 blackline series.

* eSIM support is integrated from hardware revision D onward

Secure SD-WAN Gateways of the 1800EF Series

Does your small or medium-sized business need a reliable fiber-optic network that securely connects branch offices, employees, and service providers? These routers, housed in a classic CPE enclosure, provide high-speed broadband Internet for Secure SD-WAN.

R&S®LANCOM 1800EF

- High-speed fiber-optic Internet access (GPON and AON modules available separately) and Gigabit Ethernet for connecting external modems
- 5 VPN connections (IPSec and WireGuard, opt. 25)

R&S®LANCOM 1800EF-4G

- Like 1800EF, also features a 4G modem with eSIM* for LTE Advanced speeds up to 300 Mbps, intelligent backup scenarios, and greater resilience

R&S®LANCOM 1800EF-5G

- Like 1800EF, also features a 5G modem with eSIM* for low latency and high bandwidth

* eSIM support is integrated from hardware revision D onward



Rugged Secure SD-WAN Gateways for demanding Infrastructures

These routers are ideal for reliably connecting security-critical infrastructures in energy supply and building automation, as well as decentralized IT environments.

NEW: R&S®LANCOM IGR-750EF-5G

- High-speed fiber-optic Internet access and Gigabit Ethernet
- Dual-SIM 5G modem with eSIM support
- Compact, fanless IP40 all-metal protective enclosure for direct mounting on DIN rails in control cabinets
- Reliable operation in adverse temperatures (-20 °C to +50 °C)
- 5 VPN connections (IPSec and WireGuard, opt. 25)
- Flexible power supply through 12 V or a wide-range 9–36 V DC input with reverse-polarity protection

R&S®LANCOM IAP-5G

- 5G modem
- IP50 all-metal protective enclosure
- Reliable operation in adverse temperatures (-20 °C to +50 °C)
- 5 VPN connections (IPSec and WireGuard, opt. 25)
- Power supply via PoE (802.3at) or via power adapter

R&S®LANCOM OAP-5G

- 5G modem with eSIM support
- IP67 protective enclosure, fully dust-tight and resistant to water jets (operating temperature -20 °C to +70 °C)
- 5 VPN connections (IPSec and WireGuard, opt. 25)
- Power supply via PoE (802.3at)



Transparent security and greater consumer protection

The German IT Security Label identifies digital products for which manufacturers or service providers have declared compliance with the security requirements of the German Federal Office for Information Security (BSI).



Label for the R&S®LANCOM 1800EF, scan the right QR code to see all devices bearing the IT Security Label.



Find the right router for your requirements!

Headquarters or branch office, fiber-optics or cellular connectivity, Multi-WAN or demanding environments: the Router Matchmaker and comparison table offer practical tools for identifying the right solution.



To the Router Matchmaker



To the comparison table

Secure SD-WAN Gateways with Multi-WAN

Large, geographically distributed network infrastructures need to make efficient use of all available WAN connections to run data-intensive applications reliably and at high performance. Using multiple Internet connections simultaneously distributes network loads efficiently and maximizes bandwidth utilization through load balancing.

R&S®LANCOM

1936VAG / 1926VAG-4G / 1936VAG-5G

- ▶ 2x VDSL Supervectoring or 1x G.Fast, 1x Gigabit Ethernet and 1x SFP/TP combo for fiber-optic connections (GPON and AON modules available separately)
- ▶ Telephony functions (VCM/SBC), 2 ISDN (NT) interfaces, and 4 analog interfaces
- ▶ 25 VPN connections (IPSec and WireGuard, opt. 100)
- ▶ **1926VAG-4G** also features a dual-SIM 4G modem
- ▶ **1936VAG-5G** also features a dual-SIM 5G modem with eSIM support



R&S®LANCOM 1930EF / 1930EF-5G

- ▶ 1x Gigabit Ethernet and 1x SFP/TP combo for fiber-optic connections
- ▶ Telephony functions equivalent to 1936VAG series
- ▶ 25 VPN connections (IPSec and WireGuard, opt. 100)
- ▶ **1930EF-5G** also features a dual-SIM 5G modem with eSIM support



Secure SD-WAN Central Site Gateways

Large multi-service IP networks require performance, reliability, and consistently high security at the central site. The ISG series provides a secure core, including integrated security mechanisms such as firewall and redundancy functions and network segmentation.

R&S®LANCOM ISG-8000

- ▶ 2x 10G SFP+ and 8x Gigabit Ethernet
- ▶ 250 VPN connections (IPSec and WireGuard, opt. 3,000)
- ▶ Network virtualization with up to 256 networks (ARF)



R&S®LANCOM ISG-5000

- ▶ 2x 10G SFP+ and 6x Gigabit Ethernet
- ▶ 100 VPN connections (IPSec and WireGuard, opt. 1,000)
- ▶ Network virtualization with up to 256 networks (ARF)



R&S®LANCOM
vRouter

R&S®LANCOM vRouter

Virtualized performance for scalable Secure SD-WANs

Whether used as a virtual branch router (vCPE), central site gateway (vGateway), or WLAN controller (vWLC), the software-based R&S®LANCOM vRouter runs on VMware ESXi, AWS, Microsoft Hyper-V, or Azure. It gives you flexibility in network size and performance requirements while delivering consistent protection for your branch and cloud infrastructures.

License variants can be found at:

www.rohde-schwarz.com/networks-and-cybersecurity → Products → Routers & Secure SD-WAN → vRouter

Secure SD-WAN Gateway with Multi-Gigabit WAN



R&S®LANCOM 2100EF

- ▶ Multi-Gigabit high-speed fiber-optic Internet access with 2x 10G SFP+
- ▶ 4x 2.5 Gigabit Ethernet ports for connecting network components with demanding performance requirements
- ▶ Integrated telephony functions (VCM/SBC)
- ▶ 25 VPN connections (IPSec and WireGuard, opt. 100)
- ▶ Ideal compatibility with the R&S®LANCOM SFP-XGSPON-1 transceiver module for XGS-PON connections



Learn more about all routers and Secure SD-WAN products by scanning the QR code or visiting:
www.rohde-schwarz.com/networks-and-cybersecurity → Products → Routers & Secure SD-WAN



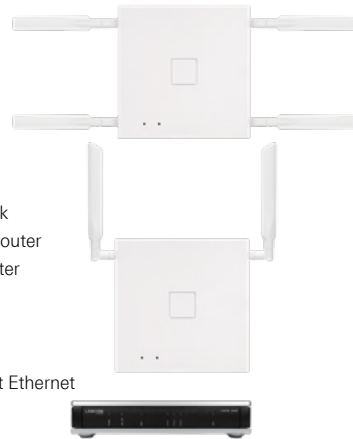
Access Routers and Network Extensions

NEW: R&S®LANCOM 750-4G / 750-5G

- Operation as a freely positionable 4G or 5G network extension, backup solution, or standalone cellular router
- Power via PoE according to 802.3af or power adapter
- **750-4G** also features eSIM support

R&S®LANCOM 1650E

- Flexible connection of external modems via Gigabit Ethernet
- 3 VPN connections (IPSec and WireGuard)



Post-Quantum VPN security

Protect today what must remain confidential tomorrow.

Quantum computers are changing IT security requirements. Encrypted data can already be intercepted and stored today for decryption at a later date ("store now, decrypt later").

R&S®LANCOM routers support post-quantum preshared keys (PQ-PSKs) as recommended by the BSI. They add an extra layer of protection against quantum-related risks to the IKEv2 handshake.



Your benefits

- More protection for long-term confidential data
- Easy integration into existing IKEv2 VPNs
- Additional protection against future attack scenarios

eSIM – cellular connectivity ready for immediate use

Integrated eSIM technology allows selected R&S®LANCOM Secure SD-WAN Gateways to connect directly to cellular networks without physical SIM cards. Cellular contracts and profiles can be provisioned, switched, and managed centrally through software.

Your benefits

- Faster rollouts with fewer on-site visits
- Flexible management of plans and profiles
- No SIM card replacements or risk of losing cards



Would you like to explore both features in practice?
Our **publications** offer additional documentation free of charge:

www.rohde-schwarz.com/networks-and-cybersecurity
→ Service & Support → Online documentation



Router Accessories

R&S®LANCOM CPE blackline Rack Mount (Plus)

- Mounting brackets for R&S®LANCOM gateways in blackline housings in 19" racks
- Plus variant also provides front-accessible connections



R&S®LANCOM Rack Mount (Plus)

- Mounting brackets for R&S®LANCOM devices in classic CPE housings in 19" racks
- Plus variant also provides front-accessible connections



R&S®LANCOM Wall Mount (White / Rail)

- Sturdy wall bracket for R&S®LANCOM devices in classic CPE housings
- Theft-resistant installation using padlock
- Available in classic and white variants
- Rail variant for DIN rail mounting



R&S®AirLancer I-360D-5G

- Indoor 4G/5G cellular antenna with 360° coverage and 2x2 MIMO for higher data rates and better signal quality
- Supports all 4G and 5G bands from 700 to 3,800 MHz
- Ideal for connection to R&S®LANCOM indoor 4G cellular routers



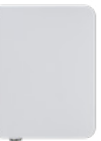
R&S®AirLancer O-360D-5G

- Like R&S®AirLancer I-360D-5G, including mounting hardware for outdoor wall and pole installation



R&S®AirLancer O-360Q-5G

- Outdoor 5G cellular antenna with 360° coverage and 4x4 MIMO for maximum 5G performance
- Ideal for connection to R&S®LANCOM 5G indoor cellular routers



Bidirectional fiber-optic transceiver modules (FTTH)

- **R&S®LANCOM SFP-AON-1** for up to 1G on active fiber-optic connections
- **R&S®LANCOM SFP-AON-10** for up to 10G on active fiber-optic connections
- **NEW: R&S®LANCOM SFP-GPON-2** for up to 1G on passive fiber-optic connections
- **R&S®LANCOM SFP-XGSPON-1** for passive 10G fiber-optic connections



More transceiver modules can be found at:
www.rohde-schwarz.com/networks-and-cybersecurity → Products → Software & Accessories

R&S®LANCOM Advanced VPN Client



Securely connected. Wherever you work.

