# **LANCOM** 1793VA-4G+

## Highest availability of Super Vectoring connections and professional telephony functions

For an efficient workflow, modern companies need fast and fail-safe data transfer as well as reliable operation of communications equipment. Via VDSL Super Vectoring, this router realizes Internet speeds of up to 300 Mbps. And if the primary connection should ever fail, the LTE-Advanced cellular connection, which is also up to 300 Mbps, ensures maximum availability. Designed for the connection of telephony components, it is the ideal router for small and medium-sized infrastructures.

> Integrated VDSL Super Vectoring modem for up to 300 Mbps (backwards compatible with VDSL2 / ADSL2+)
> 300-Mbps LTE Advanced (Cat. 7) for maximum reliability
> Continued use of existing ISDN and analog components after migrating to All-IP
> Telephony features thanks to integrated LANCOM VCM (Voice Call Manager) & SBC (session border controller)
> 2 x ISDN S0 (TE/NT + NT) for point-to-point or multipoint line configuration, 2x analog (internal) / fax
> Extension to 4x analog with LANCOM Analog Adapter Set
> SD-WAN – automatic VPN and VLAN configuration via the LANCOM Management Cloud
> 5 integrated IPSec VPN channels (25 optional)
> Network virtualization with up to 16 networks on one device (ARF)
> USB 2.0 port for the integration of modern IoT radio systems
> Security Made in Germany
> Maximum future compatibility, reliability and security

**LANCOM**
Systems

# LANCOM 1793VA-4G+

### Support for VDSL Supervectoring

VDSL Supervectoring achieves higher data rates on existing copper lines. Speeds of up to 300 Mbps are possible. The LANCOM 1793VA-4G+ offers full Supervectoring support while remaining backwards compatible with VDSL2 and ADSL2+.

### Continued use of existing ISDN and analog components

The LANCOM 1793VA-4G+ translates between ISDN, analog and VoIP. Along with the latest VoIP equipment, you can continue to operate your existing ISDN and analog components without having to replace them. Even after switching to the new All-IP connection, this cost-saving solution conveniently and professionally integrates your ISDN and analog components. Operating a combination of analog, ISDN and VoIP PBX devices directly at the LANCOM router is also an option.

### Integrated session border controller

The LANCOM Voice Call Manager provides the functions of a Session Border Controller: This ensures that external (unsecure) and internal (secure) networks are kept separate. Also, voice packets are given preference (Quality of Service) thanks to bandwidth reservation, which ensures a high call quality. In addition, the VCM as a SIP proxy enables the professional management of signaling and voice data for high security in the set up, implementation and teardown of telephone conversations, including any protocol conversion by means of transcoding.

### Maximum availability

Ideal for business critical applications: The additional LTE-Advanced Modem (Cat. 7) for high-speed cellular networking with up to 300 Mbps downstream is ideal for intelligent backup scenarios or as an alternative to wired Internet connections. With an upstream rate of up to 150 Mbbps, the module offers high speed data transfer within the company network or to external cloud services.

### Professional VPN solution

VPN solutions from LANCOM offer flexible, economical and secure networking of headquarters, subsidiaries, branches, sites and home-office workplaces in small, mid-sized and large enterprises. The LANCOM 1793VA-4G+ supports up to 5 simultaneous IPsec VPN channels, with optional upgrade for 25 channels.

### Radical simplification of the configuration with SD-WAN

In combination with the LANCOM Management Cloud, the LANCOM 1793VA-4G+ opens the way for automated management. The software-defined WAN (SD-WAN) enables the automatic setup of secure VPN connections between sites, including network virtualization and backup across the wide-area network: A few mouse clicks is all it takes to enable the VPN function and select the required VLANs for each site. The laborious configuration of individual tunnel endpoints is no longer required at all.

### IoT-ready

The aim of the IoT ("Internet of Things") is to capture information about physical "things", mostly by wireless, and to make it accessible over the network.The integrated USB port of the LANCOM 1793VA-4G+ provides you with the basis of integrating modern IoT radio systems into your existing network infrastructure.

