

# R&S® LANCOM XS-4554YUP

**10G stackable full layer 3 multi-Gigabit access switch with PoE++ for large, demanding infrastructures**



For demanding infrastructures in enterprise environments, the R&S® LANCOM XS-4554YUP access switch offers enormous performance even under high utilization: With 36x 2.5G and 12x 10G multi-Gigabit Ethernet ports, all with Power over Ethernet IEEE 802.3bt (PoE++), as well as 4x 25G SFP28 and 2x 100G QSFP28 fiber-optic ports, the switch is the ideal basis for linking network components with high energy and performance requirements, such as Wi-Fi 7 access points. Redundancy functions, such as Virtual Port Channel (VPC) or stacking, enable network operation with up to 100% uptime with support for in-service software updates (ISSU). This allows VPC and stacking speeds of up to 400G to be achieved. Redundant and hot-swappable power supplies and fan modules as well as an included R&S® LANCOM Limited Lifetime Warranty (LLW) offer additional operational reliability. Depending on your preference, you can choose between the management options web-based GUI, industry-standard CLI, or the R&S® LANCOM Management Cloud (R&S® LMC) for centralized network management, which you can switch between at any time.

- ▶ Multi-Gigabit access switch with 36x 2.5G and 12x 10G multi-Gigabit Ethernet ports as well as 4x 25G SFP28 and 2x 100G QSFP28 uplink or stacking ports
- ▶ PoE support as per IEEE 802.3bt PD-Type 4 on all 48 Ethernet ports with up to 1,440 watts PoE budget
- ▶ Support of Virtual Port Channel (VPC or MC-LAG) to implement networks with 100% uptime
- ▶ Full layer 3 functionality thanks to VRRP, DHCP, static and policy-based dynamic routing via OSPF v2/v3 and BGP4
- ▶ Backplane stacking optionally (SW-defined) via SFP28 or QSFP28 ports
- ▶ Incl. 1x hot-swappable PSU (second PSU optional) and 2x redundant (n+1), hot-swappable fans for maximum reliability
- ▶ Including 2x 19" mounting brackets and 2x 19" telescopic rails (switch slide-in rails) for 19" rack mounting
- ▶ Industry standard CLI
- ▶ Cloud-managed LAN and switch stacking for quick configuration and convenient management via the R&S® LMC
- ▶ R&S® Limited Lifetime Warranty (LLW) included

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## High performance on 54 ports

The R&S® LANCOM XS-4554YUP is equipped with 36x 2.5G multi-Gigabit PoE++ Ethernet ports, 12x 10G multi-Gigabit PoE++ Ethernet ports as well as 4x SFP28 and 2x QSFP28 ports, which support transfer rates of 25 and 100 Gbps respectively. With the SFP28 and QSFP28 ports, you can continue to use your existing fiber optics infrastructure while benefiting from higher bandwidths per port at the same time. This means that fewer hardware purchases are required in the long term, which reduces your investment costs (CapEx). With a data throughput of 1,020 Gbps on the backplane, the switch offers wirespeed performance even at high workloads. The multi-Gigabit access switch thus forms the powerful basis for modern network infrastructures in all industries and areas of application.

## Network design with 100% uptime via VPC / MC-LAG

Virtual Port Channel (VPC), or Multi-chassis Link Aggregation Group (MC-LAG), is the preferred solution for increasing the reliability of large network infrastructures. If you link two R&S® LANCOM XS-4554YUP in a VPC network and connect the underlying network components redundantly, the other switch remains active in the event of a failure or during in-service software update (ISSU) of one of the VPC-connected switches, thus ensuring 100% uptime. This is possible because both switches remain physically independent devices that merely form a virtual network. In addition, the link speed of the underlying network components is multiplied, as a VPC network allows multiple connections to the underlying level (active/active). For constant data forwarding, the switches exchange important information about the network, such as MAC tables, via their peer link.

