LANCOM

Product Overview

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SECURE.NETWORKS.

- > Cloud Management
- > Routers & VPN Gateways
- > Switches
- > Wireless LAN
- > Service, Training & Support







Seccure. Networks.Trusted network solutions

LANCOM Systems is the leading German manufacturer of networking solutions for business customers and the public sector. LANCOM offers professional users secure, reliable, and futureproof infrastructure solutions for local-area and multi-site networks (LAN, WAN, WLAN), as well as centralized network management based on software-defined networking technologies (SD-WAN, SD-LAN, SD-WLAN). The solutions for Wireless LAN and Network Connectivity are developed and manufactured in Germany. They run on an operating system (LCOS) that is developed completely in-house. Freedom from backdoors is an essential feature of the products. The quality mark "IT Security Made in Germany" and certification by the German Federal Office for Information Security (BSI) confirm the trustworthiness and the outstanding level of security. The ultimate priorities for us at LANCOM are the trust of our customers and the security of their networks.

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WELCOME TO THE NEW HYPER-INTEGRATED NETWORK MANAGEMENT

Welcome to the LANCOM Management Cloud
The LANCOM Management Cloud is the world's first hyper-integrated management system for the intelligent organization, optimization, and control of your entire network architecture. State-of-the-art software-defined networking technology drastically simplifies the provision of integrated networks – the manual configuration of individual devices is now a thing of the past.

HIGHLIGHTS OF THE LANCOM MANAGEMENT CLOUD

- > Control of the entire network by one system
- > Radically simplified & automated configuration
- > Available as a Public Cloud and Private Cloud
- > Unsurpassed scalability for networks of any size
- > Unique system for maximum savings in time and costs
- > Easy device integration thanks to a term-based licensing model





This is **hyper integration**

FULL INTEGRATION

One simple firmware update makes the entire, tried-and-trusted premium product range Cloud-ready, including previously installed components – there is no need to exchange any hardware. A unique all-round solution with unparalleled investment protection.

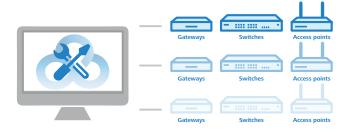
STATE-OF-THE-ART TECHNOLOGY

> The LANCOM Management Cloud replaces what was formerly the manual configuration of individual devices – software-defined networking technology delivers fully automated network orchestration. All the administrator has to do is focus on the framework conditions for the network's overall design. Tasks that previously took hours or days to complete are now handled within minutes or with a few clicks.

For more information see: www.lancom-systems.com/cloud

SOFTWARE-DEFINED NETWORKING

Current LANCOM devices, including routers, gateways, switches, and access points, all support SDN technology. Your benefit: A massive reduction in complexity, because even sophisticated configurations are set up with just a few clicks.



SD-WAN

SD-WAN automatically and dynamically creates secure IPSec VPN connections between sites, including network virtualization across the wide-area network (WAN). A mouse click is all it takes to enable the VPN function and select the required VLANs for each site. The laborious individual configuration of the two tunnel endpoints is simply no longer required.

SD-LAN

SD-LAN orchestrates the port profiles for each switch and automatically assigns the necessary network configuration, e.g. the required VLANs. At the click of a mouse, switch configurations that are fully customized for the access points and routers at each site are rolled-out or updated simultaneously.

SD-WLAN

SD-WLAN facilitates the automatic configuration of multiple WLANs (multi-SSID), including for example the separation of hotspot networks. All that needs to be specified here is the SSID authentication method and, if required, the bandwidth restrictions for each WLAN. The WLAN profiles created in this way are rolled out or updated on any number of access points and WLAN routers at the different sites — simply by mouse click.



THE SECURE CLOUD SOLUTION MADE & HOSTED IN GERMANY

Confidential data in the wrong hands can lead to serious damage to companies. In a market with a strong presence of American and Asian products, LANCOM offers maximum security "Made in Germany".

Gateways, routers, access points, the LCOS operating system, and the LANCOM Management Cloud are developed and manufactured in Germany. With the Public Cloud hosted in Germany, data security and legally compliant handling are guaranteed.



SECURE. NETWORKS.

You can rely on IT security Made in Germany from LANCOM and benefit from device handling that is guaranteed to be backdoor-free and fully compliant with data protection regulation.



Products on pages marked with this symbol can be integrated into the LANCOM Management Cloud.

Multi Site VPN Routers



LANCOM multi site VPN routers are the ideal solution for enterprises with multiple locations and the demand for a reliable, future-proof Internet access. A large scope of interfaces, versatile backup options, as well as future-oriented features enable the application of these routers in any industry and line of business.