LANCOM
Systems

# LANCOM 1793VA-4G+ LCOS 10.50

| LTE modem | |
|---|---|
| Supported standards | LTE, UMTS and HSPA support (mode of transmission automatically or manually adjustable), 2G/GSM is not supported |
| Supported mobile bands (3G/4G) | Band 1 (2100 MHz), Band 3 (1800 MHz), Band 7 (2600 MHz), Band 8 (900 MHz), Band 20 (800 MHz), Band 28 (700 MHz), Band 32 (1500 MHz), Band 38 (2600 MHz), Band 40 (2300 MHz), Band 41 (2500 MHz), Band 42 (2500 MHz), Band 43 (3600 MHz) |
| Maximum transmission power | +23 dBm |
| Diversity support | Receive diversity on the aux antenna (3G); MIMO (2x2) for LTE (4G) |
| Supported SIM card formats* | Mini-SIM (2FF), Micro-SIM (3FF) via adaptor, Nano-SIM (4FF) via adaptor |
| Multi-SIM support | Supported |
| *) Note | LANCOM Systems recommends the use of a standard SIM (2FF / Mini-SIM) |

| Layer 2 features | |
|---|---|
| VLAN | 4.096 IDs based on IEEE 802.1q, dynamic assignment, Q-in-Q tagging |
| 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 |

| 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 |
| High availability / redundancy | VRRP (Virtual Router Redundancy Protocol), analog/GSM modem backup |
| 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 |
| 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, UMTS/LTE |
| WAN protocols | PPPoE, Multi-PPPoE, ML-PPP, 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 |

LANCOM
Systems

# LANCOM 1793VA-4G+

LCOS 10.50

| Security | |
|---|---|
| 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 |
| Anti-theft | Anti-theft ISDN site verification over B or D channel (self-initiated call back and blocking) |
| 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 |
| Analog/GSM modem backup | Optional operation of an analog or GSM modem at the serial interface |
| Load balancing | Static and dynamic load balancing over up to 4 WAN connections (incl. client binding). Channel bundling with Multilink 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 monitoring 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 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 certifaction 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 |
| 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 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 |

LANCOM
Systems

# LANCOM 1793VA-4G+

LCOS 10.50

| VPN | |
|---|---|
| Proadaptive VPN | Automated configuration and dynamic creation of all necessary VPN and routing entries based on a default entry for site-to-site connections. Propagation of dynamically learned routes via RIPv2 if required |
| Algorithms | 3DES (168 bit), AES-CBC and -GCM (128, 192 or 256 bit), Blowfish (128 bit), RSA (1024-4096 bit), ECDSA (P-256-, P-384-, P-521-curves), Chacha20-Poly 1305 and CAST (128 bit). 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 Dynamic VPN | Enables VPN connections from or to dynamic IP addresses. The IP address is communicated via ISDN B- or D-channel or with 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 |
| IKEv2-EAP* | VPN clients can be authenticated with IKEv2-EAP against a central database like Microsoft Windows Server or RADIUS Server |
| *) | 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 |

| VoIP | |
|---|---|
| Number of local subscribers | 10 (up to 40 with VoIP +10 Option) |
| Number of local ISDN subscribers | Up to 2 internal ISDN buses each with 2 parallel channels and each up to 10 telephone numbers |
| Number of simultaneous VoIP connections | Up to 60 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 |
| Hunt groups | Hunt group cascades, Call diversion, simultaneously or sequentially. Automatic forwarding after timeout or when busy/unreachable |
| Multi login | Registration of several local VoIP terminal devices with the same number/ID. |
| 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 registrar | Management of local VoIP users/VoIP PBXs, registration at VoIP providers/upstream VoIP PBXs. Service location (SRV) support. Line monitoring for SIP trunk, link, remote gateway and SIP PBX line |
| 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 gateway | Conversion of analog or ISDN telephone calls to SIP calls, and vice versa. Local ISDN and analog subscribers register as local SIP users, and local ISDN/analog subscribers automatically register as SIP users at upstream SIP PBXs or SIP providers. Number translation between internal numbers and MSN/DDI |
| 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 |