This remote and mobile access solution securely connects employees in the office, at home, and on the go to the corporate network. All that is needed is a software client on a laptop or PC. Once configured, an encrypted connection is just one click away. As your business grows, access scales with it — from small teams to networks with several thousand users.



Secure remote access

Encrypted VPN connections to the corporate network, including seamless roaming for uninterrupted mobile work



High data security

Integrated stateful inspection firewall for IPv4 and IPv6 VPNs, and support for numerous IKEv2/IPSec protocol extensions



“One-Click VPN”

Setup wizard for fast rollouts and straightforward administration with automatic media detection, enabling users to establish VPN connections easily



The right client for your platform

R&S®LANCOM Advanced VPN Client is available for Windows and macOS. It supports the current operating system versions (Windows 11 and macOS 27 Golden Gate) and selected earlier versions. The Windows version also includes a budget manager for effective cost control with configurable time and data quotas.



More on the versions via QR code scan or by visiting:
www.rohde-schwarz.com/networks-and-cybersecurity → Products → Remote & Mobile Access

Try it free today!

Would you like to try R&S®LANCOM Advanced VPN Client at no cost? The 30-day trial gives you plenty of time to experience this practical and secure VPN solution for yourself.



Scan the QR code or visit:
www.rohde-schwarz.com/networks-and-cybersecurity → Service & Support → Software downloads

Desktop Unified Firewalls

Small and medium-sized businesses are increasingly targeted by cyberattacks, making trustworthy threat protection more important than ever. Choose multilayer security “Engineered in Germany” with R&S®LANCOM Unified Firewalls, featuring full VPN functionality and Unified Threat Management (UTM). Manage devices individually through the web interface or centrally with the R&S®LANCOM Management Cloud.

The **R&S®LANCOM UF-T60** features a rugged enclosure with a DIN rail bracket for harsh industrial locations (temperature range –20 °C to +70 °C).



	UF-T60	UF-60	UF-160	UF-260
IDS/IPS throughput, HTTPS (Mbps)	1,150	700	750	1,250
Firewall throughput TCP (Mbps)	3,700	3,500	3,550	4,450
VPN throughput IPSec (Mbps)	1,200	790	1,200	1,500
UTM throughput HTTPS (Mbps)	200	150	170	340

Virtual Unified Firewalls



Software-based security at any scale

In cloud scenarios or conventional networks of any size, R&S®LANCOM vFirewalls deliver a comparable level of security and the same extensive functionality as hardware-based R&S®LANCOM Unified Firewalls, without additional hardware. They run in virtualized environments using hypervisors such as VMware ESXi, Oracle VirtualBox, Microsoft Hyper-V, or KVM. Flexible licensing lets your vFirewall scale as required (license variants S, M, L, and XL).

	S	M	L	XL
Cores	1	2	4	16
RAM	4	8	16	64
Max. recommended users*	20	100	200	500
VLAN	16	32	64	256

* When all users are using all UTM functions simultaneously

Rack Unified Firewalls

For growing, distributed businesses and educational institutions with high and fluctuating data volumes, rack-mounted R&S®LANCOM Unified Firewalls deliver high performance, VPN, and comprehensive UTM security “Engineered in Germany.”

For example, the **R&S®LANCOM UF-1060** achieves interface performance of up to 100G and UTM performance of 10G.



	UF-360	UF-560	UF-760	UF-1060
Opt. extension modules	1G ETH, 1G SFP, 10G SFP+	1G ETH, 1G SFP, 10G SFP+, 40G QSFP+	1G ETH, 1G SFP, 10G SFP+, 40G QSFP+	1G ETH, 1G SFP, 10G SFP+, 40G QSFP+, 100G QSFP28
IDS/IPS throughput, HTTPS (Mbps)	1,400	4,700	13,000	20,000
Firewall throughput TCP (Mbps)	11,600	20,000	49,830	100,000
VPN throughput IPSec (Mbps)	2,200	9,000	19,700	40,000
UTM throughput HTTPS (Mbps)	420	1,500	3,400	12,000

Licensing model for all firewalls

An active license is required to commission R&S®LANCOM Unified Firewalls and vFirewalls. Choose the scope of functionality (Basic or Full), container capabilities (SAG), and license term (1, 3, or 5 years, or SPLA). The R&S®NC FX License Portal allows you to monitor, activate, and renew firewall licenses securely in one place.

R&S®LANCOM LICENSE

UF Basic	UF Full	UF SAG Basic	UF SAG Full
Activates firewall functionality and provides firmware updates and manufacturer support under an existing support agreement, such as R&S®NC Support Direct / Access.	Adds comprehensive UTM functions to the Basic License, including malware and spam protection, content filters, and parental controls.	SAG licenses extend Basic or Full functionality with Secure Application Gateway (SAG) capabilities for integrating customer-specific Docker containers, always isolated from the operating system. A 30-day free trial of the SAG Full License is available for new firewalls.	

Unified Threat Management features

Unified Threat Management (UTM) combines established and modern protective mechanisms into a comprehensive security approach. Traditional features such as antivirus protection are complemented by modern capabilities such as container management directly on the firewalls. Combining security, compliance, and ease of use, UTM protects your network reliably. It enables you to strengthen your security posture over time, identify threats early, and protect sensitive company data across locations.

Top 5 UTM highlights

- 

Control applications and content with Application Management and the R&S®PACE 2 Deep Packet Inspection (DPI) engine
- 

Database-driven protection against known threats through an Intrusion Detection and Prevention System (IDS/IPS)
- 

Preventive protection against unknown threats through cloud-based sandboxing and machine learning (Anti-Virus)
- 

Protection against phishing through DNS Web Filter, Content Filter, and an HTTP(S) proxy (Secure Web Gateway, SWG)
- 

Access control with user-based policies and network segmentation (VLAN segmentation)



A Full License is required to use all UTM features. Scan the QR code for further firewall features available with the different license types.

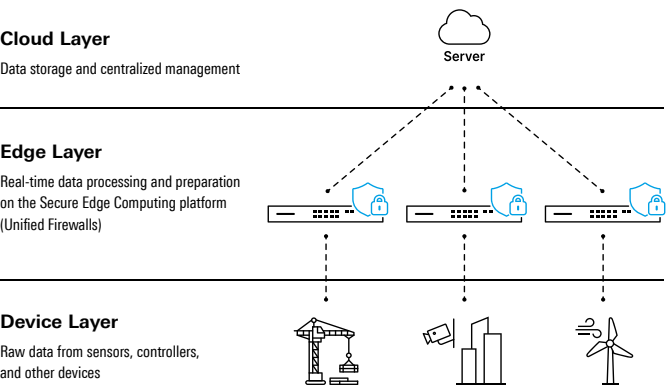


Secure Edge Computing for secure data processing at the network edge

Business processes continuously generate large volumes of data, for example, from sensors, connected machines, or card readers. Transferring all of this unfiltered data to the cloud or data centers can increase latency, network traffic, and security risks.

Secure Edge Computing therefore brings processing power and protection to the point where data is generated: the network edge. Local Desktop and Rack Unified Firewalls not only secure connections but also serve as platforms for isolated applications (Docker containers). This makes it possible to run critical processes locally in real time with consistent security and data protection mechanisms.

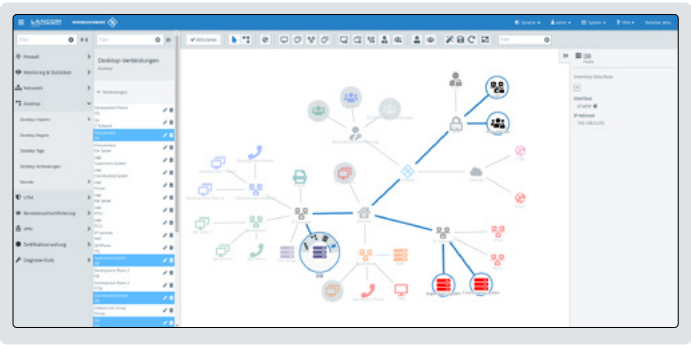
The result: greater speed, stronger data sovereignty, and new opportunities for tailored edge security concepts, such as industry-specific security and analytics functions.



Since LCOS FX firmware version 11.2, Docker containers can be run directly on Unified Firewall hardware appliances with an SAG Full or Basic License. More information: www.rohde-schwarz.com/networks-and-cybersecurity
→ Solutions → KRITIS Network Solutions → Secure Edge Computing

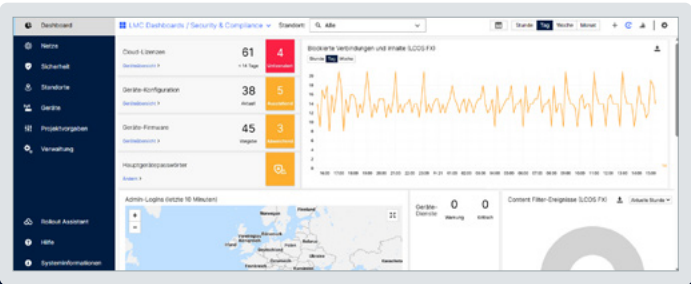
Management & Monitoring Tools

R&S®LANCOM Unified Firewalls and vFirewalls can be managed conveniently and efficiently, whether as individual appliances or as a complete security infrastructure spanning multiple sites. Administrators retain an overview at all times, roll out policies quickly, and implement consistent security standards.



Graphical web interface

- Browser-based management console for transparent, detailed configuration of individual firewalls, including compliance and audit reports



R&S®LANCOM Management Cloud

- Centralized management of all firewalls through a single platform
- One-Click Security: Define uniform security standards through global policies (policy-based management), with automatic, simultaneous rollout to numerous firewalls across multiple locations
- Transparent event and alert functions for rapid incident response
- Integration of firewall licenses into Service Provider License Agreements (SPLA)
- SIEM integration service for cloud-managed firewalls

Firewall Accessories



R&S®LANCOM Firewall Extension Modules

- Flexible port expansion for Unified Firewalls
- Various connections for high-speed fiber networking or copper-based Ethernet (1 GE, 1G SFP, 10G SFP+, or 40G QSFP+, with 2, 4, or 8 ports per module)

R&S®LANCOM Transceiver Modules

- Flexible use in firewalls with SFP ports
- For (bidirectional) fiber-optic networking or as a copper Ethernet port
- Also available in bulk packs or as direct attach cables



R&S®LANCOM SPSU UF-760

- 300 W hot-swappable power supply for increased resilience of the R&S®LANCOM UF-760



R&S®LANCOM Firewall Rack Mount

- Sturdy mounting brackets for R&S®LANCOM UF-60, UF-160, and UF-260 in 19" racks



For more information about all security products and compatible expansion and transceiver modules for your firewall, scan the QR code or visit:
www.rohde-schwarz.com/networks-and-cybersecurity → Products → Security → Firewalls



Which firewall is best for your use case?