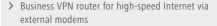
MULTI SITE VPN ROUTERS

VPN connection of multiple locations and Internet access

LANCOM 1781EF+

- > Business VPN router for high-speed Internet via external modems or fiber optics
- > Secure VPN site connectivity with 5 simultaneous IPSec VPN connections (25 optional)
- > Network virtualization with up to 16 networks (ARF)

LANCOM 1781EW+



- > IEEE 802.11n Wi-Fi with up to 450 Mbps
- > Secure VPN site connectivity with 5 simultaneous IPSec VPN connections (25 optional)
- > Network virtualization with up to 16 networks (ARF)

LANCOM 1781A

- > Business VPN router for high-speed Internet due to ADSL2+ modem
- > Secure VPN site connectivity with 5 simultaneous IPSec VPN connections (25 optional)
- > Network virtualization with up to 16 networks (ARF)

LANCOM 1781AW

> Like LANCOM 1781A, additionally IEEE 802.11n Wi-Fi with up to 300 Mbps

LANCOM 1781VA

- > Business VPN router for high-speed Internet due to VDSL2 / ADSL2+ modem
- > Secure VPN site connectivity with 5 simultaneous IPSec VPN connections (25 optional)
- > Network virtualization with up to 16 networks (ARF)



LANCOM 1781VAW

> Like LANCOM 1781VA, additionally IEEE 802.11n Wi-Fi with up to 300 Mbps







3G / 4G VPN Routers



3G / 4G VPN routers with LTE modem are the versatile solution for locations without wired DSL Internet access or if an additional backup of the primary connection is necessary. LANCOM provides a comprehensive portfolio for mobile VPNsecured data communication via LTE with up to 300 Mbps.

Single Site Routers



In smaller companies and offices the primary demand lies in a professional and reliable Internet access. Specially designed for applications at single sites, LANCOM provides professional, cost-effective solutions – exactly meeting your needs.

LANCOM 1781-4G

- > Business VPN router for high-speed Internet due to 4G LTE modem for up to 100 Mbps
- > Secure VPN site connectivity with 5 simultaneous IPSec VPN connections (25 optional)
- > Network virtualization with up to 16 networks (ARF)



LANCOM 1631E

> Business VPN router for external DSL or cable modems

SINGLE SITE ROUTER

Internet access for

> Secure VPN site connectivity with 3 simultaneous IPSec VPN connections



LANCOM 1781VA-4G

LANCOM 1780EW-4G+

> Like LANCOM 1781A-4G, but with VDSL2 / ADSL2+ modem and dual-SIM LTE

> Business VPN router for high-speed Internet due

867 Mbps in IEEE 802.11ac or 300 Mbps in IEEE

> Secure VPN site connectivity with 5 simultaneous IPSec VPN connections (25 optional)

> Network virtualization with up to 16 networks (ARF)

to 4G LTE modem for up to 300 Mbps > Wi-Fi for operation at 2.4 or 5 GHz with up to





- > Freely positionable LTE network extension incl. data backup with up to 100 Mbps
- > Convenient connection to LANCOM router or switch
- > Gigabit Ethernet

LANCOM 730-4G

- > Power supply via PoE or power adapter
- > Also applicable as stand-alone LTE router



LANCOM IAP-4G

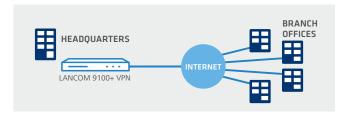
802.11n

- > Industrial VPN router for high-speed Internet due to 4G LTE modem for up to 100 Mbps
- > Full-metal housing based on IP50
- > Reliable even at demanding temperatures (-20° to +50°C)

Central Site VPN Gateways



More and more companies are using encrypted Internet connections to handle business-critical applications operating at multiple sites. LANCOM central site VPN gateways are ideal for large multi-service IP infrastructures and offer security, high performance, and utmost reliability.



LANCOM 7100+ VPN

- > Central site VPN gateway for mid-size to largescale VPN projects
- > Incl. 100 VPN channels, upgradable to 200
- > 4 x Gigabit Ethernet
- > Integrated AES/3-DES hardware accelerator
- > Network virtualization with up to 256 networks (ARF)
- > TACACS+ management
- > Routing performance with up to 790 Mbps and VPN throughput (AES) with up to 450 Mbps



FC



LANCOM 9100+ VPN

- Central Site VPN gateway for large-scale VPN projekte
- > Like LANCOM 7100+ VPN, but incl. 200 VPN channels, upgradable to 1,000
- > Routing performance with up to 990 Mbps and VPN throughput (AES) with up to 600 Mbps



NEW Virtual Router



The LANCOM vRouter is a software-based router for operation in virtualized environments based on the hypervisor VMware ESXi. Using the LCOS operating system to offer the same functionality as LANCOM hardware router, it is the best available basis for state-of-the-art infrastructures — be it as a router for medium sized scenarios, or as a central site VPN gateway for larger scales.





LANCOM vROUTER

- > Virtual, software-based routers for operation with VMware ESXi
- > Tried-and-trusted operating system LCOS as a high-performance basis
- > Easy management via the LANCOM Management Cloud or LANtools
- Radical simplification of the configuration thanks to SD-WAN

AVAILABLE IN THE FOLLOWING TERM-BASED VARIANTS

(each available as a license for 1 or 3 years):

LANCOM vRouter 50
(50 Mbps, 5 VPN channels, 2x ARF)

LANCOM vRouter 250
(250 Mbps, 50 VPN channels, 16x ARF)

LANCOM vRouter 1,000
(1,000 Mbps, 200 VPN channels, 128x ARF)

LANCOM vRouter unlimited
(unlimited Mbps, 1,000 VPN channels, 256x ARF)

High-Security VPN Routers

The LANCOM CC portfolio has been awarded by the German Federal Office for Information Security (BSI) as a trustworthy and secure IT infrastructure based on Common Criteria EAL 4+. This officially recognized quality seal guarantees independently tested security according to the high standards of the Common Criteria.

