

LANCOM 1800VA-5G

SD-WAN gateway with VDSL and 5G



Secure, flexible, highly available – this is what site networking via SD-WAN can look like for your medium-sized branch infrastructures. With parallel support for multiple Internet lines via VDSL, fiber, and 5G, the LANCOM 1800VA-5G ensures the best connection quality for your business-critical applications. Thanks to 5G, intelligent backup scenarios or primary operation with low latencies for real-time applications are no longer a future scenario. By increasing the bandwidths provided, you can securely connect mobile employees and sites to your headquarters with LANCOM IPSec VPN, even with higher data volumes. With just a few clicks, you can integrate the LANCOM 1800VA-5G into the LANCOM Management Cloud (LMC) and centralize, automate, and accelerate your network management.

- → SD-WAN incl. zero-touch deployment and Auto-VPN via the LANCOM Management Cloud
- → Integrated VDSL Supervectoring modem for up to 300 Mbps
- → High-speed Internet via fiber optics (GPON and AON modules available separately) and Gigabit Ethernet for connection of external modems
- → Load balancing for the active/active operation of several Internet access lines and maximization of the available bandwidth
- → Integrated 5G modem for primary operation via 4G/5G or in parallel with other access types for low latency and high bandwidth for real-time applications (video streaming, telephony or AR)
- → 5 integrated IPSec VPN channels (25 optional)
- → Network virtualization with up to 16 networks on one device (ARF)
- → Maximum future compatibility, reliability, and security "Engineered in Germany"



LANCOM 1800VA-5G

LANCOM SD-WAN - Next-level networking

With LANCOM SD-WAN you can manage and monitor your entire corporate network centrally, cost-effectively, quickly, and stress-free! In combination with the LANCOM Management Cloud, the SD-WAN gateway gives you all the options for an automated setup of secure VPN connections (Auto-VPN) between sites, including network virtualization. Highlight features such as High Scalability VPN (HSVPN) and Advanced Mesh VPN offer you a significant plus in scalability and efficiency for a large number of branches and applications. Furthermore, if multiple WAN connections are defined, they are automatically operated in active/active mode (load balancing), thereby increasing the available total bandwidth. With Dynamic Path Selection and Dynamic Traffic Steering, applications are also dynamically routed via the best connection at any given time.

WAN connectivity with VDSL Supervectoring

The LANCOM 1800VA-5G offers full VDSL Supervectoring support and is also backwards compatible with VDSL2 and ADSL2+. Data rates of up to 300 Mbps are possible on existing copper lines.

Fully future-proof with 5G

Thanks to high-performance 5G technology, the LANCOM 1800VA-5G is ideal for intelligent backup scenarios, primary operation, or parallel operation in active/active mode with other access types. Highest availability and best bandwidths for the use of real-time applications such as video streaming or augmented reality (AR) in combination with lowest latencies make the branch router the ideal node in environments with high data traffic.

Modern housing with focus on sustainability

Innovative technology meets forward-looking optics: the combination of matte black plastic and mirror-like acrylic glass front panel for interface information conveys a tangible feeling of security, reliability, and high quality. The housing of the SD-WAN branch router offers high installation flexibility thanks to possible table, rack, and wall mounting. Local production ensures short procurement routes with low CO2 emissions and thus scores particularly well in terms of sustainability.

Security with stateful inspection firewall, VLAN, and ARF

Equipped with a stateful inspection firewall, the LANCOM SD-WAN gateway protects the entire network with functions such as intrusion prevention and denial of service protection. Logical network segmentation allows you to define individual security settings and access rights according to the requirements of the user groups, and to divide your infrastructures and applications into different areas. This network segmentation using ARF (Advanced Routing and Forwarding) and VLAN (Virtual Local Area Network) ensures that your enterprise network as a whole remains protected, even if a network segment is compromised. Learn more in the Techpaper: Advanced Routing and Forwarding.