Find answers to this and other questions using our practical comparison tools, including reference values for typical deployment scenarios.



To the Firewall Matchmaker



To the comparison table

Switch Portfolio

The R&S®LANCOM switch portfolio covers virtually every use case, from cost-effective entry-level solutions (SME) to highly available switches for demanding enterprise networks. Different switch classes offer different feature sets, performance levels, and expansion capabilities. This means you can choose a solution that meets your requirements while gaining planning and investment certainty and the flexibility to expand your network for the future.

	SME-class switches	Enterprise-class switches
Portfolio focus	Cost- and efficiency-oriented for simple networks	Performance- and feature-oriented for complex networks
Firmware & operation	► Unified operating system (LCOS SX 4.x) ► Proprietary CLI and GUI	► Unified operating system (LCOS SX 5.x) ► Industry-standard CLI and GUI
Switching & routing	Layer 2 and Layer 3 Lite support (DHCP and static routing)	Full Layer 3 support (including OSPF and BGP)
Redundancy & high availability	► No stacking ► Generally no redundant power supplies or fans (except XS-3550YUP and GS-3652XUP)	► Advanced redundancy and virtualization with VRRP, stacking, and VPC (including ISSU) ► Redundant hot-swappable power supplies and fans (except XS-5110F)
Security / Access Control	► IEEE 802.1X ► Standard functions	► IEEE 802.1X ► RADIUS-assigned ACLs
Warranty	Five-year replacement service, including security updates regardless of lifecycle status	► Limited Lifetime Warranty (LLW), including security updates until End of Life or up to 10 years ► Dead on Arrival Policy
Access switch series	► GS-2000 ► IGS-3000 (industrial-class) ► GS-3000 ► XS-3000	► GS-4000 ► XS-4000
Aggregation switch series	–	► XS-5000 ► XS-6000 ► YS-7000
Core switch series	–	► CS-8000

Which switch is best for your network?

Find out using our comparison tools:



To the Switch Matchmaker



To the series comparison

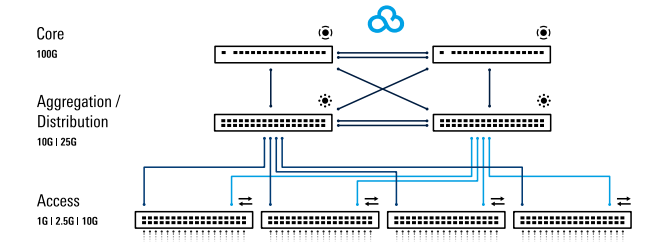


To the comparison table



Scalable campus networks with R&S Networks and Cybersecurity

Hierarchical network designs deliver scalability and long-term flexibility. For large, distributed organizations and campus networks in particular, a LAN architecture consisting of core, distribution, and access layers provides consistent management. R&S®LANCOM switches make it possible to implement these **three-tier designs with products from a single source**. All managed switches, from the GS-2000 to the CS-8000 series, are **cloud-ready** and can be managed centrally through R&S®LMC, including practical port templates.



Built-in Security in all managed switches

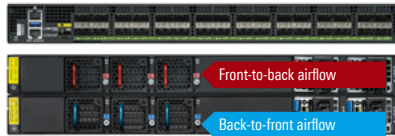
- Encrypted administration and authentication via SSH/SSL and RADIUS/TACACS
- Access control and traffic protection through IEEE 802.1X, port security (MAC), IP source guard, blocking of unauth. IP/MAC addresses, ACLs, and storm control
- Network segmentation with priv. VLAN, dyn. VLAN assignment, and isolated groups
- Protection against firmware tampering through signed firmware
- Advanced attack protection with DHCP snooping, dynamic ARP inspection, IPv6 first hop security, and DoS defense
- Additionally, on all enterprise-class models: Dynamic policy assignment and centralized management via RADIUS-assigned ACLs



Learn more at: www.rohde-schwarz.com/networks-and-cybersecurity → Products → Switches

Core Switch

As a central node for distributed campus area networks, the core switch delivers enormous switching capacity. A choice of fan configurations, intelligent **switch redundancy concepts (VPC/MC-LAG)**, and the included **Limited Lifetime Warranty (LLW)** provide exceptional availability and network resilience.



R&S®LANCOM CS-8132F

- ▶ 32-port 100G fiber core switch with industry-standard 100G QSFP28 ports and switching capacity of up to 6.4 Tbps
- ▶ Supports VPC or MC-LAG and ISSU for networks designed with 100% uptime
- ▶ Full Layer 3 functionality with VRRP, DHCP, static routing, and policy-based dynamic routing using OSPF v2/v3 and BGP4
- ▶ Two variants available, with front-to-back (F2B) or back-to-front (B2F) airflow for optimal 19" rack cooling
- ▶ Includes 2x redundant, hot-swappable power supplies and 3x redundant (N+1), hot-swappable fans for increased resilience
- ▶ Includes 2x 19" mounting brackets and 2x 19" telescopic rails (switch slide-in rails) for four-point mounting in 19" racks

R&S®LANCOM SFAN-CS8-F2B / SFAN-CS8-B2F

- ▶ Hot-swappable fan modules for optimal cooling and reliable protection against overheating



R&S®LANCOM SPSU-750-F2B / SPSU-750-B2F

- ▶ Hot-swappable 750 W power supplies for increased resilience
- ▶ Protection against power spikes, overvoltage, and overheating

Limited Lifetime Warranty: protection throughout the lifecycle

- ▶ Replacement service until End of Life (up to 10 years) and guaranteed security updates until the switch reaches End of Life
- ▶ Fast, straightforward service processing through repairs
- ▶ **Included free of charge** at the time of purchase, with no hidden additional costs

Up to 100 % network availability through virtualization



With **Virtual Port Channel (VPC)**, also known as MC-LAG (Multi-Chassis Link Aggregation Group), two interconnected switches form a virtual unit. Both switches remain independently manageable and can be restarted or updated separately. VPC therefore enables **In-Service Software Upgrades (ISSU)**, such as firmware updates during ongoing operation.

R&S®LANCOM switches can enable up to 100% network availability (zero downtime) from core to access layers!



Deepen your switching expertise with our switching solutions series!

From fundamentals and network designs to specific configuration instructions, these technical papers provide practical knowledge for deploying R&S®LANCOM switches efficiently.

- | | |
|------------------------|-------------------------------------|
| 1. Basics | Two-Tier & Three-Tier architectures |
| 2. Basics | Switch security with IEEE 802.1X |
| 3. Design Guide | Switch redundancy concepts |
| 4. Setup Guide | VPC configurations |
| 5. Setup Guide | Stacking configurations |
| 6. Setup Guide | Configurations XS-6228QF |

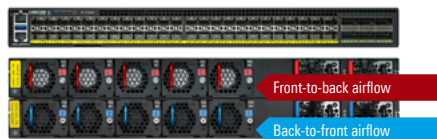


Download for free now!



Aggregation Switches

Depending on network size, the **YS**, **XS-6000**, and **XS-5000 series** serve as interfaces between the core and access layers or as a collapsed backbone at the top layer connected to the WAN (two-tier design). Fiber-optic downlink and uplink ports, together with VPC and stacking redundancy mechanisms, make them a reliable distribution foundation, with LLW included in each case.



R&S®LANCOM YS-7154CF

- ▶ 54-port stackable 25G fiber aggregation switch for highly available campus networks or as a collapsed core in two-tier networks
- ▶ 48x 25G SFP28 ports and 6x 100G QSFP28 ports, including 4x Flex stacking ports
- ▶ Switching capacity up to 3.6 Tbps and Full Layer 3 functionality
- ▶ Network redundancy and 100% uptime through VRRP, VPC/MC-LAG, and ISSU, or alternatively stacking for near-100% uptime using uplink or stacking ports
- ▶ Selectable F2B or B2F airflow design for optimal cooling
- ▶ Includes 2x redundant, hot-swappable power supplies and 5x redundant (N+1), hot-swappable fans for increased resilience
- ▶ Includes 2x 19" mounting brackets and 2x 19" telescopic rails (switch slide-in rails)

R&S®LANCOM SFAN-YS7-F2B / SFAN-YS7-B2F

- ▶ Hot-swappable fan modules

R&S®LANCOM SPSU-400-F2B / SPSU-400-B2F

- ▶ Hot-swappable power supplies



R&S®LANCOM XS-6228QF

- ▶ 28-port stackable 10G fiber aggregation switch for medium-sized and large distributed networks, including use as a collapsed core in two-tier networks
- ▶ 20x 10G SFP+ downlink ports, including 4x multi-Gigabit combo ports (SFP+ or 1G/2.5G/5G/10G nBASE-T), 4x 25G SFP28 or 2x 40G QSFP+ Flex uplink ports, and 4x 50G SFP-DD Flex stacking ports
- ▶ 1x out-of-band (OOB) management port
- ▶ Switching capacity up to 1 Tbps and Full Layer 3 functionality
- ▶ Network redundancy and 100% uptime with VRRP, VPC/MC-LAG, and ISSU, or alternatively stacking with Flex uplink or stacking ports
- ▶ Includes 2x 19" mounting brackets and 2x 19" telescopic rails (switch slide-in rails)

