

LANCOM LX-6200

Fast Wi-Fi 6 for low and medium user densities



With the LANCOM LX-6200, you get high-throughput performance from the latest Wi-Fi 6 generation. This makes it the ideal device wherever the fastest Wi-Fi is needed for a small to medium-sized number of users, such as in hotels, smaller offices, medical practices, or branch offices. The integrated USB interface (2.0) also provides the basis for integrating IoT wireless systems into existing WLAN infrastructures.

- Dual concurrent Wi-Fi – parallel operation at 2.4 GHz and 5 GHz with Wi-Fi 6 (IEEE 802.11ax)
- 2x2 multi-user MIMO for simultaneous beam-steering for multiple clients in down- and uplink mode
- Bluetooth Low Energy radio module for innovative beaconing applications
- USB 2.0 port for the integration of future IoT radio systems
- Automated operation via the LANCOM Management Cloud (LMC)
- WLAN controller support (including layer-3 tunneling)
- Support of the security standard WPA3
- Uncompromising and future-proof standards for warranty, support, and software lifecycle management



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Dual concurrent Wi-Fi with an aggregated data rate of up to 1,775 Mbps

The LANCOM LX-6200 offers the Wi-Fi 6 standard (IEEE 802.11ax) for fast wireless LAN for clients in the 2.4- and 5-GHz bands. Wi-Fi 6 technology achieves transmission rates of up to 1,200 Mbps at 5 GHz and simultaneously up to 575 Mbps at 2.4 GHz.

2x2 Multi-User MIMO for downlinks and uplinks

Multi-user MIMO (MU-MIMO for short) simultaneously distributes all of the available spatial streams of the LANCOM LX-6200 between several different 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. With Wi-Fi 6, MU-MIMO is not, as before, only usable in the downlink but now also in the uplink as well.

Integrated beaconing technology

The 5.1 Bluetooth Low Energy radio module integrated in the LANCOM LX-6200 is the technical basis for modern BLE beaconing-based applications, such as push advertising services to mobile devices (iBeacon) or the localization of persons or objects (asset tracking/management) via partner solutions.

USB port 2.0 for IoT readiness

The integrated USB port of the LANCOM LX-6200 allows proprietary IoT wireless systems to be easily connected to the existing WLAN infrastructure. This enables, for example, the implementation of innovative digital signage solutions such as the ePaper solution from LANCOM by using a LANCOM ePaper USB or the support of third-party electronic price tags.

Modern web interface for stand-alone operation

The LANCOM LX-6200 offers the greatest possible versatility in operation: Managed through the LANCOM Management Cloud, it integrates into a holistic, automated network orchestration system based on software-defined networking technology. It is also able to operate with central management by LANCOM WLAN controller or even in stand-alone mode.

Operates via the LANCOM Management Cloud

WPA3, the successor of WPA2, offers important upgrades and security features for small ("WPA3-Personal") and large networks ("WPA3-Enterprise").

Operation via a WLAN controller

The LANCOM LX-6200 supports the fast WLAN standard IEEE 802.11ax (Wi-Fi 6), so that you are technically well equipped for future challenges. LANCOM Systems gives you a 3-year warranty on the LX-6200, which can easily be extended to 5 years with the Warranty Basic Option S or the Warranty Advanced Option S. And you also benefit from the high LANCOM standards on the software side: several times a year you receive free major releases of the LCOS LX operating system with new, future-proof features.



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Even if a product is no longer available, we offer free major releases, critical security fixes (security updates) based on the last available software version, and free technical manufacturer support as part of the LANCOM software lifecycle management for at least another 2 years.



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Wi-Fi product specification

Frequency band 2.4 GHz and 5 GHz	2400-2483.5 MHz (ISM), 5150-5700 MHz (depending on country-specific restrictions)
Data rates IEEE 802.11ax	→ up to 1200 MBit/s according to IEEE 802.11ax with MCS11/QAM-1024 at 5 GHz, 2x2 MIMO and 80 MHz channel width → up to 575 MBit/s according to IEEE 802.11ax with MCS11/QAM-1024 at 2.4 GHz, 2x2 MIMO and 40 MHz channel width
Data rates IEEE 802.11ac/n	867 Mbps according to IEEE 802.11ac with MCS9 (fallback to 6.5 Mbps with MCS0).
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 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 (simultaneous use of up to 16 independent Wi-Fi networks at WLAN interface 1 and up to 16 independent Wi-Fi networks at WLAN interface 2); time-controlled activation and deactivation of Wi-Fi networks
Hotspot	Support for the Cloud-managed Hotspot in combination with the LANCOM Management Cloud

Supported Wi-Fi standards

IEEE standards	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 802.11ax

Supported features	2x2 DL-/UL-MU-MIMO, DL-/UL-OFDMA, triggered target-wake-time, BSS coloring, QAM-1024, 80 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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LANCOM Active Radio Control

