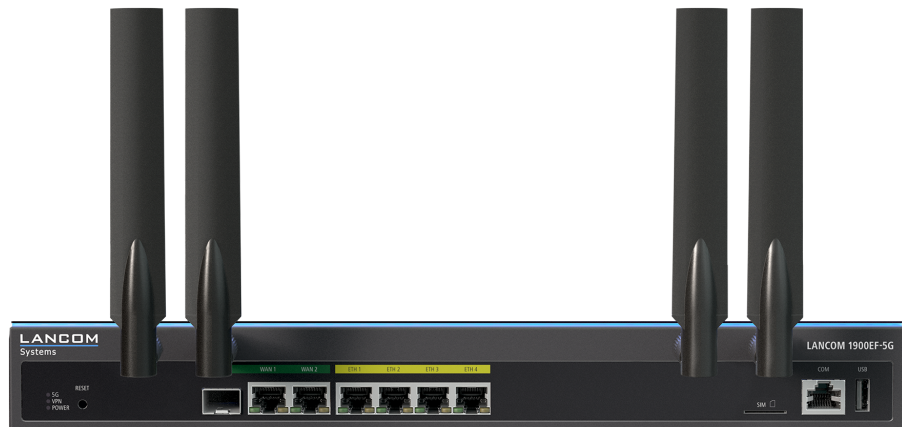


LANCOM 1900EF-5G

Versatile 5G power for your SD-WAN



The LANCOM 1900EF-5G is the first choice for versatility when operating a variety of Internet connections on a single device. This extremely high-performance multi-WAN SD-WAN gateway combines the integrated high-performance 5G modem with two Gigabit Ethernet WAN ports for connecting any external DSL or cable modems for the greatest possible flexibility, whatever Internet connections are available at the site. It also supports high-speed fiber-optic connections. With the outstanding LANCOM IPsec VPN, 25 (optionally 100) sites and mobile employees are securely networked.

- Multi-WAN VPN gateway for 5G, 1x SFP/TP, 1x WAN Ethernet
- Low latencies and high bandwidth for real-time applications (video streaming, telephony or AR) due to integrated 5G modem
- Mobile primary operation or in parallel with other access technologies
- Load balancing for the parallel operation of several Internet access connections and maximization of the available bandwidth
- 25 simultaneous IPsec VPN connections (100 optional)
- Network virtualization with up to 64 networks on one device (ARF)
- Professional telephony features thanks to integrated LANCOM VCM (Voice Call Manager) & SBC (session border controller)
- SD-WAN – automatic VPN and VLAN configuration via the LANCOM Management Cloud
- Full-metal housing for mounting in a 19" rack and integrated 230V power supply



LANCOM 1900EF-5G

Full future viability with 5G

As the primary connection when on the move, or in active/active mode with other access technologies, the LANCOM 1900EF-5G provides all of the advantages of 5G technology, such as the low-latency and high-performance use of real-time applications such as telephony, video chat, video streaming in 4K or 8K, or augmented reality—especially where there is a high density of users. The backwards compatible 5G module works seamlessly with the 4G LTE network and thus guarantees maximum future viability.

Multi-WAN

The LANCOM 1900EF-5G is a multi-WAN router with integrated 5G modem, 1x SFP/TP combo port and 1x WAN Ethernet connection. It works with high-speed fiber-optic connections and any external DSL or cable modems. This guarantees the greatest possible flexibility in the choice of Internet connection at the site.

Load Balancing

The LANCOM 1900EF-5G allows the parallel operation of several Internet access connections for perfect load balancing and maximization of the available bandwidth. It is versatile enough to operate with any kind of connection—be it 5G, Ethernet, fiber-optic or DSL/cable with an external modem. So the LANCOM 1900EF-5G offers maximum versatility as it operates with any Internet connection.

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.

Secure communication via VPN

With virtual private networks (VPN), you use the public medium of the Internet as a communication path and secure the connection in such a way that the communication still remains completely inaccessible to external parties. This SD-WAN gateway offers you 25 integrated IPsec VPN channels for secure encryption, so that the protection of internal company data is always guaranteed when connecting mobile employees, home offices, or branch offices. With the LANCOM VPN Option, you can also upgrade the device to up to 100 VPN channels, so that the infrastructure can easily grow with your needs without additional hardware.



LCOS 10.80

LANCOM 1900EF-5G

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 Tree, Rapid Spanning Tree, ARP, Proxy ARP, BOOTP, DHCP, LACP
OAM	Ethernet link OAM 802.3ah, IEEE 802.1ag CFM

Layer 3 features

Firewall	Stateful inspection firewall including packet filtering, extended port forwarding, N:N IP address mapping, packet tagging, support for DNS targets, user-defined rules and notifications
Quality of Service	Traffic shaping, bandwidth reservation, DiffServ/TOS, packet size control, layer-2-in-layer-3 tagging, support for 8 QoS queues (6 free configurable)
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-, 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 64 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, 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, 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), VRRPv3



LANCOM 1900EF-5G

Layer 3 features

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
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, Dual Stack Lite, 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 VRRPv2 and VRRPv3) 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).
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 monitoring with ICMP polling