R&S®LANCOM SFAN-XS6

- ▶ Hot-swappable fan module



R&S®LANCOM XS-5116QF

- ▶ 16-port stackable 10G fiber aggregation switch for medium distributed networks
- ▶ 14x 10G SFP+ downlink ports, including 2x multi-Gigabit combo ports (SFP+ or 1G/2.5G/5G/10G), and 2x 40G QSFP+ uplink/stacking ports
- ▶ Up to 440 Gbps switching capacity and Full Layer 3 functionality
- ▶ Network redundancy through stacking
- ▶ Includes 2x 19" mounting brackets and 2x 19" telescopic rails (switch slide-in rails)



R&S®LANCOM XS-5110F

- ▶ 10-port stackable 10G fiber aggregation switch for smaller distributed networks
- ▶ 8x 10G SFP+ ports and 2x multi-Gigabit Ethernet ports (1G/2.5G/5G/10G)
- ▶ Up to 200 Gbps switching capacity and Full Layer 3 functionality
- ▶ Network redundancy through stacking
- ▶ Includes 2x 19" mounting brackets

Additional Switch Accessories

R&S®LANCOM SPSU-920

- ▶ 920 W power supply for redundant power or increasing the PoE budget (hot-swappable)
- ▶ Compatible with XS-4554YUP, XS-4530YUP, GS-4554XUP, GS-4554XP, GS-4530XUP, GS-4530XP, XS-3550YUP, and GS-3652XUP



R&S®LANCOM SPSU-250

- ▶ 250 W hot-swappable power supply for increased resilience
- ▶ Compatible with XS-6128QF, XS-5116QF, GS-4554X, and GS-4530X



R&S®LANCOM Switch Rack Mount L250

- ▶ L-shaped mounting system for supporting the rear of certain access switches (37 cm deep and above) in 19" racks
- ▶ Compatible with XS-3550YUP, GS-3652XUP, GS-3652XP, and GS-3252P



R&S®LANCOM Transceiver Modules

- ▶ Flexible use in switches with integrated SFP ports
- ▶ For (bidirectional) fiber-optic connections or copper-based Ethernet ports



R&S®LANCOM Direct Attach Cables

- ▶ A practical alternative to individual transceiver modules



Full Layer 3 Stackable Enterprise-Class Access Switches

The stackable access switches of the **XS and GS-4500 series** enable reliable and resilient implementation of large, data-intensive LAN infrastructures and are ideal for high-performance Wi-Fi 7 access points. These switch series also bring aggregation switch advantages to the access layer: industry-standard CLI and ports, high resilience through redundant power supplies and fans, and LLW.

Mounting brackets and telescopic rails for rack installation are included with these models.



R&S®LANCOM XS-4554YUP

- ▶ 54-port stackable 10G PoE++ multi-Gigabit access switch
- ▶ 12x 10G and 36x 2.5G multi-Gigabit Ethernet ports, plus 4x 25G SFP28 and 2x 100G QSFP28 uplink or stacking ports
- ▶ Up to 1,020 Gbps switching capacity and Full Layer 3 functionality
- ▶ Network redundancy and 100% uptime through VRRP, VPC/MC-LAG, and ISSU, or near-100% uptime through stacking with uplink or stacking ports
- ▶ PoE++ according to IEEE 802.3bt PD Type 4 on all 48 Ethernet ports, with a PoE budget up to 1,440 W for Wi-Fi 7 access points (up to 10G)



R&S®LANCOM XS-4530YUP

- ▶ 30-port stackable 10G PoE++ multi-Gigabit access switch
- ▶ 12x 10G and 12x 2.5G multi-Gigabit Ethernet ports, plus 4x 25G SFP28 and 2x 100G QSFP28 uplink or stacking ports
- ▶ Up to 900 Gbps switching capacity and Full Layer 3 functionality
- ▶ Network redundancy and 100% uptime through VRRP, VPC/MC-LAG, and ISSU, or near-100% uptime through stacking with uplink or stacking ports
- ▶ PoE++ according to IEEE 802.3bt PD Type 4 on all 24 Ethernet ports, with a PoE budget up to 1,440 W for Wi-Fi 7 access points (up to 10G)



R&S®LANCOM GS-4554XP

- ▶ 54-port stackable 2.5G PoE++ multi-Gigabit access switch
- ▶ 48x 2.5G multi-Gigabit Ethernet ports, 4x 10G SFP+ ports, and 2x 40G QSFP+ uplink or stacking ports
- ▶ Up to 480 Gbps switching capacity and Full Layer 3 functionality
- ▶ Network redundancy for near-100% uptime through stacking
- ▶ PoE++ according to IEEE 802.3bt PD Type 4 (24x 2.5G ports), PoE+ according to IEEE 802.3af/at (24x 2.5G ports), and a PoE budget up to 1,440 W for Wi-Fi 7 access points with download speeds up to 2.5G

R&S®LANCOM GS-4554X / GS-4554XP

- ▶ 54-port stackable 2.5G multi-Gigabit access switch
- ▶ 12x 2.5G multi-Gigabit and 36x 1G Ethernet ports, plus 4x 10G SFP+ and 2x 40G QSFP+ uplink or stacking ports
- ▶ Up to 372 Gbps switching capacity and Full Layer 3 functionality
- ▶ Network redundancy for near-100% uptime through stacking
- ▶ **GS-4554XP** also includes PoE+ according to IEEE 802.3af/at and a PoE budget up to 1,440 W for Wi-Fi 7 access points with download speeds up to 2.5G



R&S®LANCOM GS-4530XP

- ▶ 30-port stackable 2.5G PoE++ multi-Gigabit access switch
- ▶ 24x 2.5G multi-Gigabit Ethernet ports, plus 4x 10G SFP+ and 2x 40G QSFP+ uplink or stacking ports
- ▶ Up to 360 Gbps switching capacity and Full Layer 3 functionality
- ▶ Network redundancy for near-100% uptime through stacking
- ▶ PoE++ according to IEEE 802.3bt PD Type 4 and a PoE budget up to 1,440 W for Wi-Fi 7 access points with download speeds up to 2.5G

R&S®LANCOM GS-4530X / GS-4530XP

- ▶ 30-port stackable 2.5G multi-Gigabit access switch
- ▶ 12x 2.5G multi-Gigabit and 12x 1G Ethernet ports, plus 4x 10G SFP+ and 2x 40G QSFP+ uplink or stacking ports
- ▶ Up to 324 Gbps switching capacity and Full Layer 3 functionality
- ▶ Network redundancy for near-100% uptime through stacking
- ▶ **GS-4530XP** also includes PoE+ according to IEEE 802.3af/at and a PoE budget up to 720 W for Wi-Fi 7 access points with download speeds up to 2.5G



Layer 3 Lite SME-Class Access Switches

The fully managed access switches of the **XS and GS-3000 series** offer a cost-effective solution for small and medium-sized enterprises (SMEs). They include essential Layer 3 features such as static routing and a DHCP server, straightforward management through a proprietary CLI, and **five years of replacement service**. Depending on the model, they also allow centralized power delivery to PoE devices without additional electrical wiring. **Mounting brackets for 19" racks are included with all switches.**



R&S®LANCOM XS-3550YUP

- ▶ 50-port 10G PoE++ multi-Gigabit access switch
- ▶ 8x 10G multi-Gigabit and 40x 1G Ethernet ports, plus 2x 25G SFP28 uplink ports, providing up to 340 Gbps switching capacity
- ▶ 1x hot-swappable PSU and a separate bay for adding a second power supply
- ▶ PoE++ according to IEEE 802.3bt PD Type 4 (8x 10G ports), PoE+ according to IEEE 802.3af/at (40x 1G ports), and a PoE budget up to 1,440 W for Wi-Fi 7 access points (up to 10G)
- ▶ Nonstop PoE maintains power to connected PoE devices during software updates



R&S®LANCOM XS-3526YUP

- ▶ 26-port 10G PoE++ multi-Gigabit access switch
- ▶ 8x 10G multi-Gigabit and 16x 1G Ethernet ports, plus 2x 25G SFP28 uplink ports, for up to 292 Gbps switching capacity
- ▶ PoE++ according to IEEE 802.3bt PD Type 4 (8x 10G ports), PoE+ according to IEEE 802.3af/at (16x 1G ports), and up to 720 W PoE budget for Wi-Fi 7 access points (up to 10G)
- ▶ Nonstop PoE functionality



R&S®LANCOM XS-3510YUP

- ▶ 10-port 10G PoE++ multi-Gigabit access switch
- ▶ 4x 10G multi-Gigabit and 4x 1G Ethernet ports, plus 2x 25G SFP28 uplink ports, for up to 188 Gbps switching capacity
- ▶ PoE++ according to IEEE 802.3bt PD Type 4 (4x 10G ports), PoE+ according to IEEE 802.3af/at (4x 1G ports), and up to 370 W PoE budget for Wi-Fi 7 access points (up to 10G)
- ▶ Nonstop PoE functionality



R&S®LANCOM GS-3652X / GS-3652XP / GS-3652XUP

- ▶ 52-port 2.5G multi-Gigabit access switch
- ▶ 12x 2.5G multi-Gigabit and 36x 1G Ethernet ports, plus 4x 10G SFP+ uplink ports, for up to 212 Gbps switching capacity
- ▶ **GS-3652XP** also supports PoE+ according to IEEE 802.3af/at on all 48 Ethernet ports with a PoE budget up to 740 W, ideal for Wi-Fi 7 up to 2.5G
- ▶ **GS-3652XUP** also supports PoE++ according to IEEE 802.3bt PD Type 4 (12x 2.5G ports), PoE+ according to IEEE 802.3af/at (36x 1G ports), and up to 1,440 W PoE budget, ideal for Wi-Fi 7 up to 2.5G



R&S®LANCOM GS-3628X / GS-3628XP / GS-3628XUP

- ▶ 28-port 2.5G multi-Gigabit access switch
- ▶ 12x 2.5G multi-Gigabit and 12x 1G Ethernet ports, plus 4x 10G SFP+ uplink ports, for up to 164 Gbps switching capacity
- ▶ **GS-3628XP** also supports PoE+ according to IEEE 802.3af/at on all 24 Ethernet ports with a PoE budget up to 370 W, ideal for Wi-Fi 7 up to 2.5G
- ▶ **GS-3628XUP** also supports PoE++ according to IEEE 802.3bt PD Type 4 (12x 2.5G ports), PoE+ according to IEEE 802.3af/at (12x 1G ports), and up to 740 W PoE budget, ideal for Wi-Fi 7 up to 2.5G