## A high-performance basis for Wi-Fi 7 – PoE included

Thanks to twelve high-performance 10G multi-Gigabit Ethernet ports, the PoE switch R&S® LANCOM XS-4554YUP is the ideal LAN-side basis for integrating Wi-Fi 7 into modern infrastructures. This is because Wi-Fi 7 access points or other network components with high transmission speeds and energy requirements mean increased performance requirements at the access level. To ensure the full performance and range of 10G, cables with higher specifications such as CAT6a or CAT7 are required. For a centralized and efficient power supply without additional electrical installation or power supply units, the R&S® LANCOM XS-4554YUP supplies connected PoE end devices and supports the Power over Ethernet standards IEEE 802.3af (PoE), IEEE 802.3at (PoE+), and IEEE 802.3bt PD-Type 4 (PoE++) with up to 90 watts per port. Thanks to high power reserves, a PoE budget of 1,440 watts is available when using both power supply units in power mode.

## Redundant network topologies with high-performance stacking

Stacking allows up to eight physical switches from the XS-4500 series to be combined into one logical unit for convenient maintenance and management – at a single site or even distributed across different sites. The stacking function can be activated on both the front SFP28 and the rear QSFP28 uplink ports. The stack manager uses the non-stop forwarding function to cyclically supply its standby with current information such as the MAC table and its own status information. In the event of a failure, the standby manager can ensure that the network is almost 100% up and running within a few seconds. In the event of a firmware update, the stack is restarted, for which a maintenance window must be scheduled. The entire stack can be conveniently managed and monitored via cloud-managed switch stacking using the R&S® LANCOM Management Cloud. The network can also be expanded at a later date, as the new switch receives its configuration automatically from the stack manager and is ready for use within seconds.

## Full control over your investment

Fully equipped ex works, ready for immediate use, everything from a single source: In accordance with the principle of "Total Cost of Ownership" (TCO), the R&S® LANCOM XS-4554YUP gives you planning security from the very beginning and at all times with regard to the acquisition costs for your network expansion. The full expansion with all necessary ports in the industry standard makes time-consuming and costly retrofitting of proprietary port modules a thing of the

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past. Furthermore, our accessories portfolio provides you with the necessary SFP modules and direct attach cables directly from us in tested R&S® LANCOM quality. In addition to the guarantee of maximum operational reliability through extensive load and long-term testing of the modules and interoperability tests with the entire R&S® LANCOM portfolio, you also save on long delivery times.

## Static routing for fast data exchange

The R&S® LANCOM XS-4554YUP is full layer 3 capable with policy-based dynamic routing via OSPF, providing dynamic network routes through one or more network segments. This provides tremendous increase in network efficiency for example in meshed networks with multiple aggregation switches at different locations.

## Operational reliability with hardware redundancy

The R&S® LANCOM XS-4554YUP with a “hot-swappable” PSU (power supply unit) allows the power supply unit to be replaced quickly and without interruption in the event of a breakdown. A separate plug-in slot realizes the addition of a second PSU. With the integration of two redundant power supply units, for example, highly fail-safe scenarios can be realized. In addition, the redundant (N+1) fan concept also ensures fail-safe switch operation in case one of the two fans fails.

## Cloud-managed LAN with port templates and Secure Terminal Access

With the R&S® LANCOM Management Cloud (R&S® LMC) and Cloud-managed LAN, the R&S® LANCOM XS-4554YUP offers quick and easy network integration as well as automatic provision of the configuration across locations with the a click of a mouse. Time-consuming individual device and switch port configurations are now a matter of the past. The targeted switch rollout via the R&S® LMC enables automatic VLAN assignment to switch ports including practical switch port profiles and therefore “zero-touch” assignment to the devices.

## R&S® LANCOM Limited Lifetime Warranty (LLW)

This enterprise switch is reliably covered ex factory by a Limited Lifetime Warranty. Regardless of the switch's operating time, the replacement service is valid until the End of Life status of the device (max. 10 years). For perfect complement: Ensure minimal downtime in the event of a hardware defect with next-business-day delivery of a replacement device. We recommend R&S® NC NBD Replacement or in combination with guaranteed service times R&S® NC Support Direct Advanced 24/7 or 10/5.

