

LANCOM LX-7200E

LANCOM LX-7200E - Perfect synergy of Wi-Fi 7 and digital signage



The LANCOM LX-7200E is the ideal solution for small to medium-sized environments where both high-performance Wi-Fi and digital signage are required – particularly in retail. With cutting-edge Wi-Fi 7 technology and additional use of the 6 GHz frequencies, it ensures a stable and powerful wireless connection that effortlessly meets even the highest demands. Its unique feature is the integrated digital signage interface, which enables a seamless and energy-efficient connection to digital displays from VUSION and PDi Digital. Alternatively, SoluM and Hanshow displays can be operated via external radio modules connected through the USB interface. Additionally, the LANCOM LX-7200 series, including the LX-7200E, features a dedicated BLE module that supports future BLE-powered displays from VUSION and PDi Digital. This makes the LANCOM LX-7200E a future-proof foundation for applications such as electronic price labeling, digital advertising spaces, or information displays. The integrated digital signage interface also guarantees maximum reliability and extended battery life for the connected displays.

- Wi-Fi 7 access point with tri-band Wi-Fi - parallel operation in 2.4 GHz, 5 GHz and 6 GHz
- Integrated 2.4 GHz radio module for energy-saving communication with digital displays for price labeling or IIoT applications
- OFDMA for more efficient Wi-Fi channel utilization
- 1x 2.5 GE PoE+ (IEEE 802.3at) and 1x 1 GE port
- IoT support: BLE 5.4 and USB 2.0
- Housing with protection class IP50 and UL 2043
- Innovative design incl. theft-resistant and flexible mounting plate
- Power-saving functions with precise consumption monitoring
- Automated deployment, operation, and optimization via the LANCOM Management Cloud (LMC)
- WLAN controller support (including layer 3 tunneling)



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Wi-Fi 7 designed for retail – powerful, cost-optimized, and future-proof

The LANCOM LX-7200E has been specifically designed to meet the requirements of modern retail. They enable powerful and stable wireless networks that seamlessly integrate applications such as mobile payment, fail-safe checkout connections, self-checkout solutions, and customer apps. With support for all Wi-Fi frequency ranges, including the exclusive 6 GHz band, they offer interference-free wireless operation, maximum performance, and long-term investment security. This makes them the ideal solution for store networks, pop-up stores and omnichannel strategies.

Faster data transfer

With Wi-Fi 7, you benefit from a speed boost of up to 240% compared to Wi-Fi 6 in real-world applications. This is made possible by a doubling of the available frequency spectrum for Wi-Fi through additional 6 GHz frequencies, a doubled maximum channel width (320 MHz instead of the previous 160 MHz), and an increased data density during transmissions (4096 QAM instead of 1024 QAM in Wi-Fi 6). As a result, the LANCOM LX-7200E delivers a maximum aggregated data rate of 9.3 Gbps across all frequency bands.

Integrated radio module for digital signage

The additionally integrated 2.4 GHz radio module in the LANCOM LX-7200E enables seamless and cost-efficient implementation of digital signage projects by controlling digital displays from VUSION and PDi Digital. Whether electronic price tags and shelf labels in warehouses, status updates at workstations, or information displays – digital signage offers a wide range of applications. This Wi-Fi 7 access point delivers both fast, reliable wireless connectivity and simultaneous, interference-free communication with digital displays. Additionally, external USB wireless modules from SoluM and Hanshow can be connected, allowing for even greater flexibility in integrating digital signage solutions.

Housing design optimized for field use

The design of the LANCOM LX-7200E is based on decades of market experience and valuable user feedback. Its flattened side contours give it a discreet appearance, allowing it to blend seamlessly into any environment. With IP50 protection rating, including rubber-sealed ports, the access point is dustproof. Additionally, it features certified fire resistance and low-smoke emissions in case of fire (UL 2043). The compact mounting bracket with a security lock not only helps prevent opportunistic theft but is also compatible with standard mounting hole patterns from various manufacturers. Optionally, the LANCOM LX-7000 series offers a specially designed mounting system for ergonomic and time-saving installation on T-bars of suspended ceilings.