## LANCOM
Systems

# LANCOM 1793VA-4G+

| VoIP | |
|---|---|
| SIP link | Call switching of any numbers to/from SIP PBXs/SIP providers. Mapping of entire SIP telephone number blocks |
| Media proxy | Termination and interconnection of multiple media streams. Control of media sessions. IP address and port translation for media stream packets. Connection of parties at media stream level where a call transfer in SIP (REFER) is not possible |
| Session Border Controller (SBC) | Separation of insecure and secure networks, QoS, management of signaling and voice data, transcoding |
| Media protocols | RTP, SIPS and SRTP |
| Supported providers | German Telekom, QSC, Ecotel and Sipgate |
| ISDN features | Operation at ISDN exchange line or at ISDN extension line of existing PBXs. Provision of exchange lines or extension lines |
| Analog features | Internal FXS ports for one analog terminal device each, or as an analog PBX exchange line. |
| Audio properties | Echo canceling (G.168) with automatic deactivation during fax transmission, automatic adaptive jitter buffer. Inband tone signaling compliant with EU standards and country-specific. Voice encoding with G.711 -law/A-law (64 kbps) |
| SIP-Codec support | SIP only: G.711 -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) |
| Fax transmission | Transmisson of fax via SIP on the LAN/WAN side with T.38 or G.711. Conversion of SIP fax with T.38 and break-in/break-out at the outside line to ISDN G.711 with service signalisation. Connection and conversion to SIP T.38 or G.711 for SIP, analog or ISDN fax machines. Compatible to SwyxFax on true G.711 SIP lines. |
| Auto QoS | Automatic dynamic bandwidth reservation per SIP connection. Voice packet prioritization, DiffServ marking, traffic shaping (incoming/outgoing) and packet-size management of non-prioritized connections compared to VoIP. Independent settings for DiffServ marking of signaling (SIP) and media streams (RTP) |
| VoIP monitoring | Reporting of Call Data Records (CDR) via SYSLOG or e-mail. Status display of subscribers, lines, and connections. Logging of VoIP Call Manager events in LANmonitor. SYSLOG and TRACE for voice connections. Active monitoring even with SNMP |
| 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). |

| Interfaces | |
|---|---|
| WAN: VDSL / ADSL2+ | › VDSL2 compliant with ITU G.993.2, profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a, 35b <br> › VDSL Supervectoring as per ITU G.993.2 (Annex Q) <br> › VDSL2 Vectoring: as per ITU G.993.5 (G.Vector) <br> › ADSL2+ over ISDN as per ITU G.992.5 Annex B/J with DPBO, ITU G.992.3/5 and ITU G.992.1 <br> › ADSL2+ over POTS as per ITU G.992.5 Annex A/M with DPBO, ITU G.992.3 and ITU.G.992.1 <br> › Supports one virtual ATM circuit (VPI, VCI pair) at a time |
| Ethernet ports | 4 individual 10/100/1000 Mbps Ethernet ports; up to 3 ports can be operated as additional WAN ports with load balancing. 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), serial devices (COM port server), USB data storage (FAT file system); bi-directional data exchange is possible |
| ISDN | 1x ISDN BRI port (NT) and 1x internal/external ISDN port (NT/TE) |
| Analog | 4x internal FXS ports (Analog1, Analog2, Analog3, Analog4) each for one analog device |
| Serial interface | Serial configuration interface / COM port (8 pin Mini-DIN): 9,600 - 115,000 baud, suitable for optional connection of analog/GPRS modems. Supports internal COM port server and allows for transparent asynchronous transmission of serial data via TCP |
| External antenna connectors | Two SMA antenna connectors for external LTE antennas (Ant 1, Ant 2) |

| Management and monitoring | |
|---|---|
| Management | LANCOM Management Cloud, LANconfig, WEBconfig, LANCOM Layer 2 management (emergency management) |

LANCOM
Systems

# LANCOM 1793VA-4G+

LCOS 10.50

## 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 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 |

## Hardware

| | |
|---|---|
| Weight | 1,15 lbs (520 g) |
| Power supply | 12 V DC, external power adapter (230 V) with bayonet cap to protect against accidentally unplugging |
| Environment | Temperature range 0–40° C; humidity 0–95%; non-condensing |
| Housing | Robust synthetic housing, rear connectors, ready for wall mounting, Kensington lock; 210 x 45 x 140 mm (W x H x D) |
| Fans | 1 silent fan |
| Power consumption (max) | 18 watt |