Layer 2 features		
VLAN	4.096 IDs based on IEEE 802.1q, dynamic assignment	
Multicast	IGMP-Snooping, MLD-Snooping	
Protocols	Ethernet over GRE-Tunnel (EoGRE), L2TPv3, ARP-Lookup, LLDP, DHCP option 82, IPv6-Router-Advertisement-Snooping, DHCPv6-Snooping, LDRA (Lightweight DHCPv6 Relay Agent), Spanning Rapid Spanning Tree, ARP, Proxy ARP, BOOTP, DHCP, LACP	
Layer 3 features		
Firewall	Stateful inspection firewall including paket filtering, extended port forwarding, N:N IP address mapping, paket tagging, support for DNS targets, user-defined rules and notifications	
Quality of Service	Traffic shaping, bandwidth reservation, DiffServ/TOS, packetsize control, layer-2-in-layer-3 tagging	
Security	Intrusion Prevention, IP spoofing, access control lists, Denial of Service protection, detailed settings for handling reassembly, session-recovery, PING, stealth mode and AUTH port, URL blocker, password protection, programmable reset button	
PPP authentication mechanisms	PAP, CHAP, MS-CHAP, and MS-CHAPv2	
Router	IPv4-, IPv6-, NetBIOS/IP multiprotokoll router, IPv4/IPv6 dual stack	
SD-WAN Application Routing	SD-WAN Application Routing in connection with the LANCOM Management Cloud	
SD-WAN dynamic path selection	SD-WAN dynamic path selection in connection with the LANCOM Management Cloud	
SD-WAN Zero Touch Deployment	Zero touch commissioning of the device in conjunction with the LANCOM Management Cloud	
Router virtualization	ARF (Advanced Routing and Forwarding) up to separate processing of 16 contexts	
IPv4 services	HTTP and HTTPS server for configuration by web interface, DNS client, DNS server, DNS relay, DNS proxy, dynamic DNS client, DHCP client, DHCP relay and DHCP server including autodetection, NetBIOS/IP proxy, NTP client, SNTP server, policy-based routing, Bonjour-Proxy, RADIUS	
IPv6 services	HTTP and HTTPS server for configuration by web interface, DHCPv6 client, DHCPv6 server, DHCPv6 relay, DNS client, DNS server, dynamic DNS client, NTP client, SNTP server, Bonjour-Proxy, RADIUS	
Dynamic routing protocols	RIPv2, BGPv4, OSPFv2, LISP (Locator/ID Separation Protocol)	
IPv4 protocols	DNS, HTTP, HTTPS, ICMP, NTP/SNTP, NetBIOS, PPPoE (server), RADIUS, RADSEC (secure RADIUS), RTP, SNMPv1,v2c,v3, TFTP, TACACS+, IGMPv3	
IPv6 protocols	NDP, stateless address autoconfiguration (SLAAC), stateful address autoconfiguration (DHCPv6), router advertisements, ICMPv6, DHCPv6, DNS, HTTP, HTTPS, PPPoE, RADIUS, SMTP, NTP, BGP, LISP, Syslog, SNMPv1,v2c,v3, MLDv2, PIM, NPTv6 (NAT66)	
Multicast Routing	PIM (Protocol Independent Multicast), IGMP proxy, MLD proxy	
WAN operating mode	VDSL, ADSL1, ADSL2 or ADSL2+ additional with external DSL modem at an ETH port	