LANCOM 1900EF-5G

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	25 tunnels active simultaneously (50 / 100 with VPN-50 / VPN-100 Option) when combining IPSec with PPTP (MPPE) and L2TPv2 tunnels, 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 after switching-on
1-Click-VPN Client assistant	One click function in LANconfig to create VPN client connections, incl. automatic profile creation for the LANCOM 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 certification authority (SCEP-CA) on the webpage or 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
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 servers 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
NAT-Traversal	NAT-Traversal (NAT-T) support for VPN over routes without VPN passthrough



LANCOM 1900EF-5G

VPN

MOBIKE	IKEv2 VPN clients can seamlessly switch between different networks (e.g. from WLAN to mobile radio) without having to re-establish the VPN tunnel
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 VPN. 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, RADIUS 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

Performance

Routing-Performance	Data regarding the overall routing performance can be found inside the LANCOM tech paper "Routing-Performance" on www.lancom-systems.com
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VoIP

Number of local subscribers	10 (up to 40 with VoIP +10 Option)
Number of simultaneous VoIP connections	Up to 100 external VoIP connections depending on code conversion, echo canceling and load
Functionality	Hold/Request, Swap, Transfer, Call Forwarding (CFU, CFB, CFNR), number display/suppression (CLIP, CLIR), suppression of second call (Busy on Busy), immediate outgoing line, hunt groups, call diversion, overlap dialing



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LANCOM 1900EF-5G

VoIP

Hunt groups	Hunt group cascades, Call diversion, simultaneously or sequentially. Automatic forwarding after timeout or when busy/unreachable
Call router	Central switching of all incoming and outgoing calls. Number translation by mapping, numeral replacement and number supplementation. Configuration of line and route selection incl. line backup. Routing based on calling and called number, SIP domain and line. Blocking of telephone numbers or blocks of telephone numbers. Inclusion of local subscribers into the number range of an upstream PBX. Supplement/remove line-related prefixes or switchboard numbers.
SIP proxy	Up to 25 SIP-provider accounts (up to 55 with VoIP +10 Option), up to 4 SIP PBXs incl. line backup. SIP connections from/to internal subscribers, SIP providers and SIP PBXs. Automatic bandwidth management and automatic configuration of the firewall for SIP connections.
SIP trunk	Call switching based on extension numbers to/from VoIP PBXs/VoIP providers (support of the VoIP-DDI functions compliant with ITU-T Q.1912.5). Mapping of entire VoIP telephone number blocks
Session Border Controller (SBC)	Separation of insecure and secure networks, QoS, management of signaling and voice data, transcoding
Media protocols	RTP, SIPs and SRTP
SIP-Codec support	SIP only: G.711 μ -law/A-law (64 kbps), G.722, G.723, G.726, G.729, iLBC, PCM (16, 20 und 24 Bit, Mono und Stereo), OPUS, AAC (LC, HE HEV2), MPEG Layer II, ADPCM 4SB. DTMF support (Inband, RFC2833, SIP-INFO)
Autoprovisioning	Automatic network and VoIP integration of LANCOM DECT 510 IP base station
SIP ALG	The SIP ALG (Application Layer Gateway) acts as a proxy for SIP communication. For SIP calls the ALG opens the necessary ports for the corresponding media packets. Automatic address translation (STUN is no longer needed).

Cellular radio

Supported standards	5G, LTE, UMTS and HSPA support (mode of transmission automatically or manually adjustable), 2G/GSM is not supported
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), n28 (700 MHz), n41 (2500 MHz), n66 (2100 MHz), n71 (600 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), B46 (5200 MHz), B48 (3500 MHz), B66 (1700 MHz), B71 (600 MHz)
Supported mobile bands (3G)	Band 1 (2100 MHz), Band 2 (1900 MHz), Band 3 (1800 MHz), Band 4 (1700 MHz), Band 5 (850 MHz), Band 6 (800 MHz), Band 7 (2600 MHz), Band 8 (900 MHz), Band 9 (1700 MHz), Band 19 (800 MHz)
Diversity support	Receive diversity on the aux antenna (3G); MIMO (4x4) for LTE (4G); MIMO (4x4) for 5G
Supported SIM card formats*	Mini-SIM (2FF), Micro-SIM (3FF) via adaptor, Nano-SIM (4FF) via adaptor



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LANCOM 1900EF-5G

Cellular radio

*) Note LANCOM Systems recommends the use of a standard SIM (2FF / Mini-SIM)

Interfaces

WAN: Ethernet	10/100/1000 Mbps Gigabit Ethernet
Ethernet ports	6 individual 10/100/1000 Mbps Ethernet ports, 2 of them are set to WAN; 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
SFP slot	Slot for Small Form-factor Pluggable Gigabit Ethernet transceivers ('mini-GBIC'). Compatible to optional LANCOM SFP modules for fiber connections over short distances (SX) or long distances (LX). By default a WAN port that can be configured as a LAN port
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), serial devices (COM port server), USB data storage (FAT file system); bi-directional data exchange is possible
Serial interface	Serial configuration interface / COM port (RJ45): 9,600 - 115,000 baud