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Security	
Secure Shell Protocol (SSH)	SSH for a secure remote configuration
Secure Sockets Layer (SSL)	SSL to encrypt HTTP connections; advanced security for browser-based configuration via web interface
IEEE 802.1X	IEEE 802.1X access control on all ports; RADIUS for authentication, authorization and accounting with e.g. MD5 hashing; guest VLAN; dynamic VLAN assignment
Private VLAN edge	Layer 2 isolation between clients in the same VLAN ("protected ports"); support multiple uplinks
Port security	Locking of MAC addresses to ports; limiting of the number of learned MAC addresses
IP source guard	Blocking access for illegal IP addresses on specific ports
Access-control-lists	Drop or rate limitation of connections based on source and destination MAC addresses, VLAN ID, IP address (IPv4/IPv6), protocol, port, DSCP/IP precedence, TCP/UDP source and destination ports, IEEE 802.1p priority, ICMP packets, IGMP packets, TCP flag. Support of 1023 ACEs (max. rules per list) per ACL and up to 2800 entries in total.
RADIUS/TACACS+	Authentication, authorization and accounting of configuration changes by RADIUS or TACACS+
Storm Control	Multicast/Broadcast/Unicast storm suppression
Isolated Group	Allows certain ports to be designated as protected. All other ports are non-isolated. Traffic between isolated group members is blocked. Traffic can only be sent from isolated group to non-isolated group.
DHCP Snooping	Protection against rogue DHCP servers on the network - Outgoing DHCP-server packets are only allowed on specific ports.
Dynamic ARP Inspection	Dynamic ARP Inspection to prevent man-in-the-middle attacks incl. proxy ARP
ARP Request Poisoning	Protection against ARP Request Poisoning (ARP Spoofing)
IPv6 First Hop	IPv6 First Hop Security by Snooping Guard, DHCPv6 Guard, Source Guard, Prefix Guard
Denial-of-Service	Protection against Denial-of-Service attacks to prevent the loss of important protocol functions
Performance	
Switching technology	Store and forward with latency less than 4 microseconds
MAC addresses	Support of max 32K MAC addresses
Throughput	Max. 1020 Gbps on the backplane
Maximum packet processing	758 million packets per second (mpps) at 64-byte packets
VLAN	Port based and IEEE 802.1q tag based VLAN with up to 4,093 VLAN; Supports ingress and egress packet filter in port based VLAN
Jumbo frame support	Jumbo frame support with up to 12288 bytes
Packet Buffer	8 MB
6in4 Tunneling	Support of encapsulation of IPv6 traffic in IPv4 packets
PoE with IEEE 802.3bt and IEEE 802.3at/af	
2.5G Ports	36x IEEE 802.3bt 2.5G PoE ports with up to 90W per port (type 4, compatible to IEEE 802.3at/af powered devices), limited by the maximum PoE power supplied
10G Ports	12x IEEE 802.3bt 10G PoE ports with up to 90W per port (type 4, compatible to IEEE 802.3at/af powered devices), limited by the maximum PoE power supplied
Power	720 W total power with dynamic load balancing on all ports (optional up to 1440 W with second power supply unit)
Priorisation	Supports port based priority and PoE status setting
Status information	Monitoring via LED, displaying the actual power consumption per port in web interface
Energy efficiency (Green Ethernet)	
Energy detection	Energy efficiency according to IEEE 802.3az. Automatically turns off power on Gigabit Ethernet RJ-45 port when detecting link down or Idle of client. Active mode is resumed without loss of any packets when the switch detects the link up

