Innovative networking solutions.
Made in Germany.

SECURE. NETWORKS.

› LANCOM Management Cloud
› Network Connectivity
› Wireless LAN & Wireless ePaper Solutions
› Service & Support
SECURE. NETWORKS.
With the **solutions** from LANCOM, you can be sure that your networks are **secure, reliable, and fit for the future**.
WELCOME TO HYPER-INTEGRATED NETWORK MANAGEMENT

Welcome to the LANCOM Management Cloud!

The LANCOM Management Cloud is the world’s first hyper-integrated management system that intelligently organizes, optimizes, and controls your entire WAN, LAN, and WLAN network architecture. State-of-the-art software-defined technology (SD-WAN, SD-LAN, SD-WLAN) drastically simplifies the provision of integrated networks and makes the manual configuration of individual devices a thing of the past. The system adapts dynamically to your requirements, it is future-proof and offers maximum security.
This is Hyper Integration

Fully automated configuration
LANCOM has made the manual configuration of individual devices a thing of the past – software-defined technology (SD-WAN, SD-LAN, SD-WLAN) now delivers fully automated network orchestration. All the administrator has to do is to specify the framework conditions for the design of the network. Auto-configuration and zero-touch deployment implement an automated rollout with maximum security. Complex network configurations, previously the cause of intense manual effort by certified IT professionals, is now reduced to just a few minutes and a few clicks!

The easiest way into the cloud
It takes just a few clicks to integrate your devices into the LANCOM Management Cloud – be they new devices or existing infrastructures. You decide whether to switch your entire network over to innovative SD-WAN, SD-LAN, and SD-WLAN, or whether to take it step by step: A gradual transition of your different locations is easy to implement – so take a closer look at the full power of hyper integration.

HOLISTIC NETWORK ORCHESTRATION
The LANCOM Management Cloud is a holistic system that controls the entire network infrastructure. This is only possible through a perfectly compatible product portfolio: All gateways, all routers, all switches, and all access points are quickly and easily transferred to the Cloud-based network orchestration.
A software-defined wide-area network (SD-WAN) automatically and dynamically uses any type of wide-area network (WAN) for your site connectivity. Core elements are highly automated multi-service networks which are realized via cost-efficient Internet lines and make expensive MPLS lines redundant. New locations are installed automatically, securely networked with one another, and new applications are created and rolled out with just a few clicks.

Short for software-defined local-area network, an SD-LAN supports the automated, dynamic, and secure provisioning of any type of multi-service network on switch ports. What used to be the extremely time-consuming and error-prone configuration of individual switches is now fully automated even across locations.

A software-defined wireless local-area network (SD-WLAN) combines the features of conventional WLAN controllers and cloud-managed WLANs and supplements these with maximized automation and agility. Further access points or new applications such as hotspots are easily integrated into the network, taking full account of all network policies relating to VLANs, security, bandwidth management or client management.
Complete portfolio tried and tested over a million times

LANCOM MANAGEMENT CLOUD

Management & monitoring with 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 – for individual devices or in groups.
Efficient solutions.

Reliable network.
SD-WAN
Secure & agile site connectivity

Your success is our inspiration
Smooth and reliable cross-site communication is essential for efficient and economical operations, which makes this a decisive factor for your success. LANCOM VPN solutions convince with maximum security and scalability—and in combination with SD-WAN technology you drastically reduce your IT costs and expenditure of time, too!

LANCOM OFFERS YOU:
» Automated network orchestration thanks to software-defined networking with the LANCOM Management Cloud
» Wired or wireless Internet access
» Securely encrypted networking of main and branch offices
» Mobile access to corporate networks from mobile devices
» Home-office connectivity

Securely networked with LANCOM VPN
In the interests of the secure exchange of sensitive data in the network, „a secure data channel“ (VPN) is necessary to network corporate offices, branches, home offices, and mobile workers. This involves an encrypted data tunnel being established through the public Internet, which creates a secure private network that allows access for authorized persons only.
Site connectivity for headquarters, branch offices, and mobile employees

High-performance basis for your infrastructure
For years now, companies have established networked sites around the world and are operating business-critical applications online. VPN site connectivity is a must, and this demands a high-performance network infrastructure. The central site VPN gateways from LANCOM and the software-based vRouters ensure that complex structures with large numbers of sites are implemented securely and reliably.