R&S®LANCOM GS-3510XP

- ▶ 10-port 2.5G PoE+ multi-Gigabit access switch
- ▶ 4x 2.5G multi-Gigabit and 4x 1G Ethernet ports, plus 2x 10G SFP+ uplink ports, providing up to 68 Gbps switching capacity — ideal for Wi-Fi 7 up to 2.5G
- ▶ PoE+ according to IEEE 802.3af/at with a PoE budget up to 130 W
- ▶ Zero-dB design for small offices



R&S®LANCOM GS-3252P

- ▶ 52-port PoE+ Gigabit access switch
- ▶ 48x 1GbE ports (36x with PoE+ according to IEEE 802.3af/at and a PoE budget up to 370 W), plus 4x 10G SFP+ uplink ports, for up to 176 Gbps switching capacity



R&S®LANCOM

GS-3126X / GS-3126XP

- ▶ 26-port Gigabit access switch
- ▶ 24x 1GbE ports and 2x 10G SFP+ uplink ports for up to 88 Gbps switching capacity
- ▶ **GS-3126XP** also supports PoE+ according to IEEE 802.3af/at on all 24 Ethernet ports with a PoE budget up to 185 W



Layer 3 Lite Industrial-Class Access Switches

The rugged **IGS-3000 series** switches were specifically developed for demanding environments, from manufacturing facilities and logistics centers to critical infrastructure such as wind and photovoltaic installations. Thanks to their exceptional resistance to extreme environmental conditions and centralized cloud management, they make it possible to establish a consistent switch infrastructure even in industrial settings.



R&S®LANCOM IGS-3128XF

- ▶ 28-port Gigabit fiber industrial access switch
- ▶ 24x 1G SFP ports (including 4x TP/SFP combo ports) and 4x 10G SFP+ ports for up to 128 Gbps switching capacity
- ▶ Internal AC power supply and AC/DC input for flexible power options
- ▶ Rugged metal housing for temperatures from -20 °C to +55 °C

R&S®LANCOM IGS-3510XUP

- ▶ 10-port 2.5G PoE++ multi-Gigabit industrial access switch
- ▶ 4x 2.5G multi-Gigabit and 4x 1G Ethernet ports, plus 2x 10G SFP+ uplink ports for up to 68 Gbps switching capacity
- ▶ PoE++ according to IEEE 802.3bt PD Type 4 (4x 2.5G ports), PoE+ according to IEEE 802.3af/at (4x 1G ports), and up to 360 W PoE budget for Wi-Fi 7 access points with download speeds up to 2.5G
- ▶ Fanless, rugged aluminum housing resistant to shock and vibration in outdoor environments (temperature range -40 °C to +60 °C)



R&S®LANCOM DPSU-480/55

- ▶ 480 W DIN rail power supply for the IGS-3510XUP
- ▶ Protection against power spikes, overvoltage, short circuits, and overheating



Layer 2 SME-Class Access Switches

For network structures with basic performance needs, the **GS-2000 series** enables efficient distribution of tasks and connectivity tailored to requirements. It supports IEEE 802.3az Energy Efficient Ethernet, which automatically reduces power consumption when data transmission is inactive. **Two 19" mounting brackets, a configuration cable, and a network cable are included.**



R&S®LANCOM GS-2426 / GS-2426P

- ▶ 26-port Gigabit access switch
- ▶ 24x Gigabit Ethernet ports and 2x TP/SFP combo ports for up to 52 Gbps switching capacity
- ▶ **GS-2426** is fanless, making it ideal for noise-sensitive environments
- ▶ **GS-2426P** also supports PoE+ according to IEEE 802.3af/at with a PoE budget up to 185 W and a quiet fan



R&S®LANCOM GS-2412 / GS-2412P

- ▶ 12-port Gigabit access switch
- ▶ 10x Gigabit Ethernet ports and 2x SFP ports for up to 24 Gbps switching capacity
- ▶ Compact, fanless housing
- ▶ **GS-2412P** also supports PoE+ according to IEEE 802.3af/at with a PoE budget up to 130 W

Unmanaged Switch

As an energy-efficient PoE distribution switch, this model is the ideal plug-and-play solution for integrating office equipment into simple networks.



R&S®LANCOM GS-1208P

- ▶ 8-port PoE+ unmanaged Gigabit switch
- ▶ 8 Gigabit Ethernet ports for up to 16 Gbps switching capacity
- ▶ PoE+ according to IEEE 802.3af/at with a PoE budget up to 65 W
- ▶ Compact, fanless housing for silent operation

Wi-Fi 7 Indoor Access Points

Wi-Fi 7 opens up new possibilities for high-performance, sustainable Wi-Fi infrastructures. Our R&S®LANCOM Wi-Fi 7 indoor access point portfolio covers every requirement, from entry-level to high-end solutions, combining speed, cloud automation, and energy efficiency. Developed and operated consistently according to European data protection and security standards, the portfolio delivers greater digital sovereignty over the long term.



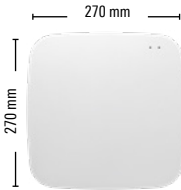
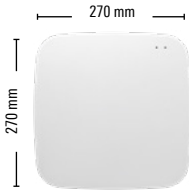
Up to 19 Gbps

BLE and USB 3.0 port

Scan radio and dual PoE-in



Learn more about Wi-Fi 7!



	LX-7500	LX-7400	LX-7300	LX-7200E	LX-7200	LW-700
Short description	Uncompromising high-density Wi-Fi 7	Wi-Fi 7 all-rounder optimized for price/performance	Scalable high-density Wi-Fi 7	Retail specialist for ESL infrastructures	Wi-Fi 7 for medium-traffic networks	Cost-optimized Wi-Fi 7 for medical practices and hospitality
Performance	High-end	Performance	High-performance	Performance	Performance	Value
Streams (2.4, 5, and 6 GHz)	4+4+4	2+4+4	2+2+2	2+2+2	2+2+2	2+2
User density	Very high	High	High	Low to medium	Low to medium	Low
Data volume	Very high	High	Medium	Medium	Medium	Low
Gross data rate	19 Gbps	18 Gbps	9.3 Gbps	9.3 Gbps	9.3 Gbps	3.6 Gbps
LAN connection	1x 10G Ethernet, 1x 2.5G Ethernet	1x 10G Ethernet, 1x 1G Ethernet	1x 10G Ethernet, 1x 2.5G Ethernet	1x 2.5G Ethernet, 1x 1G Ethernet	1x 2.5G Ethernet, 1x 1G Ethernet	1x 2.5G Ethernet
BLE standard USB port	5.1 3.0	5.4 2.0	5.1 2.0	5.4 2.0	5.4 2.0	–
Power over Ethernet	PoE++ (802.3bt) / Dual PoE	PoE++ (802.3bt)	PoE++ (802.3bt)	PoE+ (802.3at)	PoE+ (802.3at)	PoE+ (802.3at)
Location and power consumption sensors	✓	✓	✓	✓	✓	–
Protection class Fire resistance	IP50 UL2043	IP50 UL2043	IP50 UL2043	IP50 UL2043	IP50 UL2043	–
Special features	Dual PoE-in for seamless failover or load balancing; scan radio; digital display support via third-party USB*	Digital display support via third-party USB*	Scan radio, digital display support via third-party USB*	Integrated digital display support via third-party USB*	Digital display support via third-party USB*	–
* Vusion, Solum, Hanshow						

Our Wi-Fi 7 performance pledge

SECURE

- ▶ **Radio monitoring:** Dedicated scan radio on the LX-7500 and LX-7300
- ▶ **Location sensor:** Monitors correct installation and alignment and alerts when an LX-7000 series device is removed without authorization
- ▶ **Dual PoE-in:** Fully redundant power supply from a second switch for high availability (R&S®LANCOM LX-7500)
- ▶ **Firmware engineered in Germany:** Built-in Security, Secure Boot, and regular feature and security updates
- ▶ **Integrated mounting security:** Helps deter opportunistic theft

SUSTAINABLE

- ▶ **R&S®LANCOM Sustainability Mode:** Reduced Wi-Fi power consumption
- ▶ **Energy monitoring for the entire network:** CO₂ emissions and reductions
- ▶ **Environmentally friendly packaging:** Plastic-free, optimized delivery contents reduce packaging waste, electronic waste, and logistics-related CO₂ emissions
- ▶ **100% recyclable housing:** No glued individual components

AUTOMATED

- ▶ **Cloud-managed Wi-Fi:** Zero-touch deployment, automatic configuration, 24/7 monitoring and alerts, and Wi-Fi anomaly detection through R&S®LMC
- ▶ **Radio Resource Management:** R&S®LANCOM Active Radio Control 2.0, a self-learning automation solution for optimizing Wi-Fi networks of any size
- ▶ **Energy savings without compromising reliability:** R&S®LANCOM Active Power Control reduces Wi-Fi power consumption while maintaining operational reliability
- ▶ **Future AI-based features:** Powered by analysis and troubleshooting data



EN 60601-1 compliant

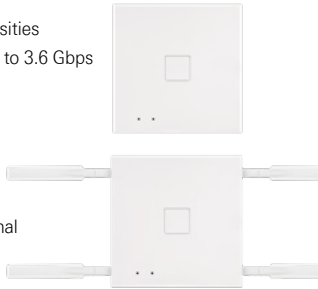
All current Wi-Fi 7 and Wi-Fi 6 access points are suitable for reliable use in medical environments with electrical medical equipment.

Wi-Fi 6 Indoor Access Points

Wi-Fi 6 delivers stable performance for applications in home and business networks, making it ideal for hotels, offices, medical practices, and branch locations that depend on reliable, robust Wi-Fi connectivity.