YOUR BENEFITS:

- > Highly secure VPN site-connectivity based on highly integrated, field-proven network components
- > Comprehensive scope of interfaces and functionalities
- > Certified protection against cyber attacks
- > All LANCOM routers are guaranteed free of backdoors
- > Development and manufacturing "Made in Germany"



LANCOM 1781EF (CC)

Certified VPN router with Gigabit Ethernet and SFP port

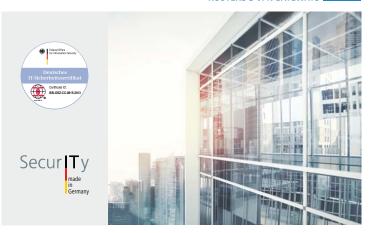


LANCOM 1781A (CC)

Certified VPN router with ADSL2+ modem

THE FOLLOWING APPLIES TO ALL CC ROUTERS:

- Secure VPN site-connectivity with 5 simultaneous IPSec VPN connections (optionally 25)
- Network virtualization with up to 16 networks (ARF)
- > Firewall with intrusion detection and denial-of-service protection



LANCOM 7100+ VPN (CC)

- > Certified central site VPN gateway for a highly secure connection of up to 200 sites
- > Incl. 100 VPN channels, upgradable to up to 200
- > Network virtualization with up to 256 networks (ARF)
- > 4 x Gigabit Ethernet



LANCOM 9100+ VPN (CC)

- Certified central site VPN gateway for a highly secure connection of up to 1,000 sites
- > Incl. 200 VPN channels, upgradable to up to 1,000
- > Network virtualization with up to 256 networks (ARF)
- > 4 x Gigabit Ethernet



LANCOM CC START-UP KIT

> For a certified start-up of LANCOM CC products according to CC EAL 4+



 Scope of delivery: Card reader for reading contactless smart cards (BSI-certified), serial configuration cable, USB-to-Serial adapter, and contactless smart card (BSI-certified)

VPN Software Clients

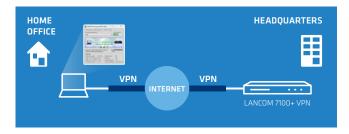
Even while traveling or at their home office, employees can securely dial-in to the corporate network at any time: The LANCOM Advanced VPN Client provides secure, convenient data communication via the Internet. The LANCOM Advanced VPN Client is available for the operating systems Microsoft Windows* and Mac OS X**.

LANCOM ADVANCED VPN CLIENT WINDOWS

- > IPSec VPN client for Windows 10, Windows 8.1, Windows 8, Windows 7, and Windows Vista (32 und 64 Bit)
- > Integrated stateful inspection firewall for secure Internet access
- > Integrated 3G / 4G dialer incl. budget manager for full cost control
- > Prioritization of voice over IP data
- > IPSec-over-HTTPS (based on NCP VPN Path Finder Technology)
- Seamless roaming VPN connections are maintained even during media change
- > Support of IPv4- and IPv6 VPN
- > Support of IKEv2

LANCOM ADVANCED VPN CLIENT MAC OS X

- > IPSec VPN client for Mac OS up to 10.11 El Capitan
- > Integrated stateful inspection firewall
- > Support of all IPSec protocol extensions
- > Integrated installation wizard and "1-Click-VPN"



^{*} Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries.

Websmart & Unmanaged Switches

LANCOM websmart and unmanaged switches are the ideal addition for small and medium-sized network environments and offer a great price/performance ratio.



LANCOM GS-1108

Unmanaged 8-port Gigabit Ethernet switch with fanless design



LANCOM GS-1108P

Like LANCOM GS-1108 with additional PoE support based on IEEE 802.3af/at (60 W) and silent fan



LANCOM GS-1326

- Small business websmart 26-port Gigabit Ethernet switch with 24 Gigabit Ethernet ports and 2 combo ports (TP/SFP) with fanless design
- > Browser-based configuration
- > Security due to configurable access control on all ports based on IEEE 802.1X

NFW



^{**} Mac and Mac OS are trademarks of Apple Inc. registred in the U.S. and other countries.

Fully Managed Gigabit Ethernet Switches



LANCOM fully managed Gigabit Ethernet switches are perfect for setting up professional network infrastructures. They provide full integration into the LANCOM management, comprehensive security and QoS functionalities aligned with all LANCOM routers and access points, and are ideal for implementing virtualized networks.



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NEW

All fully managed Gigabit Ethernet switches support SD-LAN for an easy and fast configuration via the LANCOM Management Cloud.