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Energy efficiency (Green Ethernet)	
<b>Cable length detection</b>	Adjusts the signal strength based on the cable length. Reduces the power consumption for short cable
Layer 3 features	
<b>Number of L3 interfaces</b>	up to 128
<b>Routing (IPv4/IPv6)</b>	Hardware based routing (IPv4/IPv6 combined) with a number of 16,000 possible routes
<b>DHCP Server</b>	DHCP Server per VLAN, max. 16 pools
<b>VRRP</b>	Virtual Router Redundancy Protocol
<b>VRF</b>	Virtual Routing and Forwarding
<b>Dynamic routing (IPv4/IPv6)</b>	dynamic routing by OSPFv2, OSPFv3 and BGP4
<b>Protocol Independent Multicast</b>	PIM-Sparse mode (PIM-SM) and PIM-Dense mode (PIM-DM)
<b>Source specific multicast</b>	Source specific multicast (SSM)for IP
Layer 2 switching	
<b>Spanning Tree Protokoll (STP) / Rapid STP / Multiple STP / PVST</b>	Standard Spanning Tree according to IEEE 802.1d with fast convergence support of IEEE 802.1w (RSTP); using Multiple Spanning Tree instances by default according to IEEE 802.1s (MSTP), PVST with up to 8 instances
<b>Link Aggregation Control Protocol (LACP)</b>	Support of 64 groups containing up to 32 ports each according to IEEE 802.1ax
<b>Virtual port channel VPC</b>	VPC (also known as MLAG) for details refer to VPC CLI manual and design guide
<b>VLAN</b>	Support for up to 4K VLANs simultaneously (out of 4093 VLAN Ids); matching due to port, IEEE 802.1q tagged VLANs, MAC addresses, IP subnet and Private VLAN Edge function ("protected ports")
<b>Voice VLAN</b>	Voice traffic is automatically assigned to a voice-specific VLAN and treated with appropriate levels of QoS
<b>IGMP multicasts</b>	IGMP v1, v2, v3 to limit bandwidth-intensive multicast traffic to ports with requesters; supports 1024 multicast groups; source-specific multicasting
<b>IGMP querier</b>	Support of multicast domains of snooping switches in the absence of a multicast router
<b>IGMP Snooping</b>	IGMP Snooping to identify multicast groups and prevent unnecessary traffic
<b>IGMP proxy</b>	IGMP proxy to pass IGMP messages through
<b>MLD v1/v2</b>	Multicast Listener Discovery - IPv6 multicast packets are transmitted to interested listeners only
<b>Generic VLAN registration</b>	VLAN registration with GVRP according to IEEE 802.1q for automatic delivery of VLANs in bridged domains
<b>DHCP Relay Agent</b>	Relay of DHCP broadcast request to different LANs
<b>Supported DHCP options</b>	all options listed in RFC2132
Stacking	
<b>Stacking Option</b>	Stacking by 2 QSFP28 100G Ports – via optional „R&S®LANCOM SFP-DAC100-1m“ or „R&S®LANCOM SFP-DAC100-3m“ or by using „LANCOM SFP-SR-LC100“ oder „R&S®LANCOM SFP-LR-LC100“ transceiver modules, or by SFP28 (25G) uplink ports
Interfaces	
<b>Ethernet</b>	<ul style="list-style-type: none"> <li>▶ 36 TP ports 100/1000/2500 Mbps</li> <li>▶ 12 TP-Ports 1000/2500/5000/10000 Mbps</li> <li>▶ 4 SFP28 ports 25 Gbps</li> <li>▶ 2 QSFP28 Uplink or Stacking ports 40/100 GBit/s</li> <li>▶ 54 concurrent ethernet ports in total</li> </ul>
<b>Console port</b>	Micro-USB and RJ45 configuration port for command line access
<b>Out of band management port</b>	Out of Band Management via Ethernet Port (SSH, HTTP/S, SCP, SFTP)