Mobile access to the company network
Be it at a hotel, at meetings or conferences out of the office – once installed on your PC or laptop, the LANCOM Advanced VPN Client provides your employees with secure data communication and access to the corporate network. LANCOM cellular routers with LTE and Wi-Fi additionally provide a wireless high-speed Internet connection with speeds of up to 300 Mbps, which makes them the ideal equipment if you need to set up temporary networks.

Connecting branch offices and partner companies
A VPN connection can be used to securely connect your branch offices to the corporate network, and to exchange data with partner companies. The access rights are controlled by virtual networks, which ensure that each and every network participant only has access to the corporate data that are relevant to them.

WORK AT ANY LOCATION
Secure access to the company from anywhere – perfect for effective collaboration.

SD-WAN
The LANCOM Management Cloud makes the formerly laborious configuration of VPNs and VLANs easier than ever before: Your sites are networked automatically and networks are dynamically assigned to the desired sites. What was formerly days of work is now reduced to a few mouse clicks!
Network Connectivity

Intranet

Internet

Accounting

Mobile employee at the hotel

Laptop

LANCOM Advanced VPN Client

Company headquarters

IT department

PRX

IP telephone

Server

LANCOM Management Cloud (Private)

Branch office / partner company

VPN

VPN

VPN

Router

Switch

PC

PC

PC
Network virtualization with LANCOM – for example, in a retail chain store

The basis for network virtualization

Instead of using dedicated infrastructures and different Internet access accounts for your various applications, you can use LANCOM routers with Advanced Routing and Forwarding (ARF) to manage multiple logical networks that are strictly separated from one another. This method encapsulates data from different VLANs into separate tunnels and transmits them over the Internet via an IPSec tunnel, which makes it possible to completely virtualize an entire corporate network.

One multipurpose network infrastructure

In retail stores, where so many applications and connections play a vital role, network virtualization is the ideal solution. The scenario shown here illustrates a retail chain store which operates different applications in parallel, all of which are kept completely separate from one another.

DIGITAL POS MARKETING

Networking solutions from LANCOM are the basis for centralized and fully digitalized marketing-campaign management in brick-and-mortar retail: In the stores, large screens (digital signage) display the current promotional offers which, at the same time, appear on customer smartphones and the digital price labels.

DIGITAL PRICE LABELING IN RETAIL

Retailers are already taking advantage of digital price tags, also known as “electronic shelf labels” or ESL. With the E-series LANCOM access points, prices, items, barcodes, and QR codes are automatically updated from the central ERP system by wireless – in almost real time.

CLOUD-BASED TOTAL SOLUTION MANAGEMENT

The LANCOM Management Cloud orchestrates your entire network with all its components into one powerful system: All LANCOM gateways, routers, switches, access points, and virtual LANCOM routers (vRouters) are centrally configured, and uniformly controlled and monitored. Networks are automatically assigned and rolled-out to the desired sites and devices – in minutes, not days!

LEARN MORE AT: www.lancom-systems.com/cloud
Flexible solutions.
The best Wi-Fi.
SD-WLAN - Maximum agility for your wireless LAN

Wireless flexibility
The mobility and flexibility offered by laptops, tablet PCs and smartphones have become an integral part of our everyday lives. Modern wireless LAN solutions from LANCOM Systems are a viable alternative to wired networks. A software-defined wireless local-area network (SD-WLAN) combines the features of conventional WLAN controllers and cloud-managed WLANs and supplements these with maximized automation and agility.

LANCOM OFFERS YOU:

- Automatic Wi-Fi configuration by the LANCOM Management Cloud or WLAN controllers
- The best Wi-Fi equipment for any application or industry
- Solutions on any scale: From home offices to worldwide enterprise networks
- Professional Wi-Fi optimization technology
- User-friendly setup of guest access accounts
- Connecting mobile devices to the corporate network

The key is having the right device
The LANCOM portfolio of Wi-Fi products is as diverse and versatile as your requirements. With our range of access points, LANCOM offers a comprehensive product portfolio that will meet any individual challenge. The devices offer maximum versatility of operation: Be it orchestration by the LANCOM Management Cloud, central management by a WLAN controller, or stand-alone operation.
A perfect match: SD-LAN and SD-WLAN

The convergence of LAN and WLAN

The integration of switches and access points in the LANCOM Management Cloud results in tremendous added value for the consistent and efficient configuration of your local wired and wireless networks. Not only do SD-LAN and SD-WLAN save your valuable time, but they completely eliminate any manual configuration errors, as well.