LANCOM GS-2310P

 10-port Gigabit Ethernet switch with 8 Gigabit Ethernet ports and 2 combo ports (TP/SFP) with PoE support based on IEEE 802.3af/at (130 W)



LANCOM GS-2326+ and LANCOM GS-2326P+

- 26-port Gigabit Ethernet switches with 24 Gigabit Ethernet ports and 2 combo ports (TP/SFP) with fanless design
- > LANCOM GS-2326P+ additionally with PoE support based on IEEE 802.3af/at (185 W) and integrated fan



LANCOM GS-2328F

 28-port full fiber switch with 20 SFP ports (1G), 4 combo ports (TP/SFP), 4 SFP+ ports (1G/10G) and integrated fan





LANCOM GS-2328 and LANCOM GS-2328P

- 28-port Gigabit Ethernet switches with 24 Gigabit Ethernet ports and 4 SFP+ ports (1G/10G) and integrated fan
- > LANCOM GS-2328P additionally with PoE support based on IEEE 802.3af/at (370 W)



LANCOM GS-2352 and LANCOM GS-2352P

- 52-port Gigabit Ethernet switches with 48 Gigabit Ethernet ports and 4 SFP+ ports (1G/10G) and integrated fan
- > LANCOM GS-2352P additionally with PoE support based on IEEE 802.3af/at (370 W)



FOR ALL FULLY MANAGED GIGABIT ETHERNET SWITCHES APPLIES:

- > 5-year warranty on all components
- Port-based access control based on IEEE 802.1X (Single, Multi, Port-based, MAC-based) on all ports
- Comprehensive security features such as TACACS+ and SSH / SSI

Hardware Accessories

LANCOM provides a comprehensive portfolio of accessories for multiple applications. With practical options for rack or wall mounting and SFP modules for fast fiber connections you adapt your LANCOM product exactly according to your needs.

LANCOM RACK MOUNT (19")

- > For front or rear device mountings
- > For all LANCOM devices with indoor housing



LANCOM RACK MOUNT PLUS (19")

- > Forward-facing ports enable comfortable access and a view at the status LEDs at the same time
- > For all LANCOM devices with indoor housing



LANCOM WALL MOUNT

- > Convenient wall mounting for all LANCOM indoor access points and routers with indoor housing
- > Theft-protection due to padlock
- > Available colors: "classic" and "white"
- Additionally available as Wall Mount (Rail) in the color variant "classic" and as Wall Mount (LN) for the LN access point housing

LANCOM SFP-SX-LC1 / SFP-LX-LC1 / SFP-SX-LC10*



- > SFP modules for usage of high-speed fiber connections with 1-10 Gbps of LANCOM devices
- > Available standards: 1000Base-LX, 1000Base-SX, and 10GBase-SR

Software Options

The LANCOM software options* upgrade your LANCOM routers, central site VPN gateways, access points, and WLAN controllers. These cost-effective software upgrades give your existing devices entirely new functions – exactly according to your demands!

OPTION

LANCOM Content Filter

LANCOM CONTENT FILTER

- Category-based analysis and blockage of websites
- > Time- and profile-based configuration
- > Additive licenses for 10, 25 or 100 users

LANCOM WLC BASIC OPTION



- Upgrade of LANCOM routers with WLAN controller functionality
- > Management of 6 (optionally up to 12) access points or WLAN routers

LANCOM WLC UPGRADE OPTION



- > Increases the number of access points and WLAN routers managed by the WLAN controller
- > Available as +6, +10, +25, +100, and +500 option

LANCOM HIGH AVAILABILITY CLUSTERING OPTION



 Enables the grouping of WLAN controllers or central site VPN gateways for a centralized management and a comfortable configuration alignment (Config Sync)

LANCOM VPN

LANCOM VPN OPTION

- > Upgrades the number of available VPN tunnels
- > Available as VPN-25, VPN-200, VPN-500, and VPN-1000 option

^{*} Please refer to the table in the annex for appropriate SFP modules.

^{*} Options vary per product, please refer to the list of options in the annex.

Flexible Guest Accesses LANCOM Public Spot Option

Whether on the train, at work, in the restaurant or on their holiday – people like to use Wi-Fi guest accesses to get information or contact family and friends spontaneously. With the LANCOM Public Spot Option you offer your guests a comfortable hotspot – with flexible access options.



- > Comfortable self-authentication via SMS / e-mail
- > Simultaneous Internet access of multiple end-devices due to multi-login
- Quickly connected with the automatic re-login after an initial authentication
- > Multilingual user portals (EN, DE, FR, IT, ES, NL)
- > API interface towards external systems (XML or FIAS)

Guest accesses -

according to your needs!



A hotspot solution is convincing if it is effortlessly configurable, guests get an easy access to the Internet, and the hotspot provider is ensured that his own network and his guest network are securely separated. The user-friendly configuration wizard helps setting up a secure hotspot solution.