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Management and monitoring	
<b>Management</b>	LANconfig, WEBconfig, R&S® LANCOM Management Cloud, Industry Standard CLI
<b>Command Line Interface (CLI)</b>	Configuration and status display from the command line with console application and direct connection to console port, via Telnet or SSH
<b>Monitoring</b>	LANmonitor, R&S® LANCOM Management Cloud
<b>Remote Monitoring</b>	Integrated RMON software agent supports 4 RMON groups (history, statistics, alarms and events) for enhanced traffic management, monitoring and analysis
<b>Port Mirroring</b>	Traffic can be mirrored from on port to another for investigation with network analyzer or RMON probe. Up to 51 ports can be mirrored to a single mirror port. Single sessions can be selected
<b>Security</b>	Access rights (read/write) can be set up separately, access control list
<b>SNMP</b>	SNMP management via SNMPv1, v2c or v3 with support of traps. User-based security model for SNMPv3 (USM)
<b>Diagnosis</b>	Diagnosis from the switch with PING and cable diagnosis
<b>Firmware update</b>	<ul style="list-style-type: none"> <li>▶ Update via WEBconfig and browser (HTTP/HTTPS)</li> <li>▶ Update via TFTP, SCP, and LANconfig</li> <li>▶ Update via R&amp;S® LANCOM Management Cloud</li> <li>▶ Dual firmware image to update during operation</li> </ul>
<b>Secure Copy</b>	Securely import and export files
<b>DHCP client</b>	Automatic assignement of the management IP address by DHCP
<b>SNTP</b>	Automatic time settings with Simple Network Time Protocol (SNTP)
<b>s-flow v5</b>	Standard for monitoring of high-speed-networks. Visualization of network use, accounting an analysis to protect your network against dangers
Hardware	
<b>Weight</b>	14,5 lbs (7,0 kg)
<b>Power supply</b>	Two bays for swappable power supply units (100 – 240 V, 50 – 60 Hz)
<b>Environment</b>	Temperature range 0 – 40° C; short term temperature conditions 0 – 50°C; humidity 10 – 90%; non-condensing
<b>Housing</b>	Robust metal housing, 19" 1U (442 x 44 x 440 mm > W x H x D) with removable mounting brackets, network connectors on the front
<b>Fans</b>	2 (swappable—replace defective fans within 48 hours to protect device from possible damage / time required for replacement approx. 2 min) Exchange fan "R&S® LANCOM SFAN-XS6" optionally available
<b>Mean time between failure</b>	<ul style="list-style-type: none"> <li>▶ at 25° C: 111 000 hours (MTBF)</li> <li>▶ at 40° C: 62 000 hours (MTBF)</li> </ul>
<b>Power consumption (max) without powered devices</b>	<ul style="list-style-type: none"> <li>▶ 100 W (when using one PSU, or two PSUs in redundancy mode)</li> <li>▶ 100 W (when using two PSUs in boost mode)</li> </ul>
<b>Power consumption (max) at full PoE power delivery</b>	<ul style="list-style-type: none"> <li>▶ 910 W (when using one PSU, or two PSUs in redundancy mode)</li> <li>▶ 1650 W (when using two PSUs in boost mode)</li> </ul>
<b>Power consumption (idle)</b>	83 W
<b>Acoustic noise (typ.)</b>	60 dBa
<b>Heat power (max)</b>	715 BTU/h
Software	
<b>LCOS version</b>	based on LCOS SX 5.20