Formerly: Static networks and manual configuration of individual devices

A modern internal company network – be it wired (LAN) and/or wireless (WLAN) – demands separate networks for different applications, all of which need to be securely isolated from one another: An internal local area network (intranet) and, possibly, extra networks specifically for the accounts and R&D departments, but also an open network for guest access (hotspot). Even for experienced, certified network administrators, the conventional configuration of individual devices can become an extremely time-consuming task: The workload and the number of errors increase exponentially with the number of devices, which can result in complex troubleshooting for configuration errors.

Network orchestration and automated device configuration

Software-defined Networking by the LANCOM Management Cloud guarantees that each and every switch and access point at the various sites operates with a fine-tuned configuration. Once setup with the necessary security settings, the required networks (VLANs) are assigned to the appropriate switch ports and deployed to all of the switches in the network – completely automatically and at any number of sites. The access points connected to the switch ports transmit the appropriate WLAN SSIDs.
The LANCOM Management Cloud assigns each of the various networks to the required port. In the same way, the networks are automatically rolled out to and operated by the access points and WLAN routers.
High-speed Wi-Fi
IEEE 802.11ac
Wave 2

Wirespeed for wireless LAN

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 offers you exactly this Gigabit performance and sets the standard for a unique Wi-Fi experience.

Advantages of IEEE 802.11ac Wave 2

LANCOM access points with IEEE 802.11ac Wave 2 provide net data rates of up to 1.3 Gbps. This makes local data transfer lightning fast – even faster than wired infrastructures! And thanks to latest Multi-User MIMO technology, multiple compatible Wi-Fi clients are supplied with data at the same time in parallel.

- All-wireless office – high-speed networking without wires
- Maximum speed for all applications
- Increased battery life for devices through shorter data-transfer times
- High-speed Wi-Fi in high-density environments with many clients

All LANCOM 11ac Wave 2 access points are Cloud-ready!

NEXT GENERATION: HIGH-SPEED WI-FI WITH IEEE 802.11AC WAVE 2

Current latest-generation LANCOM access points support IEEE 802.11ac Wave 2. They provide additional functions that not only increase the overall gross data rate, but it also significantly improve the efficiency of the Wi-Fi as a whole.

LEARN MORE AT:
www.lancom-systems.com/ac
Multi-User Mimo
The new wave of efficiency

Wave 2 introduces Multi-User MIMO
The Wi-Fi standard IEEE 802.11ac Wave 2 introduces a new technology which significantly increases the efficiency of the entire wireless network: Multi-User MIMO (MU-MIMO for short) simultaneously distributes all of the available spatial streams of an access point between several different Wave 2 clients, rather than one after the other as was formerly the case. The available bandwidth is used efficiently and delays in the wireless network are substantially reduced.

How it works
Multi-User MIMO (MU-MIMO for short) allows the spatial streams of an access point to be shared between different clients. This supplies several clients with data at the same time and all of the available spatial streams are used to maximum effect.

IEEE 802.11ac Wave 2 – the benchmark for wirespeed performance and maximum efficiency for your Wi-Fi.

LEARN MORE AT:
www.lancom-systems.com/ac
Always up to date.
Efficient in use.

LANCOM
Wireless ePaper Solutions

A world’s first in innovative signage
Wireless ePaper Displays from LANCOM offer state-of-the-art digital signage for a wide range of applications. With their modern design and ePaper suitable for use in daylight, the LANCOM Wireless ePaper Displays not only look good, they also create transparency and improve your information flow: Once connected to your calendar management system, they update fully automatically. The energy-efficient technology lasts for up to 5-7 years without an external power supply. The innovative E-series access points from LANCOM support Wi-Fi and ePaper displays in parallel – operating absolutely free of any interference. Available in different sizes, the latest generation of Wireless ePaper Displays use their full graphics capability to display the colors red, black, and white.
Innovative signage, countless possibilities

Active room signs for businesses
Current meetings and events are automatically synchronized with your calendar management system (including Exchange, Domino, Google Calendar, Office 365, etc.) and presented on the LANCOM Wireless ePaper Displays at the conference rooms – an added value that significantly improves the information flow for employees and visitors alike.

Signage in the public sector and in healthcare
LANCOM Wireless ePaper Displays simplify workflows and create transparency at offices, schools, universities, and hospitals. Thanks to automatic synchronization with the database, you can see at a glance whether an office, a classroom or a treatment room is free or occupied.