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Carpooling in the radio field - OFDMA for more efficient data traffic

Take a seat in the VIP lounge in the Wi-Fi: The LANCOM LX-7200E offers an exclusive Wi-Fi radio field free of interference in the 6 GHz frequency band. While the 2.4 and 5 GHz bands can be used by other wireless technologies such as alarm systems or audio applications, the broadband 6 GHz spectrum is intended for exclusive Wi-Fi use. This enables interference-free Wi-Fi connections with minimal latency and maximum data throughput. Fast-response connections and time-critical Wi-Fi applications in particular benefit from this.

Professional IoT support

With the LANCOM LX-7200E, you can easily immerse yourself in the world of the Internet of Things (IoT). Support for BLE 5.4 and USB 2.0 opens up many possibilities for you to communicate with modern BLE sensors in devices or objects and to use innovative applications such as asset tracking or digital signage. In addition, the LANCOM LX-7200E is already prepared for ESL via BLE 5.4 – a future-proof solution for the long-term planning of your digital signage projects.

Reduced overall energy consumption thanks to LANCOM Active Power Control

In light of rising energy costs and the growing societal demand for sustainable solutions, LANCOM Active Power Control provides the ideal answer for your network infrastructure. This intelligent, cloud-based optimization solution dynamically adjusts the available Wi-Fi capacity, reducing the energy consumption of your Wi-Fi infrastructure without compromising operational reliability. In "Sustainability Mode," the functions of the access points are minimized during idle phases, leading to a lower PoE power requirement. A centralized energy monitoring system provides full transparency of your energy consumption.

Perfect Wi-Fi at the Push of a Button – with LANCOM Active Radio Control 2.0

Retail stores are often located in urban environments with a high density of external Wi-Fi networks, which can directly impact Wi-Fi quality. LANCOM Active Radio Control 2.0 is an intelligent optimization solution that automatically ensures the best possible performance – without requiring any specialized Wi-Fi expertise.

Flexible operation via LANCOM Management Cloud, modern web interface or WLAN controller

Choose freely between operation via the LANCOM Management Cloud, stand-alone via WEBconfig or a WLAN controller! In cloud mode, the LANCOM LX-7200E becomes part of a user-friendly, holistic and automated network management system. Even in stand-alone operation, the LX-7200E offers fast configuration and comprehensive management and monitoring thanks to the intuitive, clear web interface of the new WEBconfig. As a third option, management can also be selected centrally via a WLAN controller.



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Wi-Fi product specification

Frequency band 2.4 GHz, 5 GHz and 6 GHz	2400-2483.5 MHz (ISM), 5150-5700 MHz (depending on country-specific restrictions), 5925-6425 MHz
Integrated Antenna Gain (peak gain)	up to 5 dBi in 2.4 GHz, up to 7 dBi in 5 GHz and up to 7 dBi in 6 GHz
Data rates IEEE 802.11be	→ up to 5765 MBit/s according to IEEE 802.11be with MCS13/QAM-4096 at 6 GHz, 2x4 MIMO and 320 MHz channel width → up to 2882 MBit/s according to IEEE 802.11be with MCS13/QAM-4096 at 5 GHz, 2x2 MIMO and 160 MHz channel width → up to 688 MBit/s according to IEEE 802.11be with MCS13/QAM-4096 at 2,4 GHz, 2x2 MIMO and 40 MHz channel width
Data rates IEEE 802.11ax	→ up to 2400 MBit/s according to IEEE 802.11ax with MCS11/QAM-1024 at 6 GHz, 2x2 MIMO and 160 MHz channel width → up to 575 MBit/s according to IEEE 802.11ax with MCS11/QAM-1024 at 2.4 GHz, 4x4 MIMO and 40 MHz channel width
Data rates IEEE 802.11n	300 Mbps according to IEEE 802.11n with MCS15 (fallback to 6.5 Mbps with MCS0).
Data rates IEEE 802.11a/ h	54 Mbps (fallback to 48, 36, 24, 18, 12, 9, 6 Mbps, Automatic Rate Selection), fully compatible with TPC (adjustable power output) and DFS (automatic channel selection, radar detection)
Data rates IEEE 802.11b/g	54 Mbps to IEEE 802.11g (fallback to 48, 36, 24, 18, 12, 9, 6 Mbps, Automatic Rate Selection)
Radio channels 6 GHz	Up to 24 non-overlapping channels (EU; 20 MHz channel width)
Radio channels 5 GHz	Up to 16 non-overlapping channels (available channels and further obligations such as automatic DFS dynamic channel selection depending on national regulations), configurable maximum transmit power
Radio channels 2.4 GHz	Up to 13 channels, max. 3 non-overlapping (depending on country-specific restrictions), configurable maximum transmit power
Multi-SSID	Up to 32; time-controlled activation and deactivation of Wi-Fi networks
Concurrent Wi-Fi clients	Up to 256 clients per WiFi radio
Hotspot	Support for the Cloud-managed Hotspot in combination with the LANCOM Management Cloud; Support for Frederix Hotspot (in combination with LANCOM Management Cloud)
WLAN operation modes	Access Point (infrastructure), client mode, WDS/point-to-point links