Layer 3 features		
WAN protocols	PPPOE, Multi-PPPOE, GRE, EOGRE, PPTP (PAC or PNS), L2TPv2 (LAC or LNS), L2TPv3 with Ethernet-Pseudowire and IPoE (using DHCP or no DHCP), RIP-1, RIP-2, VLAN, IPv6 over PPP (IPv6 and IPv4/IPv6 dual stack session), IP(v6)oE (autokonfiguration, DHCPv6 or static)	
Tunneling protocols (IPv4/IPv6)	6to4, 6in4, 6rd (static and over DHCP), Dual Stack Lite (IPv4-in-IPv6-Tunnel), 464XLAT	
Security		
Intrusion Prevention	Monitoring and blocking of login attempts and port scans	
IP spoofing	Source IP address check on all interfaces: only IP addresses belonging to the defined IP networks are allowed	
Access control lists	Filtering of IP or MAC addresses and preset protocols for configuration access	
Denial of Service protection	Protection from fragmentation errors and SYN flooding	
General	Detailed settings for handling reassembly, PING, stealth mode and AUTH port	
URL blocker	Filtering of unwanted URLs based on DNS hitlists and wildcard filters. Extended functionality with Content Filter Option	
Password protection	Password-protected configuration access can be set for each interface	
Alerts	Alerts via e-mail, SNMP traps and SYSLOG	
Authentication mechanisms	PAP, CHAP, MS-CHAP and MS-CHAPv2 as PPP authentication mechanism	
Adjustable reset button	Adjustable reset button for 'ignore', 'boot-only' and 'reset-or-boot'	
High availability / redundancy		
VRRP	VRRP (Virtual Router Redundancy Protocol) for backup in case of failure of a device or remote station.	
FirmSafe	For completely safe software upgrades thanks to two stored firmware versions, incl. test mode for firmware updates	
Load balancing	Static and dynamic load balancing over up to 4 WAN connections (incl. client binding). Channel bundling with Multi PPP (if supported by network operator)	
VPN redundancy	Backup of VPN connections across different hierarchy levels, e.g. in case of failure of a central VPN concentrator and re-routing to multiple distributed remote sites. Any number of VPN remote sites can be defined (the tunnel limit applies only to active connections). Up to 32 alternative remote stations, each with its own routing tag, can be defined per VPN connection. Automatic selection may be sequential, or dependant on the last connection, or random (VPN load balancing)	
Line monitoring	Line monitoring with LCP echo monitoring, dead-peer detection and up to 4 addresses for end-to-end mon with ICMP polling	



VPN		
IPSec over HTTPS	Enables IPsec VPN based on TCP (at port 443 like HTTPS) which can go through firewalls in networks where e. g. port 500 for IKE is blocked. Suitable for client-to-site connections and site-to-site connections. IPSec over HTTPS is based on the NCP VPN Path Finder technology	
Number of VPN tunnels	Max. number of concurrent active IPSec, PPTP (MPPE) and L2TPv2 tunnels: 5 (25 with VPN 25 Option). Unlimited configurable connections. Configuration of all remote sites via one configuration entry when using the RAS user template or Proadaptive VPN.	
Hardware accelerator	Integrated hardware accelerator for 3DES/AES encryption and decryption	
Realtime clock	Integrated, buffered realtime clock to save the date and time during power failure. Assures timely validation of certificates in any case	
Random number generator	Generates real random numbers in hardware, e. g. for improved key generation for certificates immediately aft switching-on	
1-Click-VPN Client assistant	One click function in LANconfig to create VPN client connections, incl. automatic profile creation for the LANCO Advanced VPN Client	
1-Click-VPN Site-to-Site	Creation of VPN connections between LANCOM routers via drag and drop in LANconfig	
IKE, IKEv2	IPSec key exchange with Preshared Key or certificate (RSA signature, ECDSA-Signature, digital signature)	
Smart Certificate*	Convenient generation of digital X.509 certificates via an own certifaction authority (SCEP-CA) on the webpag via SCEP.	
Certificates	X.509 digital multi-level certificate support, compatible with Microsoft Server / Enterprise Server and OpenSSL. Secure Key Storage protects a private key (PKCS#12) from theft.	
Certificate rollout	Automatic creation, rollout and renewal of certificates via SCEP (Simple Certificate Enrollment Protocol) per certificate hierarchy	
Certificate revocation lists (CRL)	CRL retrieval via HTTP per certificate hierarchy	
OCSP Client	Check X.509 certifications by using OCSP (Online Certificate Status Protocol) in real time as an alternative to CRLs	
OCSP Server/Responder*	Offers validity information for certificates created with Smart Certificate via OCSP	
XAUTH	XAUTH client for registering LANCOM routers and access points at XAUTH servers incl. IKE-config mode. XAUTH server enables clients to register via XAUTH at LANCOM routers. Connection of the XAUTH server to RADIUS serve provides the central authentication of VPN-access with user name and password. Authentication of VPN-client access via XAUTH and RADIUS connection additionally by OTP token	
RAS user template	Configuration of all VPN client connections in IKE ConfigMode via a single configuration entry	
Proadaptive VPN	Automated configuration and dynamic creation of all necessary VPN and routing entries based on a default entry for site-to-site connections.	
Algorithms	3DES (168 bit), AES-CBC and -GCM (128, 192 or 256 bit), RSA (1024-4096 bit), ECDSA (P-256-, P-384-, P-521-curves and Chacha20-Poly 1305. OpenSSL implementation with FIPS-140 certified algorithms. MD-5, SHA-1, SHA-256, SHA-384 or SHA-512 hashes	