R&S®LANCOM LX-6400 / LX-6402

- ▶ 4x4 MU-MIMO dual-band Wi-Fi 6 for high user densities
- ▶ Simultaneous operation on 2.4 GHz and 5 GHz at up to 3.6 Gbps
- ▶ 1x 2.5 Gigabit Ethernet port (incl. PoE according to IEEE 802.3at) and 1x 1 Gigabit Ethernet port
- ▶ Power via PoE or external power adapter
- ▶ IoT support: BLE 5.0 and USB 3.0
- ▶ **LX-6400** with 8 integrated 180° antennas
- ▶ **LX-6402** with 4 adjustable dual-band omnidirectional antennas (2.4 GHz/5 GHz); alternatively, connection of optional sector antennas



R&S®LANCOM LX-6212

- ▶ 2x2 MU-MIMO dual-band Wi-Fi 6 for medium user densities
- ▶ Simultaneous operation on 2.4 GHz and 5 GHz at up to 1.8 Gbps
- ▶ 2x 1 Gigabit Ethernet ports, including PoE according to IEEE 802.3at
- ▶ Power via PoE or external power adapter
- ▶ IoT support: BLE 5.1 and USB 2.0
- ▶ 4 adjustable dual-band omnidirectional antennas (2.4 GHz/5 GHz); alternatively, connection of optional ceiling, sector, or directional antennas



Find the ideal access point!

Indoor or outdoor, Wi-Fi 7 or Wi-Fi 6, high-density deployments or specialized ESL infrastructures: the Access Point Matchmaker decision tree makes selecting the right Wi-Fi device quick and straightforward. Answer a few questions or compare the product features in detail.



To the Access Point Matchmaker



To the comparison table

Find further information on all Wi-Fi products here:
www.rohde-schwarz.com/networks-and-cybersecurity → Products → Wireless LAN

Outdoor Access Points

From expansive outdoor areas to harsh industrial environments, these access points withstand challenging conditions with dustproof and waterproof housings. This means you can connect even hard-to-reach locations, such as cold-storage facilities, amusement parks, ski resorts, and machinery in warehouse logistics.

R&S®LANCOM OX-6400 / OX-6402

- 4x4 MU-MIMO dual-band Wi-Fi 6 for outdoor areas with medium to high user densities
- Simultaneous operation on 2.4 GHz and 5 GHz at up to 3.6 Gbps
- 2x 2.5 Gigabit Ethernet ports (1x PoE-in and 1x PoE-out)
- BLE 5.1
- PoE passthrough for connecting an additional PoE network device, such as an IP camera
- Rugged IP67 metal housing with integrated status LEDs
- Reliable operation at extreme temperatures (-30 °C to +65 °C)
- **OX-6400** with integrated 70° sector antennas
- **OX-6402** with 4 external omnidirectional antennas; alternatively, connection of optional sector antennas



R&S®LANCOM OW-702

- 2x2 MU-MIMO dual-band Wi-Fi 7 for demanding outdoor areas with low to medium user densities
- Simultaneous operation on 2.4 GHz and 5 GHz at up to 3.6 Gbps
- 1x 2.5 Gigabit Ethernet port with PoE according to IEEE 802.3at
- BLE 5.4
- Rugged IP67 metal housing with integrated status LEDs
- Reliable operation at extreme temperatures (-30 °C to +65 °C)
- Includes 4 external omnidirectional antennas; alternatively, connection of optional sector antennas

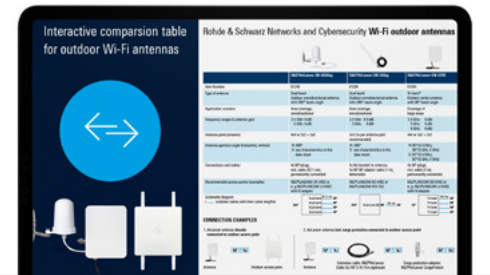


R&S®LANCOM OW-602

- 2x2 MU-MIMO dual-band Wi-Fi 6 for outdoor areas with low user densities
- Simultaneous operation on 2.4 GHz and 5 GHz at up to 1.8 Gbps
- 2x 1 Gigabit Ethernet ports with PoE according to IEEE 802.3at
- BLE 5.1
- Rugged IP67 protective housing
- Reliable operation at extreme temperatures (-30 °C to +65 °C)
- Includes 4 omnidirectional antennas; alternatively, connection of optional sector antennas



Compatible Wi-Fi antennas can be found at:
www.rohde-schwarz.com/networks-and-cybersecurity → Products → Wireless LAN → Accessories

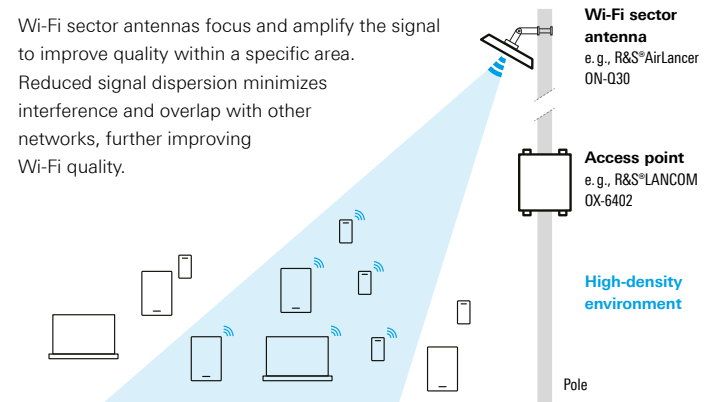


Which outdoor Wi-Fi antenna is right for which scenario and access point? Find out in the antenna overview:



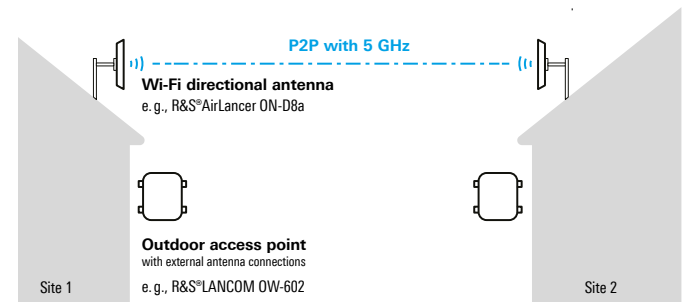
Wi-Fi coverage in high-density environments

Wi-Fi sector antennas focus and amplify the signal to improve quality within a specific area. Reduced signal dispersion minimizes interference and overlap with other networks, further improving Wi-Fi quality.



High-speed point-to-point (P2P) connections

P2P connections enable reliable Wi-Fi connectivity between distant outdoor buildings. Directional antennas eliminate the need for complex cabling or expensive leased lines when extending networks.



WLAN Controllers

Efficient Wi-Fi management is also available for networks that are not managed with the R&S®LANCOM Management Cloud. R&S®LANCOM WLAN controllers (WLCs) provide a central platform for fully automatic configuration of all access points and Wi-Fi gateways in the network.

R&S®LANCOM WLC-2000

- Centralized firmware rollout, monitoring, and management of 25 to 2,000 access points and Wi-Fi gateways
- Zero-touch deployment of connected Wi-Fi devices
- Integrated hotspot functionality



R&S®LANCOM WLC-60

- Centralized firmware rollout, monitoring, and management of 6 to 60 access points and Wi-Fi gateways
- Zero-touch deployment of connected Wi-Fi devices
- Integrated hotspot functionality



R&S®LANCOM vRouter as Virtual WLAN Controller (vWLC)

- Software-based Wi-Fi controller for operating up to 1,500 access points in a virtualized environment

R&S®LANCOM
vRouter



Virtual branch router (vCPE)



Virtual WLAN controller (vWLC)



Virtual central site VPN gateway (vGateway)

Wi-Fi Accessories

R&S®LANCOM LX-7000 Universal Mount

- Universal mounting plate for access points of the R&S®LANCOM LX-7000 series
- Compatible with the mounting holes of brackets for previous LANCOM access points



R&S®LANCOM LX-7000 T-Bar Mount

- Mounting component for flexible, easy attachment of access points of the R&S®LANCOM LX-7000 series to suspended ceilings



R&S®LANCOM PoE++ 10G Injector

- Single-port PoE injector with multi-Gigabit Ethernet support and link speeds up to 10 Gbps
- PoE power for R&S®LANCOM access points
- Supports PoE++ (IEEE 802.3bt, up to 65 W) and is backward-compatible with IEEE 802.3af/at



R&S®AirLancer SN-LAN-10G

- 10G surge protection adapter for straightforward installation on LAN devices with RJ45 connections
- Reliable operation even at demanding temperatures (-40 °C to +85 °C)



R&S®AirLancer SurgeProtect

- Surge protection adapter installed between R&S®LANCOM outdoor Wi-Fi antennas (ON) and access points



R&S®LANCOM Wall Mount (LN)

- Sturdy mounting plate for access points of the R&S®LANCOM LX series as well as the Internet access routers R&S®LANCOM 750-5G and 750-4G
- Theft protection through four Kensington locks and an included padlock



Additional mounting brackets, antennas, power supplies, and cables can be found online at:
www.rohde-schwarz.com/networks-and-cybersecurity → Products → Wireless LAN → Accessories

Software Options

Flexible extensions for your R&S®LANCOM devices

Enhance your products with powerful additional features, flexibly, according to your needs, and cost-effectively. This allows you to tailor device functionality precisely to your individual requirements.