LANCOM Public Spot

OPTION

LANCOM PUBLIC SPOT OPTION

- > Flexibly configurable login procedures
- Smart Ticket for a comfortable authentication via SMS or e-mail
- > Comprehensive design options regarding the time of use or validity period
- Secure separation of guest and internal corporate network
- > Voucher layout and login portals can be individually adapted to the corporate desgin
- > Connection to external servers via XML and RADIUS interfaces

LANCOM PMS Accounting +

OPTION

LANCOM PUBLIC SPOT PMS ACCOUNTING PLUS OPTION

- Combines your hotspot solution with the hotel's Property Management System
- > Simple and automatic authentication for guests
- > Internet fees can be charged to the room bill
- > Suitable for PMS with FIAS interface, such as Micros Fidelio or protel
- > Requirement: LANCOM Public Spot Option

NEW IEEE 802.11ac Wave 2 Indoor Access Points



Wireless freedom in combination with the speed of wired networks – with the increasing number of clients and applications, this is an absolute must for any modern company network! The Wi-Fi standard IEEE 802.11ac Wave 2 offers you exactly this Gigabit performance and sets the standard for a unique Wi-Fi experience.







- Dual-concurrent WLAN parallel operation at 2.4 and 5 GHz with up to 867 Mbps in IEEE 802.11ac Wave 2 and 300 Mbps in IEEE 802.11n for top performance and efficiency
- > 2x2 MIMO with multi-user support for the simultaneous provision of multiple clients
- > 2x Gigabit Ethernet



LANCOM LN-862

> Like LN-860, but with external antennas



LANCOM LN-1700

- Dual-concurrent WLAN parallel operation at 2.4 and 5 GHz with up to 1,733 Mbps in IEEE 802.11ac Wave 2 and 450 Mbps in IEEE 802.11n for maximum performance and efficiency
- > 4x4 MIMO with multi-user support for the simultaneous provision of multiple clients
- > 2x Gigabit Ethernet

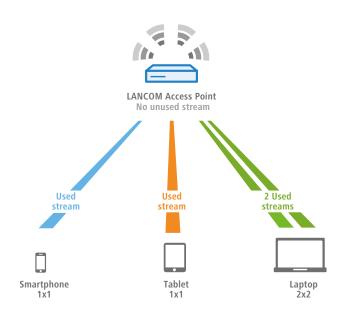


LANCOM LN-1702

> Like LANCOM LN-1700, but with external antennas

MULTI-USER MIMO

Multi-User MIMO (MU-MIMO for short) allows the spatial streams of an access point to be shared between different clients. With normal MIMO all clients are supplied with data one after another. MU-MIMO, in turn, supplies multiple MU-MIMO-enabled clients at the same time and the entire bandwidth is used more efficiently.



IEEE 802.11ac Indoor Access Points



The Wi-Fi standard IEEE 802.11ac combines wireless freedom with the speed of wired networks. That opens up flexible possibilities for modern business applications with a high demand for bandwidth and the integration of the increasing number of mobile end devices.



LANCOM L-822acn DUAL WIRELESS

- > Dual-concurrent WLAN parallel operation at 2.4 and 5 GHz with up to 867 Mbps in IEEE 802.11ac and 300 Mbps in IEEE 802.11n for top performance
- > 2x Gigabit Ethernet



LANCOM LN-830acn DUAL WIRELESS

> Like L-822acn dual Wireless, but with internal antennas and LN housing



LANCOM L-1302acn DUAL WIRELESS

- > Dual-concurrent WLAN parallel operation at 2.4 and 5 GHz with up to 1.300 Mbps in IEEE 802.11ac and 450 Mbps in IEEE 802.11n for maximum performance
- > 2x Gigabit Ethernet



LANCOM L-1310acn DUAL WIRELESS

> Like L-1302acn dual Wireless, but with internal antennas and the color variant "white"











LANCOM LN-630acn DUAL WIRELESS

- > Dual-concurrent WLAN parallel operation at 2.4 GHz and 5 GHz with up to 867 Mbps with IEEE 802.11ac and 300 Mbps with IEEE 802.11n
- > Ideal for the hospitality sector
- > 1x Gigabit Ethernet
- > Only available as bulk 10 version without power adapter

LANCOM IAP-821

- > Single-operation WLAN for the operation at 2.4 or 5 GHz with up to 867 Mbps in IEEE 802.11ac or 300 Mbps in IEEE 802.11n
- > Robust full-metal housing based on IP50 for maximum reliability in rough environments
- > Reliable even at demanding tempeatures $(-20^{\circ} \text{ to } +50^{\circ}\text{C})$

LANCOM IAP-822

> Like LANCOM IAP-821, but with dual-concurrent WLAN for parallel operation at 2.4 and 5 GHz with up to 867 Mbps in IEEE 802.11ac and 300 Mbps in IEEE 802.11n



IEEE 802.11n Indoor Access Points



The LANCOM Wi-Fi portfolio is as manifold and versatile as your applications. The range of LANCOM access points offers a large portfolio of single- and dual-radio devices based on IEEE 802.11n, meeting any demand.