Band Steering	Steering of 5GHz clients to the corresponding high-performance frequency band; support for 802.11v
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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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Layer 2 functions

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

Protocols	IPv4, IPv6, dual stack
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Interfaces

USB 2.0 host port	USB 2.0 host port (USB-A)
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Ethernet ports	1 x 100/1000BASE-T autosensing (RJ-45), IEEE 802.3az, PoE (Power over Ethernet)
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Internal antenna	Two internal antennas per radio interface (four in total)
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Hardware

Power supply	12 V DC, external power adapter (230 V), PoE (Power over Ethernet), compliant with IEEE 802.3at
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Power consumption	max. 17.3W
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Hardware

Environment	Temperature range 0–40 °C. Humidity 0–90 %; non-condensing
Housing	Robust synthetic housing with aluminum bottom, rear connectors, ready for wall mounting, Kensington lock; 205 x 42 x 205 mm (W x H x D)

Management and monitoring

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

Conformity*

Europe/EFTA	CE
Australia / New Zealand	RCM
Country of Origin	Made in Germany
*) 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)
Cable	Ethernet cable, 1 m
Power supply unit	External power adapter (100-240 V), 12 V/2A DC, EU plug (not included in bulk delivery)

Accessories

LANCOM WLAN PSU (EU, white, Bulk 10)	10x white LANCOM WLAN PSU 230V to 12V/2A DC power adapter, item no. 61814 (EU)
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 Wall Mount LN	Robust mounting plate for simple, theft-proof mounting of LANCOM AP series LN-xxxx, LX-64xx, LX-62xx, Item no. 61342

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



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Support

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
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



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Item number(s)

LANCOM LX-6200 (EU) 61871

LANCOM LX-6200 (EU, Bulk 10) 61874

transmit power and receiver sensitivity

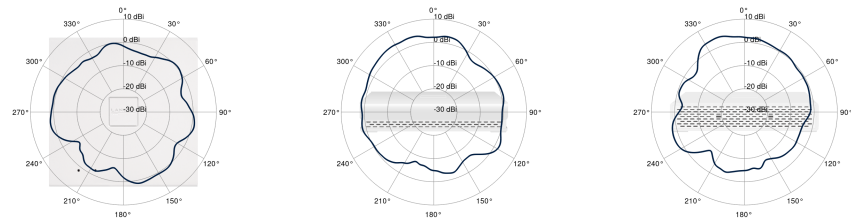
		per chain	two MIMO chains	including internal antenna	receiver sensitivity
802.11b (2,4 GHz)	1 Mbps	15	18	20	-100
	11 Mbps	15	18	20	-92
802.11g (2,4 GHz)	6 Mbps	15	28	20	-95
	54 Mbps	15	18	20	-79
802.11n (2,4 GHz)	MCS0 HT20	15	18	20	-95
	MCS7 HT20	15	18	20	-76
802.11ax (2,4 GHz)	MCS9 HE40	15	18	20	-69
	MCS11 HE40 (2,4 GHz)	15	18	20	-63
802.11a (5 GHz)	6 Mbps	21	24	27	-94
	54 Mbps	21	24	27	-78
802.11n (5 GHz)	MCS0 HT20	21	24	27	-94
	MCS7 HT20	21	24	27	-75
802.11ax (5 GHz)	MCS9 HE80	17	20	23	-64
	MCS11 HE80	14	17	20	-57

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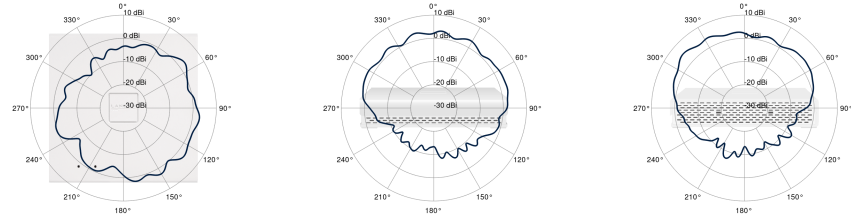
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Antenna Gain

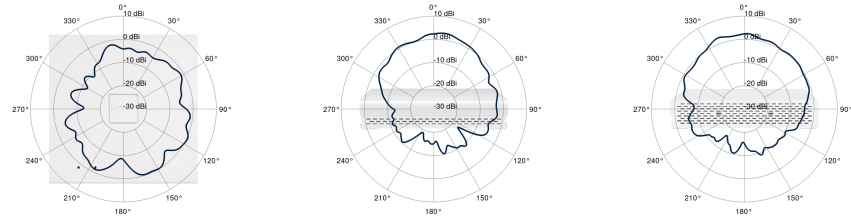
antenna pattern, 2.4 GHz



antenna pattern, 5.2 GHz



antenna pattern, 5.6 GHz



antenna pattern, BLE