R&S®LANCOM OPTION Security Essentials

Adds a cloud-based content filter, including a BPjM filter, to Secure SD-WAN gateways, central site gateways, and WLAN controllers*

R&S®LANCOM OPTION BPjM Filter

Adds the module of Germany's Federal Review Board for Media Harmful to Minors (BPjM) to Secure SD-WAN gateways and WLAN controllers*

R&S®LANCOM OPTION VPN

Increases the number of available VPN tunnels (IPSec and WireGuard) in Secure SD-WAN gateways*

R&S®LANCOM OPTION High Availability Clustering

Enables high-availability device clusters on Secure SD-WAN (central site) gateways and WLAN controllers

* These features are already included in the UF (SAG) Full License of the R&S®LANCOM Unified Firewalls

R&S®LANCOM OPTION WLC Basic

Adds WLAN controller functionality to Secure SD-WAN gateways

R&S®LANCOM OPTION WLC AP Upgrade

Increases the number of access points and Wi-Fi-enabled Secure SD-WAN gateways managed by a WLAN controller

R&S®LANCOM OPTION All-IP

Adds professional telephony management to Secure SD-WAN gateways

R&S®LANCOM OPTION VoIP+10

Adds 10 VoIP numbers (maximum 40) and 10 SIP lines (maximum 55) to Secure SD-WAN gateways

R&S®LANCOM OPTION Public Spot

Enables secure guest access on Secure SD-WAN gateways, WLAN controllers, and access points

R&S®LANCOM OPTION Public Spot PMS Accounting Plus

Extends R&S®LANCOM Public Spot Option to integrate hotspot functionality into hotel billing systems (Property Management Systems, PMS)

For more information on all software options, please visit:
www.rohde-schwarz.com/networks-and-cybersecurity → Products → Software & Accessories

Cloud-managed hotspot — even without a software option

If you manage your network through R&S®LANCOM Management Cloud (R&S®LMC), you can deploy Wi-Fi hotspots conveniently without an additional software option. A separate gateway or WLAN controller with a Public Spot Option is not required. All you need is a valid R&S®LMC license for the devices involved in the hotspot.



R&S®NC Academy

Understanding, building, and maintaining network scenarios does not have to be difficult. We equip you with the right knowledge to become an expert in Rohde & Schwarz Networks and Cybersecurity infrastructures. R&S®NC Academy workshops give you specialized knowledge directly from the manufacturer that you can immediately put into practice. Workshops and training courses are tailored to resellers, systems integrator technicians, system administrators, and IT decision-makers, and they offer flexible delivery formats.

Our training formats

- **Expert-led classroom**
Traditional workshops with instructors, equipment, and participants at one of our training centers throughout Germany or at the customer's premises for individually arranged workshops
- **Expert-led virtual classroom**
Location-independent workshops with instructors and equipment in one room and participants joining remotely
- **Web-based training (WBT)**
Self-directed, location-independent learning with exclusive materials and flexible scheduling

Knowledge that connects!

Join us on the journey to becoming an expert in Rohde & Schwarz Networks and Cybersecurity solutions!

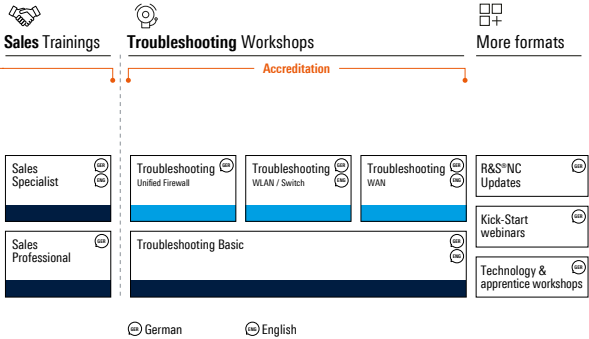
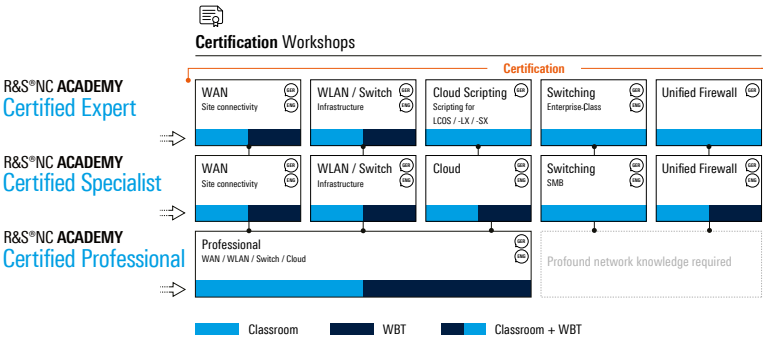


Scan the QR code or learn more at:
www.rohde-schwarz.com/networks-and-cybersecurity → Service & Support → R&S®NC Academy



Our training portfolio

- **Certification workshops** provide progressive theoretical and practical expertise for deploying network infrastructures. R&S®NC Academy Certified Professional, Specialist, or Expert certifications can be completed as part of the workshops or in a separate remote certification session. These certifications are essential to achieving or maintaining R&S®NC Community Partner status.
- **Sales trainings** provide sales professionals with solution-oriented expertise for successful customer discussions and increased sales opportunities, including R&S®NC Academy Certified Specialist Sales and Professional Sales certifications.
- **Troubleshooting workshops** prepare technicians to systematically narrow down typical issues with our products, collect diagnostic information, and resolve problems in practice. The focus is not only on solving the problem but also on understanding which information is critical for efficient analysis and targeted communication with the R&S Networks and Cybersecurity support team.
- **Additional formats** round out the offering, including the R&S®NC Update roadshow covering products, solutions, and trends, numerous webinars, and trainee workshops introducing practical device configuration.



Service & Support

Expert support from Germany and Europe — for resilient networks and predictable long-term IT operations

Digital sovereignty begins with your own expertise. That is why we focus on qualified local specialists. Our support team helps you overcome complex challenges in ongoing network operations. AI and modern technologies complement our expertise; they do not replace it. We continuously develop our capabilities and share this expertise with our partners and customers.



Personal when it matters. Digital whenever you prefer.



Personal, paid support

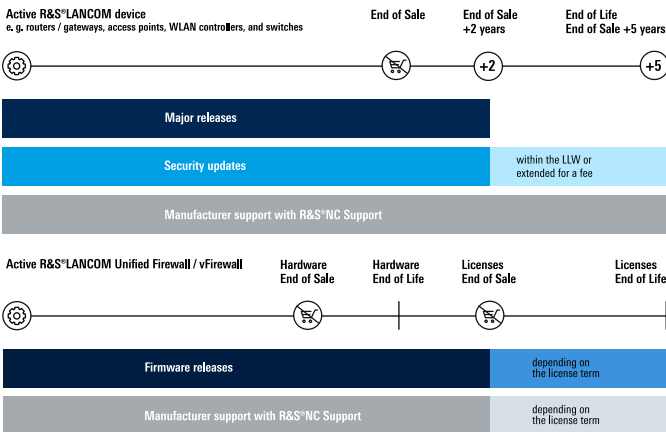
Support portal, hotline with defined response times, escalation contacts, and R&S®NC Support and Services products



Free digital self-services

Known issues, security advisories, knowledge base, lifecycle information, downloads, AI-based chatbot, and publications

Long-term security throughout the product lifecycle



For more information, scan the QR code or visit:
www.rohde-schwarz.com/networks-and-cybersecurity
→ Service & Support → Lifecycle management



As flexible as your requirements — the service and support portfolio

- **Support for partners with R&S®NC Support Access***
Security updates during the term and best-effort manufacturer support (10/5) as recommended minimum coverage for all R&S®NC Community Partners to provide support for end customers and benefit from manufacturer backing; includes access to the registration portal for central management of R&S®NC Support licenses.
- **Priority support with R&S®NC Support Direct***
Priority manufacturer support with defined response times (SLAs) and security updates during the term, optional 24/7 availability and next-business-day (NBD) advance replacement (also suitable for end customers).
- **Device replacement and compliance with R&S®NC Replacement***
Security updates until EOL and replacement service with opt. NBD replacement
- **Maintenance agreements for encryption products**
Security and software updates during the term (potentially until EOL), manufacturer support (8/5), and replacement service, optionally with defined response times (SLAs), NBD advance replacement, and on-site services.
- **Professional services with R&S®NC Services**
Customized planning, analysis, consulting, configuration, and optimization of network infrastructures, remotely or on-site, for example: Wi-Fi site surveys.



* Available exclusively for R&S®LANCOM devices.
Explore all products at:
www.rohde-schwarz.com/networks-and-cybersecurity
→ Products → Service & Support



Structured processes for greater information security

- Certified Information Security Management System (ISMS) according to ISO/IEC 27001 for standardized, audited service and support processes
- Alignment with established IT Infrastructure Library (ITIL) best practices
- More than 50 German- and English-speaking support employees with over 350 combined years of service and “IT Security — Engineered in Germany”

R&S®SITLine

Layer 2 encryption for security-critical communications

When government agencies and businesses transmit sensitive data between sites, the communication path must also be protected. R&S®SITLine ETH encrypts Ethernet connections at Layer 2, protecting the confidentiality and integrity of the transmitted data. Different performance variants secure small remote offices as well as connections between high-performance data centers.



Variants at a glance

	ETH-S	ETH-XL
Typical deployment	Branch offices and decentralized connections	Data centers, backbones, and sites with numerous connections
Model variants	10 or 100 Mbps, 1 or 10 Gbps	1x 100 or 2x 100 Gbps, 4x 10 or 8x 10 Gbps
Connections per device	1	1, 2, 4, or 8 depending on model
Ports	2	2, 4, 8, or 16 depending on model
Form factor	Compact, fanless, approx. 4.5", 1 U	2 chassis fans, 19" rack, 1 U

Technical features

- ▶ Symmetric AES-256 encryption in GCM (Galois/Counter Mode)
- ▶ Authentication using asymmetric cryptography: 384-bit ECC for peer authentication (ECGDSA) and 512-bit ECC (Brainpool) for management (TLS 1.2)
- ▶ Central security management for efficient administration of encryption devices with the R&S®Trusted Objects Manager (TOM)
- ▶ Post-quantum ready (PQC) through the BOTAN cryptographic library developed on behalf of the German Federal Office for Information Security (BSI)
- ▶ 100% made in Germany and BSI security approvals:
VS-NfD, RESTREINT UE/EU RESTRICTED, and NATO RESTRICTED

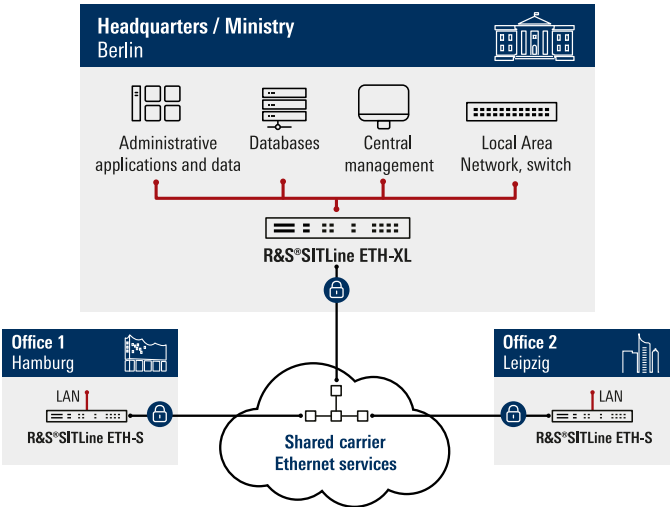


Your benefits

- ▶ **High throughput with low latency:** Dedicated encryption hardware protects even time-sensitive data connections.
- ▶ **Autonomous key exchange:** Devices negotiate session keys directly with each other, eliminating the need for a central key server.
- ▶ **Centralized security management:** R&S®Trusted Objects Manager supports administration of encryptors and their certificates. Zero-touch provisioning simplifies decentralized rollouts.
- ▶ **Trusted origin:** Development and manufacturing in Germany provide a traceable, trustworthy foundation for protecting sensitive communications.