VPN		
NAT-Traversal	NAT-Traversal (NAT-T) support for VPN over routes without VPN passthrough	
LANCOM Dynamic VPN	Enables VPN connections from or to dynamic IP addresses. The IP address is communicated via the ICMP or UDP protocol in encrypted form. Dynamic dial-in for remote sites via connection template	
Dynamic DNS	Enables the registration of IP addresses with a Dynamic DNS provider in the case that fixed IP addresses are not used for the VPN connection	
Specific DNS forwarding	DNS forwarding according to DNS domain, e.g. internal names are translated by proprietary DNS servers in the External names are translated by Internet DNS servers	
Split DNS	Allows the selective forwarding of traffic for IKEv2 depending on the addressed DNS domain.	
IPv4 VPN	Connecting private IPv4 networks	
IPv4 VPN over IPv6 WAN	Use of IPv4 VPN over IPv6 WAN connections	
IPv6 VPN	Connecting private IPv6 networks	
IPv6 VPN over IPv4 WAN	Use of IPv6 VPN over IPv4 WAN connections	
Radius	RADIUS authorization and accounting, outsourcing of VPN configurations in external RADIUS server in IKEv2, RA CoA (Change of Authorization)	
High Scalability VPN (HSVPN)	Transmission of multiple, securely separated networks within a VPN tunnel	
Advanced Mesh VPN	On demand dynamic VPN tunnel establishment between branches	
IKEv2-EAP*	VPN clients can be authenticated with IKEv2-EAP against a central database like Microsoft Windows Server or RADIUS Server	
Two-factor authentication*	Two-factor authentication with LANCOM Advanced VPN Client via IKEv2 EAP-OTP	
*)	Only with VPN 25 option	
Performance		
Routing-Performance	Data regarding the overall routing performance can be found inside the LANCOM tech paper "Routing-Performance" on www.lancom-systems.com	
VolP		
SIP ALG	The SIP ALG (Application Layer Gateway) acts as a proxy for SIP communication. For SIP calls the ALG opens t necessary ports for the corresponding media packets. Automatic address translation (STUN is no longer needs	
Cellular radio		
Supported standards	5G, LTE, UMTS and HSPA support (mode of transmission automatically or manually adjustable), 2G/GSM is not supported	