Supported Wi-Fi standards

IEEE standards	IEEE 802.11be, IEEE 802.11ax, IEEE 802.11ac Wave 2, IEEE 802.11n, IEEE 802.11a, IEEE 802.11g, IEEE 802.11b, IEEE 802.11i, IEEE 802.1X, IEEE 802.11h, IEEE 802.11d, IEEE 802.11v
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Standard IEEE 802.11be

Supported features	MLO, OFDMA Multi-RUs, QAM-4096, 320 MHz channel bandwidth in 6 GHz
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Standard IEEE 802.11ax

Supported features	2x2 DL-/UL-MU-MIMO, DL-/UL-OFDMA, triggered target-wake-time, BSS coloring, QAM-1024, 160 MHz channels
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Standard IEEE 802.11ac

Supported features	2x2 MIMO, 80 MHz channels, MU-MIMO, QAM-256
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Standard IEEE 802.11n

Supported features	2x2 MIMO, 40-MHz channels, 20/40MHz coexistence mechanisms in the 2.4 GHz band, MAC aggregation, Block Acknowledgement, STBC (Space Time Block Coding), LDPC (Low Density Parity Check), MRC (Maximal Ratio Combining), Short Guard Interval
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Operating modes

Modes	Standalone, WLC-managed or LANCOM Management Cloud managed
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Wi-Fi security

Encryption options	IEEE 802.1X (WPA3-Enterprise, WPA2-Enterprise), WPA3-Personal, IEEE 802.11i (WPA2-Personal), WEP, LEPS-U (Private PSK, only possible with WPA2), LEPS-MAC
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Encryption algorithms	AES-CCMP, AES-GCMP, TKIP, RC4
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EAP types (authenticator)	EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-FAST
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Roaming

Roaming	IAPP (Inter Access Point Protocol), Fast Roaming (802.11r), OKC, Pre-Authentication, 802.11k
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Wireless ePaper Displays

Support for LANCOM Wireless ePaper Displays	The device is equipped with a radio module to control LANCOM Wireless ePaper Displays in the 2.4 GHz frequency band.
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LANCOM Active Radio Control

LANCOM Active Radio Control™ 2.0	automated optimization of WLAN channels, channel bandwidth and transmit power, controlled by the LANCOM Management Cloud
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Band Steering	active steering of clients between the 2.4 GHz and 5 GHz band
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LANCOM Active Power Control

LANCOM Active Power Control	LANCOM Sustainability Mode and energy consumption monitoring for the whole network, controlled by the LANCOM Management Cloud
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Bluetooth Low Energy (BLE)

Support of Bluetooth Low Energy technology (BLE)	The device can scan the environment for BLE devices and can forward the resulting scan data via a REST API.
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Bluetooth Low Energy (BLE)