Typical applications

- ▶ **Site-to-site connectivity:** Exchange sensitive government or corporate data over Ethernet services between headquarters and branch offices.
- ▶ **Data center interconnection:** Securely transmit large volumes of data over high-performance links for replication and backup.
- ▶ **Decentralized infrastructure:** Connect small sites and technical installations securely to a central infrastructure.



Scan the QR code or visit:
www.rohde-schwarz.com/networks-and-cybersecurity
→ Products → Security → Network encryption

R&S®Trusted VPN

BSI-approved Layer 3 encryption for highly secure connections

Protect classified information as it travels between your sites. R&S®Trusted VPN offers Layer 3 encryption approved by the German BSI for VS-NfD, RESTREINT UE/EU RESTRICTED, and NATO RESTRICTED. Government agencies and businesses can use it to secure IP communications over public and managed networks. IPSec, cryptographic network separation, and hardware-based system protection work together seamlessly. Three combinable models allow deployment tailored to each site's requirements.

Variants at a glance

	VPN-S	VPN-L	VPN-XL
Recommended number of clients	< 100	< 1,000	< 3,500
Maximum throughput	250 Mbps	600 Mbps	6,000 Mbps
1 Gigabit Ethernet ports	4	6	4
10 Gigabit Ethernet ports	–	2x SFP+	2x SFP+
Form factor	Desktop appliance	19", 1 U	19", 1 U



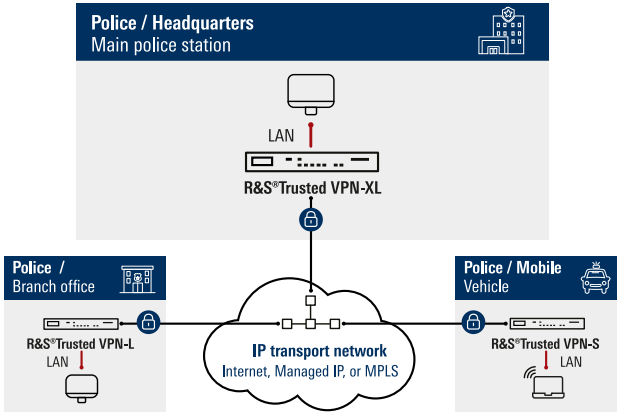
Technical features

- ▶ IPSec with AES-256-GCM, IKEv2, and Perfect Forward Secrecy
- ▶ Trusted Virtual Domains for cryptographic separation of communication domains
- ▶ Integrated certificate authority; external CA for road-warrior connections
- ▶ UEFI Secure Boot, TPM-based Trusted Boot, and disk encryption
- ▶ Centralized administration with the R&S®Trusted Objects Manager with a web interface and integrated, automated PKI
- ▶ 100% made in Germany and BSI security approvals: VS-NfD, RESTREINT UE/EU RESTRICTED, and NATO RESTRICTED



Your benefits

- ▶ **Security for classified information**
R&S®Trusted VPN protects the transfer of information at the corresponding classification level. IPSec tunnels encrypt payload data and inner IP headers, also concealing internal addressing from the transport network.
- ▶ **Separate security domains on shared infrastructure**
Trusted Virtual Domains enable cryptographic separation of organizational units, projects, or security zones. Associated trust relationships can be managed centrally and extended selectively when sites are added.
- ▶ **Centralized control of gateways and certificates**
R&S®Trusted Objects Manager lets you manage gateways, certificates, and security relationships in one place. Its web interface and integrated automated PKI simplify the administration of distributed VPN infrastructures.



Typical applications

- ▶ **Connect government sites:** Exchange classified information between headquarters, offices, and data centers over public IP networks or managed IP services such as MPLS.
- ▶ **Secure project communications:** Cryptographically separate communication domains with different permissions over shared infrastructure.
- ▶ **Connect mobile workplaces:** Provide secure client-to-site connections for access from home offices or while traveling, within the intended security architecture.



More at:
www.rohde-schwarz.com/networks-and-cybersecurity
→ Products → Security → Network encryption

R&S®Trusted Disk



VS-NfD,
RESTREINT UE/
EU RESTRICTED,
NATO RESTRICTED

Disk encryption for protecting classified information

Processing classified information requires security products approved by the German Federal Office for Information Security (BSI). As a complete disk encryption solution for VS-NfD, RESTREINT UE/EU RESTRICTED, and NATO RESTRICTED environments, R&S®Trusted Disk meets these requirements while standing out for its clear, user-friendly management capabilities.

R&S®Trusted Disk protects data on Windows endpoints and USB storage media against unauthorized access in cases of loss, theft, maintenance, and repair. Combined with the centralized R&S®Trusted Objects Manager and its integrated PKI, it also significantly simplifies the management of users, permissions, security policies, and certificates.



For more information, scan the QR code or visit:
www.rohde-schwarz.com/networks-and-cybersecurity → Products → Security → Hard disk encryption

Technical features

- ▶ For Windows endpoints, from notebooks, tablets, and desktop PCs to permanently installed PCs in emergency and service vehicles
- ▶ Encryption of the system drive and additional internal storage devices with automatic re-encryption
- ▶ Encryption of external USB storage media for data exchange within an organization
- ▶ Secure pre-boot authentication using a smart card and PIN
- ▶ Centralized management of endpoints, users, permissions, and security policies
- ▶ 100% made in Germany and BSI security approvals:
VS-NfD, RESTREINT UE/EU RESTRICTED, and NATO RESTRICTED



Highlights

▶ Centralized, efficient management

R&S®Trusted Objects Manager provides a clear overview and transparency into the security status of protected endpoints. This central management system enables organization-wide enforcement of consistent policies and traceable monitoring of operational events.

▶ Integrated Public Key Infrastructure (PKI)

Required digital identities and certificates are provided directly within R&S®Trusted Disk, making rollout and administration easier, reducing dependencies, and eliminating the need to establish a separate PKI.

▶ Unique remote permissions management

Access rights can be centrally granted or revoked without the endpoint being physically present at the administration site. This enables a rapid response to personnel or security-related changes, including for mobile or decentralized devices.



Unique selling points

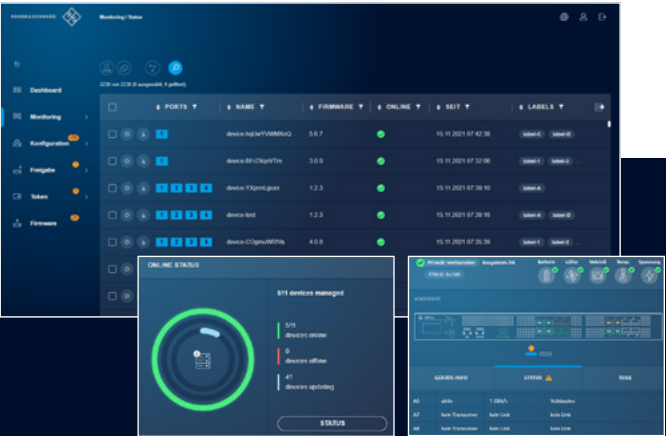
- ▶ The only VS-NfD-compliant solution with centralized network-based management
- ▶ Broad hardware support
- ▶ Developed entirely in Germany: fast, reliable manufacturer support from Germany
- ▶ Proven security: No known security incidents since the product launch in 2012
- ▶ Included in the BSI program for accelerated security certifications

R&S®Trusted Objects Manager

Centralized management system for the Rohde & Schwarz endpoint and network encryption portfolio

The more endpoints, users, and locations an organization has, the more important reliable, comprehensive management becomes. The R&S®Trusted Objects Manager (TOM) is the central management appliance for the R&S endpoint and network encryption portfolio (including R&S®Trusted Disk, R&S®Trusted VPN, and R&S®SITLine). Deployed within the organization’s own infrastructure, it ensures that management of R&S products remains entirely under the organization’s control.

Through a secure, intuitive web interface, administrators can manage R&S products, including users, permissions, and smart cards, while closely monitoring the operation of the managed systems. The integrated public key infrastructure (PKI) also enables independent, centralized management of keys and certificates under the organization’s own control.



More information at:
www.rohde-schwarz.com/networks-and-cybersecurity
→ Products → Management systems

Technical features

- ▶ Hardware appliance serving as a central management system for managing devices in the R&S endpoint and network encryption portfolio
- ▶ Administration via a secure web interface designed for ease of use and intuitive operation
- ▶ Integrated public key infrastructure (PKI) that can be operated independently without third-party involvement
- ▶ Centralized, intuitive user and permissions management
- ▶ Scriptable API
- ▶ Integration with LDAP directory services, including Microsoft Active Directory and OpenLDAP
- ▶ Support for importing users and user groups from existing LDAP structures
- ▶ Support for deploying additional TOM instances as standby instances
- ▶ Secure management environment for R&S products approved for use up to VS-NfD, RESTREINT UE/EU RESTRICTED, and NATO RESTRICTED classification levels

Variants at a glance

	TOM-S	TOM-M
Description	Compact hardware appliance for small to medium-sized management environments	Higher-performance hardware appliance for larger management environments and increased availability requirements
Form factor	19", 1 U, depth: ~ 30 cm	19", 1 U, depth: ~ 74 cm