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Software	
<b>Lifecycle Management</b>	After discontinuation (End of Sale), the device is subject to the R&S®NC Lifecycle Management. Details can be found at: <a href="#">Link</a>
<b>IT Security made in Germany</b>	The development and quality assurance take place in Germany in accordance with high security standards. The „IT Security made in Germany“ quality label of the German IT Security Association attests to the level of security achieved.
Declarations of conformity*	
<b>Europe/EFTA</b>	CE
<b>North America</b>	FCC/IC
<b>Australia / New Zealand</b>	ACMA
<b>*) Note</b>	The full text of the specific Declaration of Conformity is available <a href="#">here</a>
Supported IEEE standards	
<b>IEEE 802.1AB</b>	Link Layer Discovery Protocol (LLDP)
<b>IEEE 802.1AB</b>	LLDP-MED
<b>IEEE 802.1ad</b>	Q-in-Q tagging
<b>IEEE 802.1ak</b>	MRP and MVRP - Multiple Registration Protocol and Multiple VLAN Registration Protocol
<b>IEEE 802.1d</b>	MAC Bridging
<b>IEEE 802.1d</b>	Spanning Tree
<b>IEEE 802.1p</b>	Class of Service
<b>IEEE 802.1q</b>	VLAN
<b>IEEE 802.1s</b>	Multiple Spanning Tree Protocol (MSTP)
<b>IEEE 802.1w</b>	Rapid Spanning Tree Protocol (RSTP)
<b>IEEE 802.1X</b>	Port Based Network Access Control
<b>IEEE 802.3</b>	10Base-T Ethernet
<b>IEEE 802.3ab</b>	1000Base-TX Ethernet
<b>IEEE 802.1ax, incl. 802.3ad</b>	Link Aggregation Control Protocol (LACP)
<b>IEEE 802.3ae</b>	10 Gigabit Ethernet over fiber
<b>IEEE 802.3af</b>	Power over Ethernet (PoE)
<b>IEEE 802.3at</b>	Power over Ethernet Plus (PoE+)
<b>IEEE 802.3bt</b>	Power over Ethernet++(PoE++) Type 4
<b>IEEE 802.3az</b>	Energy Efficient Ethernet
<b>IEEE 802.3bz</b>	2.5GBASE-T Ethernet
<b>IEEE 802.3an</b>	10GBASE-T Ethernet
<b>IEEE 802.3bj</b>	25GBASE-X Ethernet
<b>IEEE 802.3ba, 40G</b>	40GBASE-X Ethernet
<b>IEEE 802.3ba, 100G</b>	100GBASE-X Ethernet
<b>IEEE 802.3u</b>	100Base-T Ethernet
<b>IEEE 802.3x</b>	Flow Control

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Supported IEEE standards	
IEEE 802.3z	1000Base-X Ethernet
IEEE 802.3ac	VLAN tagging
IEEE 802.3bj-CL91	Forward Error Correction (FEC)
IEEE 802.1ak	Multiple Registration Protocol (MRP)
IEEE 802.1as	Timing and Synchronization for Time-Sensitive LANs
IEEE 802.1Qat	Multiple Stream Reservation Protocol (MSRP)
IEEE 802.1Qav	Forwarding and Queuing Enhancements for Time-Sensitive Streams
IEEE 802.1Qbb	Priority-based Flow control
IEEE 802.1v	Protocol-based VLANs
Supported RFC standards	
RFC 854	Telnet Protocol Specification
RFC 1213	MIB II
RFC 1215	SNMP Generic Traps
RFC 1493	Bridge MIB
RFC 1534	Interoperation between DHCP and BootP
RFC 1769	Simple Network Time Protocol (SNTP)
RFC 2021	Remote Network Monitoring MIB v2 (RMONv2)
RFC 2233	Interface MIB
RFC 2453	Routing Information Protocol - RIPv2
RFC 2460	Internet Protocol Version 6 (IPv6)
RFC 2613	SMON MIB
RFC 2617	HTTP Authentication
RFC 2618	RADIUS Authentication Client MIB
RFC 2665	Ethernet-Like MIB
RFC 2674	IEEE 802.1p and IEEE 802.1q Bridge MIB
RFC 2737	Entity MIB v2
RFC 2818	Hypertext Transfer Protocol Secure (HTTPS)
RFC 2819	Remote Network Monitoring MIB (RMON)
RFC 2863	Interface Group MIB using SMIv2
RFC 2933	IGMP MIB
RFC 3019	MLDv1 MIB
RFC 3273	RMON Groups 1,2,3 and 9
RFC 3414	User based Security Model for SNMPv3
RFC 3415	View based Access Control Model for SNMP
RFC 3587	IPv6 Global Unicast Address Format
RFC 3621	Power Ethernet MIB