ALL LANCOM INDOOR ACCESS POINTS PROVIDE:

- > Security features such as IEEE 802.11i (WPA2) / IEEE 802.1X
- > Stand-alone operation, via LANCOM WLAN controller, or LANCOM Management Cloud
- > VLAN and multi-SSIDs for virtualized networks
- > Detection of rogue Wi-Fi stations during operations
- > Versatile power supply with IEEE 802.3af Power over Ethernet

CENTYRED

LANCOM L-320agn WIRELESS

- Single-operation WLAN operation either at 2.4 or 5 GHz with up to 300 Mbps in IEEE 802.11n
- > 1x Gigabit Ethernet



LANCOM L-321agn WIRELESS

> Like LANCOM L-320agn Wireless, but with external antennas and in the color variant "classic"



LANCOM L-322agn DUAL WIRELESS

- > Dual-concurrent WLAN parallel operation at 2.4 and 5 GHz with up to 300 Mbps in IEEE 802.11n
- > 1x Gigabit and 1x Fast Ethernet







LANCOM L-330agn DUAL WIRELESS

> Like L-332agn dual Wireless, but with internal antennas and in the color variant "white"



LANCOM L-151gn WIRELESS

- > Single-operation WLAN operation at 2.4 GHz with up to 150 Mbps in IEEE 802.11n
- > 1x Fast Ethernet

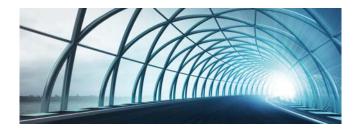


Active Radio Control

Active Radio Control

With the Wi-Fi optimization concept LANCOM

Active Radio Control (ARC) you sustainably increase the performance of your Wi-Fi. The intelligent combination of complementary features is included in the LANCOM operating system LCOS and is hence absolutely free of charge.



ADAPTIVE RF OPTIMIZATION* >> Dynamic selection of the best Wi-Fi channel by the access point as a reaction to severe channel disturbances

AIRTIME FAIRNESS >> Fair, equal distribution of Wi-Fi transmission times by the access points for multiple clients

BAND STEERING >> Active steering of clients towards the less used and more powerful 5 GHz frequency band

CLIENT STEERING* >> Intelligent steering of Wi-Fi clients towards the most suitable access point

ADAPTIVE NOISE IMMUNITY >> Significantly more data throughput for clients in disturbed wireless environments

SPECTRAL SCAN >> Efficient Wi-Fi troubleshooting due to the identification of interferences in the radio field

ADAPTIVE TRANSMISSION POWER >> In case an access point becomes inoperative, the transmission power of the remaining access points will be automatically increased to maintain a seamless Wi-Fi coverage

MANAGED RF OPTIMIZATION* >> Less channel overlaps due to the selection of optimal Wi-Fi channels

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* For WLAN controller-based installations

More information: www.lancom-systems.com/arc

WLAN Controllers

Benefit from an even more efficient and more secure management of your wireless network infrastructures: With LANCOM WLAN controllers you centrally and automatically configure your wireless infrastructure at highest reliability. LANCOM WLAN controllers are suitable for all LANCOM access points and WLAN routers.

LANCOM WLC-4006+ > Centralized management for 6 access points and WLAN routers (upgradable for up to 30 devices) > Integrated hotspot functionality LANCOM WLC-4025+ > Centralized management for 25 access points and WLAN routers (upgradable for up to 100 devices) > Highest operational reliability without "single-point-of-failure" > Optional upgrade with hotspot functionality > Optional upgrade with clustering functionality

OBBBB

LANCOM WLC-4100

00000

 Centralized management for 100 access points and WLAN routers (upgradable for up to 1,000 devices)

> Highest operational reliability without

> Optional upgrade with hotspot functionality

> Optional upgrade with clustering functionality

"single-point-of-failure"

31

FC.

Wireless ePaper Solutions

Give your facility an attractive look, automate your processes, and improve transparency as well as the flow of information. With the LANCOM Wireless ePaper solutions we offer a world's first combination of radio-controlled displays and professional wireless LAN in only one infrastructure!

POSSIBLE APPLICATIONS

- > Active room signage
- > Visitor passes or table reservations at meetings and conferences
- > Menu cards and table reservations in restaurants
- > Electronic Shelf Labeling in the retail sector





LANCOM LN-830E WIRELESS

- Dual-concurrent WLAN parallel operation at 2.4 and 5 GHz with up to 867 Mbps with IEEE 802.11ac and 300 Mbps with IEEE 802.11n
- > Integrated radio module for updating LANCOM Wireless ePaper Displays
- > Integrated iBeacon technology
- > Power supply via PoE based on IEEE 802.3af







LANCOM L-151E WIRELESS

- > Single-operation WLAN operation at 2.4 GHz with up to 150 Mbps in IEEE 802.11n
- > Integrated radio module for updating LANCOM Wireless ePaper Displays
- > Integrated iBeacon technology



LANCOM WIRELESS ePAPER DISPLAYS

- > Convenient, wireless updates
- > Available in three sizes: 7.4", 4.2", and 2.7"
- > Daylight-optimized and fully graphics-compatible
- > Battery lifetime of up to 5 7 years
- > NEW Display in black, white, and red
- > NFC support



LANCOM WIRELESS ePAPER CONFERENCE SET PRO

- > All-in-one package for the implementation of innovative room signage
- Scope of delivery: 1x LANCOM LN-830E Wireless, 5x LANCOM WDG-1 7,4", 1x LANCOM Wireless ePaper Server for the management of an unlimited number of access points and up to 1.000 Wireless ePaper Displays

Wireless LAN Outdoor Access Points



As a quick way of inter-connecting buildings, for point-to-point links, an outdoor WLAN hotspot, or a high-speed "last mile" broadband connection – for these and similar applications, LANCOM has a comprehensive portfolio of Wi-Fi solutions with professional 2.4 and 5 GHz access points based on IEEE 802.11ac, outdoor antennas, and a wide range of accessories.