LANCOM E-series: Wi-Fi, Wireless ePaper, and iBeacon
The access points of the LANCOM E-series combine four radio modules in one device: Along with 2.4- and 5-GHz Wi-Fi and communication with LANCOM Wireless ePaper Displays, an additional iBeacon radio module integrated into the access points supports location-based services for smartphones.

LERN MORE AT: www.lancom-systems.com/epaper
Convenient Internet access for your customers

Online. Anywhere, anytime. Preferably at no charge and with a minimum of effort. The Public Spot solutions from LANCOM fulfill this wish for your guests and, at the same time, they securely separate the guest network from your company’s network. What’s more, LANCOM solutions adapt perfectly to the size of your network – and your budget. An open interface makes it easy to integrate external systems without problem.
Maximum freedom of design with maximum security

Wi-Fi hotspots for everybody
The LANCOM Public Spot option provides reliable and secure access for guests, visitors, partners or customers, all based on a common infrastructure. At the same time it offers the administrator full freedom to configure and customize their Wi-Fi guest access to precisely meet their needs.

- User-friendly setup of Wi-Fi guest access (optionally charged or for free)
- Choice of login procedure to the Wi-Fi hotspot (e.g. via Smart Ticket or printed voucher)
- Choice of models for online time and validity period of the guest access accounts
- Secure separation of guest access from the internal network
- Voucher and portal layout can be customized to the individual design of the company
- Connection to external servers or property management systems (PMS) via XML, RADIUS or FIAS interfaces

WLAN hotspot from the cloud
With the LANCOM Management Cloud you create an individual hotspot in a heartbeat! Simple customizing makes your Wi-Fi hotspot unique – in seconds. Auto-trim will instantly upload your own images in the right format. See in the preview whether the login mask corresponds to your wishes and add individual welcome texts. The guest access can be securely separated from other networks at a mouse click.

EASY TO UPGRADE – ESPECIALLY FOR EXISTING INFRASTRUCTURES
The LANCOM Public Spot Option is easy to install on your existing LANCOM hardware such as access points, WLAN controllers, WLAN routers, and VPN gateways. Your network infrastructure remains in place and there is no need to purchase additional equipment.

LEARN MORE AT:
www.lancom-systems.com/publicspot
Wireless LAN in the hospitality industry

Guest access accounts in hotels

Wireless LAN makes it easier than ever for hotel operators to offer their guests mobile and high-speed Internet. Quick and easy to install, Public Spot Wi-Fi solutions enable guests to use their own laptop, tablet or smartphone to access the Internet.

- Easy hotspot login for the guests by means of SMS or e-mail (Smart Ticket), printed vouchers, or with their room number and surname
- Billing of fee-based Internet access by hotel accounting system (such as Micros Fidelio or protel)
- No access to internal data by unauthorized persons thanks to the secure separation of the company and guest networks
- User-friendly commissioning and configuration thanks to helpful setup and configuration wizard

NO WI-FI, NO STAR

Since January 2015, a minimum requirement of two-star hotels in Germany and 14 other European countries is to offer wired or wireless Internet access in their public areas, such as the lobby or bar. To earn three stars, DSL or Wi-Fi has to be available in the rooms.

Free Wi-Fi is the decisive selection criterion for hotel guests*

*HRS, 2017
**Wireless LAN networks in administrations**

Secure wireless networks in administrations

In administrations today, employees are increasingly using robust wireless network connections to improve processes and increase flexibility. Guests also benefit from high-speed wireless Internet that is securely isolated from the internal network. Software-defined networking by the LANCOM Management Cloud guarantees that a common configuration operates on every switch and access point at the various offices.

- Centralized network orchestration with the LANCOM Management Cloud in compliance with German data protection law
- Everything from a single source: High-performance VPN routers, Gigabit Ethernet switches and high-speed WLAN access points
- No access to internal data by unauthorized persons thanks to the strict separation of the internal and guest networks
- Radio-controlled digital room signs with the LANCOM Wireless ePaper portfolio

**IT SECURITY MADE IN GERMANY**

In a market with a strong presence of American and Asian products, LANCOM offers maximum security “Made in Germany”. The entire LANCOM portfolio is guaranteed to be backdoor-free and the products fully comply with European data-protection regulations.
Wireless LAN in schools and universities

Wireless freedom for modern learning

That students, school pupils, teachers and staff at modern schools and universities should make do without the Internet is unthinkable — they need it even at isolated buildings, preferably via Wi-Fi, and with their own end devices. LANCOM wireless LAN solutions make it easy to implement this type of scenario.