## Declarations of conformity*

| | |
|---|---|
| Europe/EFTA | CE |
| IPv6 | IPv6 Ready Gold |
| 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 | DSL cable for IP based communications incl. galvanic signature, 4,25m |
| Adapter | 2x TAE adapter (RJ11 to TAE) |
| Antennas | Two 2 dBi LTE/UMTS-antennas |
| Power supply unit | External power adapter (230 V), NEST 12 V/2.0 A DC/S, coaxial power connector 2.1/5.5 mm bayonet, temperature range from -5 to +45° C, LANCOM item no. 111303 (EU)/LANCOM item no 110829 (UK) |

## Support

| | |
|---|---|
| Warranty | › 3 years<br>› For details, please refer to the General Warranty Conditions at: www.lancom-systems.com/warranty-conditions. |
| Software updates | Regular free updates as part of the LANCOM Software Lifecycle Managements (www.lancom-systems.com/lifecycle). |
| Manufacturer support | Free technical manufacturer support as part of the LANCOM Software Lifecycle Management (www.lancom-systems.com/lifecycle). |

## Software

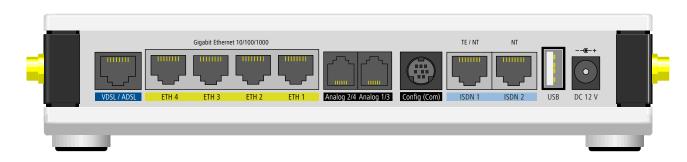| | |
|---|---|
| Software Lifecycle Management | After discontinuation, the device is subject to the LANCOM Software Lifecycle Management. Details can be found at: www.lancom-systems.com/lifecycle. |

LANCOM
Systems

# LANCOM 1793VA-4G+          LCOS 10.50

| Software | |
|---|---|
| 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 Warranty Basic Option S | Option to extend the manufacturer´s warranty from 3 to 5 years, item no. 10710 |
| LANCOM Warranty Advanced Option S | Option to extend the manufacturer´s warranty from 3 to 5 years and replacement of a defective device, item no. 10715 |
| 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 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, 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 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 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 three years via 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 the LANCOM Management Cloud, item no. 50105 |

| 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 Extender O-360-4G omnidirectional GSM/GPRS/EDGE/UMTS/HSPA+/LTE outdoor antenna, item no. 61227 |
| External antenna | AirLancer Extender I-360-4G, +2.5 dBi 4G/3G/2G antenna, 698-960 and 1710-2700 MHz, omnidirectional MIMO indoor antenna, item no. 60918 |
| 19" Rack Mount | 19" rack mount adaptor, item no. 61501 |
| LANCOM Wall Mount | For simple, theft-proof mounting of LANCOM devices with plastic housings, item no. 61349 |
| LANCOM Wall Mount (White) | For simple, theft-proof mounting of LANCOM devices with plastic housings, item no. 61345 |
| LANCOM Serial Adapter Kit | For the connection of V.24 modems with AT command set and serial interface for the connection to the LANCOM COM interface, incl. serial cable and connection plug, item no. 61500 |
| LANCOM Analog Adapter Set | For connection of 2 further analogue terminals, item no. 62599 |
| 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, Windows 8, Windows 8.1, Windows 10, single license, item no. 61600 |
| VPN Client Software | LANCOM Advanced VPN Client for Windows 7, Windows 8, Windows 8.1, Windows 10, 10 licenses, item no. 61601 |
| VPN Client Software | LANCOM Advanced VPN Client for Windows 7, Windows 8, Windows 8.1, Windows 10, 25 licenses, item no. 61602 |

LANCOM
Systems

# LANCOM 1793VA-4G+

LCOS 10.50

| Accessories | |
| --- | --- |
| 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 |
| **Item number(s)** | |
| LANCOM 1793VA-4G+ (EU) | 62137 |

Gigabit Ethernet 10/100/1000     TE / NT    NT

VDSL / ADSL    ETH 4    ETH 3    ETH 2    ETH 1    Analog 2/4   Analog 1/3    Config (Com)    ISDN 1    ISDN 2    USB    DC 12 V

www.lancom-systems.com

**LANCOM**
Systems

LANCOM Systems GmbH I Adenauerstr. 20/B2 I 52146 Wuerselen I Germany I E-mail info@lancom.de