ALL LANCOM OUTDOOR ACCESS POINTS PROVIDE:

- > Robust IP66 protective housing
- > An extended temperature range (-33° to +70°C)
- > VLAN, multi-SSID, and optional hotspot functionality
- > Comprehensive mounting material included



LANCOM OAP-821

- Single-operation WLAN operation at 2.4 or 5 GHz with up to 867 Mbps with IEEE 802.11ac or 300 Mbps with IEEE 802.11n
- > Integrated 5 GHz P2P antenna and external antenna connectors also for 2.4 GHz
- > Connector for Gigabit Ethernet with Power over Ethernet based on IEEE 802.3af
- Also available as "Bridge Kit" (2x OAP-821 incl. accessories)



LANCOM OAP-822

- Dual-concurrent WLAN parallel operation at 2.4 and 5 GHz with up to 867 Mbps with IEEE 802.11ac and 300 Mbps with IEEE 802.11n for heterogenous client environments
- > 4 external antenna connectors
- Connectors for Gigabit Ethernet with Power over Ethernet based on IEEE 802.3af and Fast Ethernet













LANCOM OAP-830

- Dual-concurrent WLAN parallel operation at 2.4 and 5 GHz with up to 867 Mbps with IEEE 802.11ac and 300 Mbps with IEEE 802.11n for heterogenous client environments
- > Integrated sector antennas for 2.4 and 5 GHz
- > Connectors for Gigabit Ethernet with Power over Ethernet based on IEEE 802.3af and Fast Ethernet

LANCOM OAP VPN OPTION

> Software upgrade for the LANCOM OAP-8xx series for IPSec VPN functionality (up to 5 channels)

AIRLANCER AN-RPSMA-NJ

 Adapter cable (20 cm) for connecting LANCOM outdoor WLAN antennas (ON) with indoor access points

AIRLANCER SN-ANT

> Surge arrestor for the connection between LANCOM outdoor WLAN antennas (ON) and access points

AIRLANCER MOUNT (ON)

Versatile wall or pole mounting of LANCOM outdoor antennas (ON)

AIRLANCER SN-LAN

> LAN-side surge arresotor adapter

For further accessories please see: www.lancom-systems.com

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External Antennas

LANCOM Systems offers a comprehensive portfolio of indoor and outdoor wireless LAN antennas for the 2.4 and 5 GHz frequency bands, as well as antennas for 3G / 4G routers. Each antenna is supplied with a kit that includes cables and mounting materials. Necessary adapters are included in the scope of delivery or are available as LANCOM accessories.





4 x 4 MIMO WLAN OUTDOOR ANTENNAS

AirLancer ON-Q360ag

> 360° omnidirectional antenna for +4 dBi gain (2.4 and 5 GHz)

AirLancer ON-Q90ag

> 90° sector antenna for +6 dBi (2.4 GHz) or +5 dBi gain (5 GHz)

AirLancer ON-Q60ag

> 60° sector antenna for +6,5 dBi (2.4 GHz) or +7.5 dBi gain (5 GHz)



3 x 3 MIMO WLAN OUTDOOR ANTENNAS

AirLancer ON-T360ag

> 360° omnidirectional antenna for +5 dBi (2.4 GHz) or +7 dBi gain (5 GHz)



> 90° sector antenna for +6 dBi (2.4 GHz) or +5 dBi gain (5 GHz)

AirLancer ON-T60ag

> 60° sector antenna for +8 dBi gain (2.4 and 5 GHz)



2 x 2 MIMO WLAN OUTDOOR ANTENNA

AirLancer Extender ON-D9a

> 9° directional antenna for +23 dBi gain (5 GHz)



1 x 1 MIMO WLAN OUTDOOR ANTENNAS

AirLancer ON-360ag

> 360° omnidrectional antenna for +6,5 dBi (2.4 GHz) or +6 dBi gain (5 GHz)



AirLancer Extender 0-30

> 30° directional antenna for +14 dBi gain (2.4 GHz)

AirLancer Extender O-18a

> 18° directional antenna for +18 dBi gain (5 GHz)

AirLancer Extender O-9a

> 9° directional antenna for +23 dBi gain (5 GHz)



3 x 3 MIMO WLAN INDOOR ANTENNA

AirLancer IN-T180ag

> 180° sector antenna for +2.5 dBi (2.4 GHz) or +8 dBi gain (5 GHz)