YOUR BENEFITS:

- Encrypted Internet access for professors, students and employees, also in combination with eduroam
- No access to internal data by unauthorized persons due to strict separation of the administrators’, professors’, and guest networks
- Specially suited LANCOM access points for high-speed Wi-Fi in high-density environments
- Automatic WLAN configuration with SD-WLAN via the LANCOM Management Cloud

RESPONSIBLY ONLINE

Educational institutions have a duty to treat pupils and students in a responsible manner, and this also applies to the Internet access they provide. For this reason you should protect your network from abuse from the very start. The LANCOM Content Filter Option ensures this by checking for website categories and blocking the retrieval of sites that offer illegal or other undesirable content.

LANCOM Content Filter
OPTION
Wireless LAN in clinics and medical practices

Efficient healthcare facilities
Professional LANCOM IT infrastructures give your healthcare facility numerous advantages: More efficient therapies thanks to faster data access, more convenience for your patients, and faster internal communications. This saves you costs and gives you more time for what is really important – your patients.

YOUR BENEFITS:

› Access points with approvals for operation in medical environments (EN 60 601-1-2)
› Electronic ward rounds with access to patient records
› Provision of guest Wi-Fi access
› Uninterrupted monitoring at any location by transmitting vital signs directly to the nurses’ station
› Automatic configuration of the entire infrastructure by the LANCOM Management Cloud (Private Cloud)
Wi-Fi solutions for extreme conditions

Mobile freedom with LANCOM outdoor solutions

Internet access plays an increasingly important role in the outdoors. Be it at secluded ski lodges, sports stadiums or sprawling campsite – for open areas where wired Internet access is not an option, the ideal solution comes in the form of the outdoor access points from LANCOM. They support applications such as providing a hotspot for your guests, or connecting secluded locations to the central network via point-to-point links. The outdoor portfolio in our rugged IP66 housing stands up to even the most extreme environmental conditions and tolerates temperatures from -33° to +70°C.
Solutions for exceptional challenges

Outdoor wireless LAN – your options
The LANCOM outdoor Wi-Fi range of products includes versatile access points and outdoor antennas for establishing wireless LAN infrastructures, which enable flexible applications in open air environments. They provide reliable Wi-Fi coverage over open spaces and offer fast wireless Internet access for visitors or modern enterprise applications. What's more, LANCOM OAPs are ideal for establishing point-to-point links over long ranges.

Coverage of open areas
Even when outdoors, your employees, customers and visitors benefit from high-speed Wi-Fi with LANCOM outdoor solutions.

Point-to-point links
Company sites with several building complexes are networked via wireless point-to-point links, over several kilometers if required. So there's no need for any laborious cable installation or expensive leased lines.

FOR EXTREME ENVIRONMENTS
LANCOM outdoor access point feature the IP66 housing that makes them ideal for use in extreme temperatures from -33° to +70°C. They are also water-jet resistant.
LANCOM Service & Support Products

With the LANCOM service and support products we provide the optimal support and a professional service – whether it be in case of emergency, for network changes after hours, in case of hardware failure or for supporting your projects.

LANCOM Warranty Basic Option >> Warranty extension for LANCOM devices to 5 years

LANCOM Warranty Advanced Option >> Warranty extension for LANCOM devices to 5 years and advance replacement by the next business day

LANCOM Config Service >> Professional support for the configuration of your LANCOM installations

LANCOM WLAN Survey Service >> Virtual Wi-Fi coverage across the premises for a successful planning and implementation

LANCOM Emergency Support >> Short-notice, solution-oriented emergency support with minimum response times

LANCOM Extended Support Times >> On-call support outside of regular business hours

LANCOM Premium Support Access >> Premium support access for optimally secured network infrastructure

LANCOM Enterprise Support Access >> Full-service package for safeguarding networks with more than 100 devices

High-Performance Products for Service & Support

Learn more at: www.lancom-systems.com/support-products
LANCOM Consulting Day

Our LANCOM trainers are coming to you! You can book our LANCOM experts for Consulting Days at your location. Benefit from both our technical expertise as well as from the convenience of personalized on-site training. These contents are available for your Consulting Day:

- Setup and optimization of your configuration, setup of configuration templates
- Implementation of a rollout
- VPN connectivity between branch offices and the central site
- 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:
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LANCOM KnowledgeBase

A full text search will find any documents with relevant terms.

LEARN MORE AT: www.lancom-systems.com/knowledgebase

LANCOM SUPPORT

Products and solutions are only as good as the service that backs them up.