Management and monitoring

Management	LANCOM Management Cloud, LANconfig, WEBconfig, LANCOM Layer 2 management (emergency management)
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 separately), SSL, SSH, HTTPS, Telnet, TFTP, SNMP, HTTP, access rights via TACACS+, scripting, timed control of all parameters and actions through cron job
Monitoring	LANCOM Management Cloud, LANmonitor, WLANmonitor
Monitoring functions	Device SYSLOG, SNMPv1,v2c,v3 incl. SNMP-TRAPS, extensive LOG and TRACE options, PING and TRACEROUTE for checking connections, internal logging buffer for firewall events
Monitoring statistics	Extensive Ethernet, IP and DNS statistics; SYSLOG error counter, accounting information exportable via LANmonitor 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



LCOS 10.80

LANCOM 1900EF-5G

Hardware

Weight	5,50 lbs (2,50 kg)
Power supply	Internal power supply unit (110–230 V, 50–60 Hz)
Environment	Temperature range 0–40°C; humidity 0–95%; non-condensing
Housing	Robust metal housing, network connectors on the front, 1U (345 x 44 x 253 mm > W x H x D) with removable mounting brackets
Fans	1 silent fan
Power consumption (max)	27 watt

Declarations of conformity*

Europe/EFTA	CE
Country of Origin	Made in Germany
*) Note	You will find all declarations of conformity on our website at www.lancom-systems.com/doc

Scope of delivery

Manual	Hardware Quick Reference (DE/EN), Installation Guide (DE/EN)
Cable	2 Ethernet cables, 3m
Cable	EU version: IEC power cord, WW version: country-specific IEC power cords are separately available
Antennas	Four 2 dBi 5G/LTE/UMTS-antennas

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), can 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 M	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. 10721



LCOS 10.80

LANCOM 1900EF-5G

Support

LANcare Advanced M	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. 10731
LANcare Direct Advanced 24/7 M	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. 10779, 10780 or 10781)
LANcare Direct 24/7 M	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. 10755, 10756 or 10757)
LANcare Direct Advanced 10/5 M	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. 10767, 10768 or 10769)
LANcare Direct 10/5 M	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. 10743, 10744 or 10745)

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-50 Option (50 channels), item no. 61405
VPN	LANCOM VPN-100 Option (100 channels), item no. 61407
LANCOM Content Filter	LANCOM Content Filter +10 user (additive up to 500), 1 year subscription, item no. 61590
LANCOM Content Filter	LANCOM Content Filter +25 user (additive up to 500), 1 year subscription, item no. 61591
LANCOM Content Filter	LANCOM Content Filter +100 user (additive up to 500), 1 year subscription, item no. 61592
LANCOM Content Filter	LANCOM Content Filter +10 user (additive up to 500), 3 year subscription, item no. 61593
LANCOM Content Filter	LANCOM Content Filter +25 user (additive up to 500), 3 year subscription, item no. 61594
LANCOM Content Filter	LANCOM Content Filter +100 user (additive up to 500), 3 year subscription, item no. 61595
LANCOM BPjM Filter	LANCOM BPjM Filter Option, 5 years subscription, item no. 61418



LCOS 10.80

LANCOM 1900EF-5G

Options

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 Public Spot PMS Accounting Plus	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, 2100EF, WLCs, and current 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 (additive up to 30) 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 VPN High Availability Clustering L Option	Comfortable administration of cluster devices like one single device — even at networks across locations, item no. 61658

LANCOM Management Cloud

LANCOM LMC-C-1Y LMC License	LANCOM LMC-C-1Y License (1 Year), enables the management of one category C device for one year via the LANCOM Management Cloud, item no. 50106
LANCOM LMC-C-3Y LMC License	LANCOM LMC-C-3Y License (3 Years), enables the management of one category C device for three years via the LANCOM Management Cloud, item no. 50107
LANCOM LMC-C-5Y LMC License	LANCOM LMC-C-5Y License (5 Years), enables the management of one category C device for five years via the LANCOM Management Cloud, item no. 50108

Accessories

LANCOM DECT 510 IP (EU)	Professional DECT base station for up to 6 DECT phones, network integration and configuration via LANCOM VoIP router, 4 simultaneous calls possible, highest voice quality, power supply via PoE or power supply unit, item no. 61901
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, Compatible for the use on FTTH-lines of Deutsche Telekom, item no. 60199
XGS-PON ONT SFP module	LANCOM SFP-XGSPON-1, item no. 60207
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



LCOS 10.80

LANCOM 1900EF-5G

Accessories

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
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
LANCOM Power Cord (UK)	IEC power cord, UK plug, item no. 61650
LANCOM Power Cord (US)	IEC power cord, US plug, item no. 61651
LANCOM Power Cord (CH)	IEC power cord, CH plug, item no. 61652
LANCOM Power Cord (AU)	IEC 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)

LANCOM 1900EF-5G (EU)	62132
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