1 x 1 MIMO WLAN INDOOR ANTENNA

AirLancer Extender I-60ag

> 60° sector antenna for +6 dBi (2.4 GHz) or +8 dBi gain (5 GHz)



3G / 4G ANTENNAS

AirLancer Extender I-360-4G

> Omnidirectional indoor multiband LTE antenna, fully backwards compatible



AirLancer Extender 0-360-4G

> Omnidirectional outdoor multiband LTE antenna, fully backwards compatible

LANtools

Along with the LANCOM Management Cloud, LANCOM has long provided a comprehensive set of free management & monitoring tools: Once installed on a Windows system, the programs LANconfig, LANmonitor, and WLANmonitor provide the detailed configuration and monitoring of LANCOM routers, access points, and WLAN controllers.

MANAGEMENT FOR SMALL AND MID-SIZED NETWORKS

- > Software package for the management of LANCOM products
- > Easy configuration and surveillance
- > Parallel management and monitoring of multiple devices

LANconfig

From the easy deployment of a single device with setup wizards to the comprehensive management of multiple devices — LANconfig has a wide spectrum of applications:

- > Consistent management of the entire infrastructure
- > Pre-configuration and configuration import
- > Automatic detection of new devices
- > Comprehensive setup wizards
- > Support of Telnet, SSH, and HTTPS configuration
- > Context-sensitive help system
- > QuickFinder, the quick way to find devices, parameters, and settings









LANmonitor

LANmonitor is the ideal program for a convenient and structured monitoring of networks. SNMP-trap-based, it offers nearly real-time monitoring of all connections and device statuses.

- > Connection and interface status display
- > Monitoring of transfer rates, protocols, and IP addresses
- > Display of software version, CPU load, and memory usage
- > Logging of online times and transfer volumes
- > Firewall event display and device SYSLOG
- > Graphical trace module for recordings and troubleshooting
- > Spectral Scan to identify sources of interference in the Wi-Fi

WLANmonitor

LANCOM WLANmonitor can centrally monitor the status of a wireless network. It presents information about the entire network in general and detailed information about individual access points and clients

- > Comprehensive monitoring of all Wi-Fi events
- > Rogue AP / client detection / intrusion detection system (IDS)

On-site Workshops / Consulting Days

Our LANCOM trainers are coming to you! You can book our LANCOM experts for on-site workshops and training courses at your location. Benefit from both our technical expertise as well as from the convenience of personalized on-site training.

YOUR BENEFITS:

- > No need to travel
- > No traveling or accomodation costs
- > Individual appointments
- > Individual combination of topics
- > Our LANCOM trainers are coming to you*

On-site workshops

We arrange our workshops (with certification by request*) at your location. As usual we combine theoretical with practical parts and will also provide the technical equipment.

With the right training tailored for your needs, we will make you a LANCOM expert for your network.



^{*} Available for DE/AT/CH/BE/NL/LU

CONSULTING DAY

These contents are available for your Consulting Day:

- > Setup and optimization of your configuration
- > Setup of configuration templates
- > Implementation of a rollout
- > Interconnectivity between branch offices and the central site via VPN
- > Central access point management via WLAN controller (WLC)
- > Embedding layer-3 tunneling into the existing infrastructure

Consulting and booking

We will gladly consult you and make you an offer that fits your needs! Contact us via

+49 2405 499 36-220 or TRAINING@LANCOM.EU

SupportWe stay by your side!

Products and solutions are only as good as the service that backs them up. This is why consulting and support play a central role at LANCOM.



YOUR ALL-INCLUSIVE PACKAGE

- > Expert advice
- > Our support form at www.lancom-systems.com/support-request
- > Tailor-made support upgrades
- > A wide range of services

LANCOM KNOWLEDGEBASE

A full text search will find any documents with relevant terms www.lancom-systems.com/knowledgebase

Support in countries outside of Germany is available directly from LANCOM distribution partners and specialist resellers: www.lancom-systems.com/how-to-buy

Also visit our international support webpage under www.lancom-systems.com/service-support

WARRANTY

LANCOM Warranty Basic ★





LANCOM Config Service



MORE WARRANTY

- LANCOM Warranty Basic Option Extension of the manufacturer warranty from 3 to 5 years*
- > LANCOM Warranty Advanced Option Extension of the manufacturer warranty from 3 to 5 years and advanced replacement to the next working day*

MORE SERVICE

- > LANCOM Config Service** Professional support for the configuration of individual LANCOM installations
- LANCOM Extended Support Times Support availability during extended service times for planned migrations and installations

MORE SUPPORT

- > LANCOM Emergency Support Short-term, solutionoriented emergency support with minimum reaction time
- > LANCOM Premium Support Access Premium support access for optimally safeguarded network infrastructures
- > LANCOM Enterprise Support Access Full-service package for networks with > 100 devices

SUPPORT

LANCOM Emergency Support

LANCOM Premium Support Access ★★

LANCOM Enterprise Support Access ★ ★ ★

^{*} The LANCOM warranty conditions apply

^{**} Available for: DE / A / CH / BE / NL / LU