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Supported RFC standards	
RFC 3635	Ethernet-Like MIB
RFC 3636	IEEE 802.3 MAU MIB
RFC 3973	Protocol Independent Multicast -Dense mode (PIM-DM) (supports both IPv4 and IPv6)
RFC 4133	Entity MIBv3
RFC 4188	Bridge MIB
RFC 4251	The Secure Shell Protocol Architecture (SSH)
RFC 4291	IP Version 6 Addressing Architecture
RFC 4443	Internet Control Message Protocol (ICMPv6)
RFC 4541	IGMP Snooping and MLD Snooping
RFC 4541	IGMP- and MLD-Snooping
RFC 4601	Protocol Independent Multicast -Sparse mode (PIM-SM) (supports both IPv4 and IPv6)
RFC 4668	RADIUS Authentication Client MIB
RFC 4670	RADIUS Accounting MIB
RFC 5171	Unidirectional Link Detection Protocol (UDLD)
RFC 5519	Multicast Group Membership Discovery MIB
Scope of delivery	
Manual	Hardware Quick Reference (DE/EN), Installation Guide (DE/EN)
Cable	Serial configuration cable, 1.5m
Cable	Micro-USB configuration cable, 1.0m
Cable	IEC power cord
Power supply (hot-swappable)	<ul style="list-style-type: none"> <li>▶ power supply 1: SPSU-920 (included): 920W</li> <li>▶ power supply 2: SPSU-920 (optional): 920W for power supply redundancy or maximizing the PoE budget (boost mode)</li> </ul>
19" rack equipment	<ul style="list-style-type: none"> <li>▶ Two 19" brackets for rack mounting</li> <li>▶ Two 19" switch slide-in rails</li> </ul>
Support	
Warranty extension	R&S®LANCOM Limited Lifetime Warranty – replacement service up to the End of Life status of the device (maximum 10 years). Find details <a href="#">here</a> . The service and support conditions valid as of July 01, 2026, available at <a href="https://rs-nc.rohde-schwarz.com/fileadmin/pdf/LCS/ServiceSupportConditions/Rohde-Schwarz-Networks-and-Cybersecurity-GmbH-Service-and-Support-Conditions-20260701.pdf">rs-nc.rohde-schwarz.com/fileadmin/pdf/LCS/ServiceSupportConditions/Rohde-Schwarz-Networks-and-Cybersecurity-GmbH-Service-and-Support-Conditions-20260701.pdf</a> , apply.
Security updates	Up to the End of Life date of the device (see <a href="#">Link</a> ), can be extended by purchasing R&S®NC Support products
Software updates	Regular free updates including new features as part of the R&S®NC Lifecycle Management ( <a href="#">Link</a> )
Information on the EU Data Act	For details on product data and data on connected services, please refer to: <a href="#">Link</a>
Manufacturer support	Available with R&S®NC products such as Support Access (for R&S®NC Community Partners only), Direct, or Premium
R&S®NC Support Direct 24/7 Advanced XL	Direct, prioritized 10/5 manufacturer support incl. 24/7 emergency hotline and security updates for the device, NBD advance replacement with delivery of the device on the next business day (24/7/NBD), guaranteed first response times (SLA) of max. 30 minutes for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years (item no. 10785, 10786 or 10787)