Cellular radio		
Supported 5G modes	5G standalone (SA), 5G non-standalone (NSA)	
Supported mobile bands (5G)	n1 (2100 MHz), n2 (1900 MHz), n3 (1800 MHz), n5 (850 MHz), n7 (2600 MHz), n8 (900 MHz), n12 (700 MHz), n13 (700 MHz), n14 (700 MHz), n18 (850 MHz), n20 (800 MHz), n25 (1900 MHz), n26 (850 MHz), n28 (700 MHz), n29 (700 MHz), n30 (2300 MHz), n38 (2600 MHz), n40 (2300 MHz), n41 (2500 MHz), n48 (3500 MHz), n66 (2100 MHz), n70 (2000 MHz), n71 (600 MHz), n75 (1500 MHz), n76 (1500 MHz), n77 (3700 MHz), n78 (3500 MHz), n79 (4700 MHz)	
Supported mobile bands (4G)	B1 (2100 MHz), B2 (1900 MHz), B3 (1800 MHz), B4 (1700 MHz), B5 (850 MHz), B7 (2600 MHz), B8 (900 MHz), B12 (700 MHz), B13 (700 MHz), B14 (700 MHz), B17 (700 MHz), B18 (850 MHz), B19 (850 MHz), B20 (800 MHz), B25 (1900 MHz), B26 (850 Mhz), B28 (700 MHz), B29 (700 MHz), B30 (2300 MHz), B32 (1500 MHz), B34 (2000 MHz), B38 (2600 MHz), B39 (1900 MHz), B40 (2300 MHz), B41 (2500 MHz), B42 (3500 MHz), B43 (3700 MHz), B48 (3500 MHz), B66 (1700 MHz), B71 (600 MHz)	
Supported mobile bands (3G)	Band 1 (2100 MHz), Band 2 (1900 MHz), Band 4 (1700 MHz), Band 5 (850 MHz), Band 8 (900 MHz), Band 19 (800 MHz)	
Diversity support	Receive diversity on the aux antenna (3G); MIMO (2x2) for LTE (4G); MIMO (4x4) for 5G	
Supported SIM card formats	Micro-SIM (3FF), Nano-SIM (4FF) via adaptor	
Interfaces		
WAN: VDSL / ADSL2+	 → VDSL2 compliant with ITU G.993.2, profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a, 35b → VDSL Supervectoring as per ITU G.993.2 (Annex Q) → VDSL2 Vectoring: as per ITU G.993.5 (G.Vector) → ADSL2+ over ISDN as per ITU G.992.5 Annex B/J with DPBO, ITU G.992.3/5 and ITU G.992.1 → ADSL2+ over POTS as per ITU G.992.5 Annex A/M with DPBO, ITU G.992.3 and ITU.G.992.1 → Supports one virtual ATM circuit (VPI, VCI pair) at a time 	
Ethernet ports	5 individual 10/100/1000 Mbps Ethernet ports, 1 of them is combo (TP/SFP), 1 port is set to WAN when delivered, up to 3 ports can be operated as additional WAN ports. Ethernet ports can be electrically disabled within LCOS configuration. The ports support energy saving according to IEEE 802.3az	
Port configuration	Each Ethernet port can be freely configured (LAN, DMZ, WAN, monitor port, off). LAN ports can be operated as a switch or separately. Additionally, external DSL modems or termination routers can be operated as a WAN port with load balancing and policy-based routing. DMZ ports can be operated with their own IP address range without NAT	
USB 2.0 host port	USB 2.0 hi-speed host port for connecting USB printers (USB print server), LANCOM Wireless ePaper USB stick USB data storage (FAT file system); bi-directional data exchange is possible	
Serial interface	Serial configuration interface / COM port (USB-C): 9,600 - 115,000 baud.	
Management and monitoring	I	
Management	LANCOM Management Cloud, LANconfig, WEBconfig, LANCOM Layer 2 management (emergency management)	



Management and monitoring		
Management functions	Alternative boot configuration, voluntary automatic updates for LCMS and LCOS, individual access and function rights up to 16 administrators, RADIUS and RADSEC user management, remote access (WAN or (W)LAN, access rights (read/write) adjustable seperately), SSL, SSH, HTTPS, Telnet, TFTP, SNMP, HTTP, access rights via TACACS+, scripting, timed control of all parameters and actions through cron job	
FirmSafe	Two stored firmware versions, incl. test mode for firmware updates	
automatic firmware update	configurable automatic checking and installation of firmware updates	
Monitoring	LANCOM Management Cloud, LANmonitor, WLANmonitor	
Monitoring functions	Device SYSLOG, SNMPv1,v2c,v3 incl. SNMP-TRAPS, extensive LOG and TRACE options, PING and TRACEROUT for checking connections, internal logging buffer for firewall events	
Monitoring statistics	Extensive Ethernet, IP and DNS statistics; SYSLOG error counter, accounting information exportable via LANmoni and SYSLOG, Layer 7 Application Detection including application-centric tracking of traffic volume	
IPerf	IPerf is a tool for measurements of the bandwidth on IP networks (integrated client and server)	
SLA-Monitor (ICMP)	Performance monitoring of connections	
Netflow	Export of information about incoming and outgoing IP traffic	
SD-LAN	SD-LAN – automatic LAN configuration via the LANCOM Management Cloud	
SD-WAN	SD-WAN – automatic WAN configuration via the LANCOM Management Cloud	
Hardware		
Weight	1,74 lbs (790 g)	
Environment	Temperature range 0–40°C; humidity 0–95%; non-condensing	
Housing	Robust synthetic housing, rear connectors, ready for wall mounting, 293 x 44 x 190 mm (W x H x D)	
Fans	1 silent fan	
Power consumption (max./idle)	33 watt / 19 watt	
Declarations of conformity*		
Europe/EFTA	CE	
Great Britain	UKCA	
IPv6	IPv6 Ready Gold	
Country of Origin	Made in Germany	
*) Note	You will find all declarations of conformity on our website at <u>www.lancom-systems.com/doc</u>	