ESL	communicates with BLE 5.4 compatible ESL displays (via future software update)
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Layer 2 functions

VLAN	4096 VLAN IDs, static assignment to SSIDs, dynamic Assignment via LEPS-U/LEPS-MAC or 802.1X (RADIUS)
Quality of Service	WME based on IEEE 802.11e
Bandwidth limitation	per SSID, per Client
Multicast	IGMP-Snooping, Multicast-to-Unicast-conversion on WLAN interfaces
Protocols	LLDP, Proxy ARP, LACP, L2TPv3, (R)STP

Network

Protocols	IPv4, IPv6, dual stack
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Interfaces

Ethernet ports	→ ETH1: 10/100/1000/2.5 GBASE-T (RJ45/8P8C), PoE-in 802.3at → ETH2: 10/100/1000 GBASE-T (RJ45/8P8C)
USB 2.0 host port	USB 2.0 host port (USB-A)
Internal antenna	integrated Antennas for WLAN, BLE and Wireless ePaper / ESL

Supported IoT Modules

IoT USB modules	LANCOM Wireless ePaper USB, SES-imagotag Retail IoT Connector, Hanshow HS_C09978 ESL Controller, SoluM EGU200NA0X ESL GEN2 USB Gateway
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Hardware

Environment	Temperature range 0–40 °C. Humidity 0–90 %; non-condensing
Housing	robust housing made of polycarbonate and aluminium, protection class IP50, kensington-lock, 225 x 225 x 65 mm
orientation sensor	integrated orientation sensor (accelerometer) to detect the Access Points mounting position.

Management and monitoring

Management	LANCOM Management Cloud, WLAN-Controller, WEBconfig, LANconfig, LL2M, external Syslog, Packet Capturing, TACACS+
Monitoring	LANCOM Management Cloud, WLAN-Controller, WEBconfig, LANmonitor, SNMP



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Conformity*

Europe/EFTA	CE
Australia / New Zealand	RCM
Applicable for use in medical environments (EN 60601-1-2)	conforms to EN 60601-1-2
fire test	conforms to UL2043 (plenum rated)
Country of Origin	Engineered in Germany, Made in Vietnam
*) Note	The full text of the specific Declaration of Conformity is available at the following Internet address: www.lancom-systems.com/doc

Scope of delivery

Documentation	Installation Guide (DE/EN); Mounting Instructions (DE/EN)
Mounting	Robust low profile mounting plate, secure attachment of the device with Click-Lock

Accessories

LANCOM PoE++ Injector	1-port PoE injector with up to 5 Gigabit support, integrated power supply, compatible with the standard IEEE 802.3af/at/bt (up to 65W), item no. 61779 (EU)
LANCOM LX-7000 Universal Mount (Bulk 5)	universal mounting plate for LANCOM LX-7000 series, compatible with drill hole pattern of LANCOM LN mount and other widely used AP models, item no. 61914
LANCOM LX-7000 T-Bar Mount (Bulk 5)	Mounting kit for quick and easy mounting of LANCOM LX-7000 series APs on suspended ceilings, AL profile width 22-24 mm, item no. 61915

Support

Warranty extension	Free warranty extension up to 3 years (replacement service for defects) For details, please refer to the service and support conditions at www.lancom-systems.com/support-conditions or at www.lancom.de/rma .
Security updates	Up to 2 years after End of Sale of the device (but min. 3 years, see www.lancom-systems.com/product-tables), can be extended by purchasing LANcare products
Software updates	Regular free updates including new features as part of the LANCOM Lifecycle Management (www.lancom-systems.com/lifecycle)
Manufacturer support	For LANcommunity partners up to the End of Life of the device For end customers with LANcare Direct or LANcare Premium Support during the LANcare validity
LANcare Basic S	Security updates until EOL (min. 5 years) and 5 years replacement service with shipment of the replacement device within 5 days after arrival of the defective device (8/5/5Days), item no. 10720