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Support	
<b>R&amp;S®NC Support Direct 24/7 XL</b>	Direct, prioritized 10/5 manufacturer support incl. 24/7 emergency hotline and security updates for the device, guaranteed first response times (SLA) of max. 30 minutes for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years(item no. 10761, 10762 or 10763)
<b>R&amp;S®NC Support Direct Advanced 10/5 XL</b>	Direct, prioritized 10/5 manufacturer support and security updates for the device, NBD advance replacement with delivery of the device on the next business day (10/5/NBD), guaranteed first response times (SLA) of max. 2 hours for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years (item no. 10773, 10774 or 10775)
<b>R&amp;S®NC Support Direct 10/5 XL</b>	Direct, prioritized 10/5 manufacturer support and security updates for the device, guaranteed first response times (SLA) of max. 2 hours for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years (item no. 10749, 10750 oder 10751)
<b>R&amp;S®NC NBD Replacement XL</b>	Addition of the R&S®LANCOM Limited Lifetime Warranty with NBD advance replacement with delivery of the device on the next business day in case of hardware defect, item no.61323
R&S®LANCOM Management Cloud	
<b>R&amp;S®LANCOM Management Cloud</b>	R&S®LANCOM LMC-D-1Y License (1 Year), enables the management of one category D device for one year via the R&S®LANCOM Management Cloud, item no. 50109
<b>R&amp;S®LANCOM Management Cloud</b>	R&S®LANCOM LMC-D-3Y License (3 Years), enables the management of one category D device for three years via the R&S®LANCOM Management Cloud, item no. 50110
<b>R&amp;S®LANCOM Management Cloud</b>	R&S®LANCOM LMC-D-5Y License (5 Years), enables the management of one category D device for five years via the R&S®LANCOM Management Cloud, item no. 50111
Accessories*	
<b>1000Base-SX SFP transceiver module</b>	R&S®LANCOM SFP-SX-LC1, item no. 61556
<b>1000Base-SX SFP transceiver module</b>	R&S®LANCOM SFP-SX2-LC1, item no. 60183
<b>1000Base-LX SFP transceiver module</b>	R&S®LANCOM SFP-LX-LC1, item no. 61557
<b>1000Base-LX SFP BiDi transceiver module</b>	R&S®LANCOM SFP-BiDi1550-SC1, item no. 60201
<b>10GBase-SX SFP transceiver module</b>	R&S®LANCOM SFP-SX-LC10, item no. 61485
<b>10GBase-LX SFP transceiver module</b>	R&S®LANCOM SFP-LX-LC10, item no. 61497
<b>10GBase-LX SFP transceiver module</b>	R&S®LANCOM SFP-LR40-LC10, item no. 60182
<b>10GBase-LX SFP BiDi transceiver module</b>	R&S®LANCOM SFP-BiDi1310-LC10, item no. 60202
<b>25GBase-SX SFP transceiver module</b>	R&S®LANCOM SFP-SR-LC25, Art.-Nr.: 60171
<b>25GBase-LX SFP transceiver module</b>	R&S®LANCOM SFP-LR-LC25, Art.-Nr.: 60172
<b>40GBase-SX SFP transceiver transceiver module</b>	R&S®LANCOM SFP-SR-MPO40, Art.-Nr.: 60173
<b>40GBase-LX SFP transceiver module</b>	R&S®LANCOM SFP-LR-LC40, Art.-Nr.: 60174
<b>100GBase-LR4 SFP transceiver module</b>	R&S®LANCOMSFP-LR-LC100, Art.-Nr.: 60205
<b>100GBase-SR4 SFP transceiver module</b>	R&S®LANCOM SFP-SR-MPO100, Art.-Nr.: 60206
<b>10G Direct Attach Cable 1m</b>	R&S®LANCOM SFP-DAC10-1m, Art.-Nr.: 61495
<b>10G Direct Attach Cable 3m</b>	R&S®LANCOM SFP-DAC10-3m, Art.-Nr.: 60175
<b>40G Direct Attach Cable 1m</b>	R&S®LANCOM SFP-DAC40-1m, Art.-Nr.: 60176
<b>40G Direct Attach Cable 3m</b>	R&S®LANCOM SFP-DAC40-3m, Art.-Nr.: 60177

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Accessories*	
25G Direct Attach Cable 1m	R&S® LANCOM SFP-DAC25-1m, Art.-Nr.: 60180
25G Direct Attach Cable 3m	R&S® LANCOM SFP-DAC25-3m, Art.-Nr.: 60181
100G Direct Attach Cable 1m	R&S® LANCOM SFP-DAC100-1m, Art.-Nr.: 60203
100G Direct Attach Cable 3m	R&S® LANCOM SFP-DAC100-3m, Art.-Nr.: 60204
Power supply (swappable)	R&S® LANCOM SPSU-920, item no. 61498
Fan (swappable)	R&S® LANCOM SFAN-XS6, item no. 61491
IEC power cord (UK)	R&S® LANCOM Power Cord, UK plug, item no. 61650
IEC power cord (CH)	R&S® LANCOM Power Cord, CH plug, item no. 61652
IEC power cord (US)	R&S® LANCOM Power Cord, US plug, item no. 61651
IEC power cord (AU)	R&S® LANCOM Power Cord, AU plug, item no. 61653
*) Note	Support for third-party accessories (SFP and DAC) is excluded and cannot be granted
Item number(s)	
R&S® LANCOM XS-4554YUP	61886



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