Scope of delivery	Scope of delivery		
Manual	Quick Installation Guide (DE/EN)		
Cable	1 Ethernet cable, 3 m		
Cable	DSL cable for IP based communications incl. galvanic signature, 4,25m		
Antennas	Four 2 dBi 5G/LTE/UMTS-antennas		
Power supply unit	External power adapter (230 V), NEST 12 V/5 A DC/S, coaxial power connector 2.1/5.5 mm, temperature range to 0 to +40° C, LANCOM item no. 112112 (EU)		
Support			
Warranty extension	Free warranty extension up to 3 years (replacement service for defects) For details, please refer to the service and support conditions at www.lancom-systems.com/support-conditions or at www.lancom.de/rma .		
Security updates	Up to 2 years after End of Sale of the device (but min. 3 years, see www.lancom-systems.com/product-tables) be extended by purchasing LANcare products		
Software updates	Regular free updates including new features as part of the LANCOM Lifecycle Management (www.lancom-systems.com/lifecycle)		
Manufacturer support	For LANcommunity partners up to the End of Life of the device For end customers with LANcare Direct or LANcare Premium Support during the LANcare validity		
LANcare Basic S	Security updates until EOL (min. 5 years) and 5 years replacement service with shipment of the replacement device within 5 days after arrival of the defective device (8/5/5Days), item no. 10720		
LANcare Advanced S	Security updates until EOL (min. 5 years) and 5 years NBD advance replacement with delivery of the replacement device within one business day (8/5/NBD), item no. 10730		
LANcare Direct Advanced 24/7 S	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. 10776, 10777 or 10778)		
LANcare Direct 24/7 S	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 telepho (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years (item no. 10752, 107 or 10754)		
LANcare Direct Advanced 10/5 S	Direct, prioritized 10/5 manufacturer support and security updates for the device, NBD advance replacement wi delivery of the device on the next business day (10/5/NBD), guaranteed first response times (SLA) of max. 2 hou for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (prior 2), term-based for 1, 3, or 5 years.(item no. 10764, 10765 or 10766)		
LANcare Direct 10/5 S	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. 10740, 10741 or 10742)		



Software		
Lifecycle Management	After discontinuation (End of Sale), the device is subject to the LANCOM Lifecycle Management. Details can be found at: www.lancom-systems.com/lifecycle	
Anti-backdoor policy	Products from LANCOM are free of hidden access paths (backdoors) and other undesirable features for introducing, extracting or manipulating data. The trust seal "IT Security made in Germany" (ITSMIG) and certification by the German Federal Office for Information Security (BSI) confirm the trustworthiness and the outstanding level of security.	
Options		
VPN	LANCOM VPN-25 Option (25 channels), item no. 60083	
LANCOM Content Filter	LANCOM Content Filter +10 user (additive up to 100), 1 year subscription, item no. 61590	
LANCOM Content Filter	LANCOM Content Filter +25 user (additive up to 100), 1 year subscription, item no. 61591	
LANCOM Content Filter	LANCOM Content Filter +100 user (additive up to 100), 1 year subscription, item no. 61592	
LANCOM Content Filter	LANCOM Content Filter +10 user (additive up to 100), 3 year subscription, item no. 61593	
LANCOM Content Filter	LANCOM Content Filter +25 user (additive up to 100), 3 year subscription, item no. 61594	
LANCOM Content Filter	LANCOM Content Filter +100 user (additive up to 100), 3 year subscription, item no. 61595	
LANCOM BPJM Filter	LANCOM BPjM Filter Option, 5 years subscription, item no. 61418	
LANCOM Public Spot	Hotspot option for LANCOM products, versatile access (via voucher, e-mail, SMS), including a comfortable setup wizard, secure separation of guest access and internal network, item no. 60642	
LANCOM Public Spot (10 bulk)	Hotspot option for LANCOM products, versatile access (via voucher, e-mail, SMS), including a comfortable setup wizard, secure separation of guest access and internal network (10 bulk), item no. 61312	
LANCOM All-IP Lizenz Option	Upgrade option for the operation of the LANCOM routers with All-IP connections, support of PBX systems and telephony devices as well as voice & fax services, incl. Voice Call Manager, item no. 61419	
LANCOM Public Spot PMS Accounting Plus	g Extension of the LANCOM Public Spot (XL) Option for the connection to hotel billing systems with FIAS interface (such as Micros Fidelio) for authentication and billing of guest accesses for 178x/19xx routers, WLCs, and curre central-site gateways, item no. 61638	
LANCOM WLC Basic Option for Routers	LANCOM WLC Basic Option for Routers for up to 6 managed LANCOM access points or WLAN routers, item no. 61639	
LANCOM WLC AP Upgrade +6	LANCOM WLC AP Upgrade +6 Option, enables your WLC to manage 6 Access Points/WLAN router in addition, item no. 61629	
LANCOM VoIP +10 Option	Upgrade for LANCOM VoIP router with 10 additional internal VoIP numbers (additionally up to 40) and 10 external SIP lines (additionally up to 55) item no. 61423	