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Support

LANcare Advanced S	Security updates until EOL (min. 5 years) and 5 years NBD advance replacement with delivery of the replacement device within one business day (8/5/NBD), item no. 10730
LANcare Direct Advanced 24/7 S	Direct, prioritized 10/5 manufacturer support incl. 24/7 emergency hotline and security updates for the device, NBD advance replacement with delivery of the device on the next business day (24/7/NBD), guaranteed first response times (SLA) of max. 30 minutes for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years (item no. 10776, 10777 or 10778)
LANcare Direct 24/7 S	Direct, prioritized 10/5 manufacturer support incl. 24/7 emergency hotline and security updates for the device, guaranteed first response times (SLA) of max. 30 minutes for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years (item no. 10752, 10753 or 10754)
LANcare Direct Advanced 10/5 S	Direct, prioritized 10/5 manufacturer support and security updates for the device, NBD advance replacement with delivery of the device on the next business day (10/5/NBD), guaranteed first response times (SLA) of max. 2 hours for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years.(item no. 10764, 10765 or 10766)
LANcare Direct 10/5 S	Direct, prioritized 10/5 manufacturer support and security updates for the device, guaranteed first response times (SLA) of max. 2 hours for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years.(item no. 10740, 10741 or 10742)

Software

Lifecycle Management	After discontinuation (End of Sale), the device is subject to the LANCOM Lifecycle Management. Details can be found at: www.lancom-systems.com/lifecycle
Anti-backdoor policy	Products from LANCOM are free of hidden access paths (backdoors) and other undesirable features for introducing, extracting or manipulating data. The trust seal "IT Security made in Germany" (ITSMIG) and certification by the German Federal Office for Information Security (BSI) confirm the trustworthiness and the outstanding level of security.

LANCOM Management Cloud

LANCOM LMC-A-1Y LMC License	LANCOM LMC-A-1Y License (1 Year), enables the management of one category A device for one year via the LANCOM Management Cloud, item no. 50100
LANCOM LMC-A-3Y LMC License	LANCOM LMC-A-3Y License (3 Years), enables the management of one category A device for three years via the LANCOM Management Cloud, item no. 50101
LANCOM LMC-A-5Y LMC License	LANCOM LMC-A-5Y License (5 Years), enables the management of one category A device for five years via the LANCOM Management Cloud, item no. 50102

Item number(s)

LANCOM LX-7200E	61929
LANCOM LX-7200E (Bulk 5)	61930

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Antenna Gain

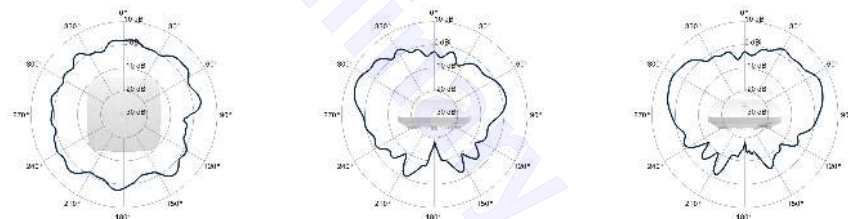
antenna pattern, 2.4 GHz



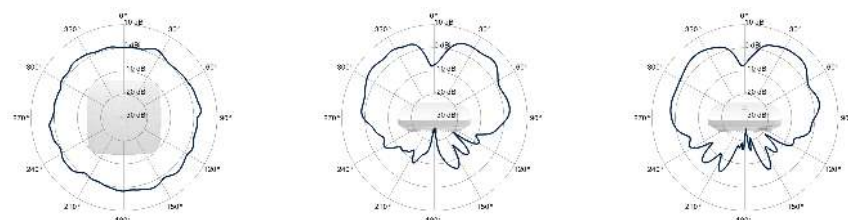
antenna pattern, 5.2 GHz



antenna pattern, 5.6 GHz



antenna pattern, 6 GHz



antenna pattern, BLE





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Antenna Gain

antenna pattern, ESL