LANCOM Management Cloud	LANCOM Management Cloud		
LANCOM LMC-B-1Y LMC License	LANCOM LMC-B-1Y License (1 Year), enables the management of one category B device for one year via the LANCOM Management Cloud, item no. 50103		
LANCOM LMC-B-3Y LMC License LANCOM LMC-B-3Y License (3 Years), enables the management of one category B device for the LANCOM Management Cloud, item no. 50104			
LANCOM LMC-B-5Y LMC License	LANCOM LMC-B-5Y License (5 Years), enables the management of one category B device for five years via th LANCOM Management Cloud, item no. 50105		
Accessories			
External antenna	AirLancer O-360Q-5G, omnidirectional outdoor antenna MIMO (4x4), for all 4G/5G bands (700-3800 MHz), item no. 61234		
1000Base-BX20-U SFP module	LANCOM SFP-AON-1, item no. 60200		
GPON ONT SFP module	LANCOM SFP-GPON-1, item no. 60199		
1000Base-BX20 SFP module pair	LANCOM SFP-BiDi1550-SC1, item no. 60201		
1000Base-SX SFP module, 550 m	LANCOM SFP-SX-LC1, item no. 61556		
1000Base-SX SFP module, 550 m (Bulk 10)	LANCOM SFP-SX-LC1 (Bulk 10), item no. 60184		
1000Base-SX SFP module, 2 km	LANCOM SFP-SX2-LC1, item no. 60183		
1000Base-LX SFP module	LANCOM SFP-LX-LC1, item no. 61557		
1000Base-LX SFP module (Bulk 10)	LANCOM SFP-LX-LC1 (Bulk 10), item no. 60185		
SFP copper module 1G	LANCOM SFP-CO1, item no. 61494		
SFP copper module 1G (Bulk 10)	LANCOM SFP-CO1 (Bulk 10), item no. 60186		
19" Rack Mount	19" LANCOM CPE blackline rack mount, item no. 61990		
19" Rack Mount	19" LANCOM CPE blackline rack mount plus, item no. 61991		
LANCOM Wireless ePaper USB	Update of LANCOM Wireless ePaper Displays in the 2.4 GHz frequency band, item no. 62225		
VPN Client Software	LANCOM Advanced VPN Client for Windows 7,8/8.1,10,11 - single license, item no. 61600		
VPN Client Software	LANCOM Advanced VPN Client for Windows 7,8/8.1,10,11 - 10 licenses, item no. 61601		
VPN Client Software	LANCOM Advanced VPN Client for Windows 7,8/8.1,10,11 - 25 licenses, item no. 61602		
VPN Client Software	LANCOM Advanced VPN Client for Mac OS X (10.5 Intel only, 10.6 or higher), single license, item no. 61606		
VPN Client Software	LANCOM Advanced VPN Client for Mac OS X (10.5 Intel only, 10.6 or higher), 10 licenses, item no. 61607		



Accessories		
*) Note	Support for third-party accessories (SFP and DAC) is excluded and cannot be granted	
Item number(s)		
LANCOM 1800VA-5G (EU)	62151	
CONFIG	WAN WAN ETH4 ETH3 ETH2 ETH1 US	SB DSL