

LANCOM LW-600

Professional entry into highly efficient Wi-Fi 6



With the LANCOM LW-600 you get high-throughput performance of the latest Wi-Fi 6 generation. This access point is the perfect solution wherever powerful Wi-Fi is required for a small to medium-sized number of users. For example, it is perfect for use in hotels, small offices, and doctor's offices or in small schools, and provides an excellent Wi-Fi experience for guests, students, or employees. Thanks to Wi-Fi 6, the LW-600 offers low latency and high throughput per client. With its modern, unobtrusive design, it fits harmoniously into any environment and also scores with an excellent price-performance ratio. It can be conveniently managed by integrating it into the LANCOM Management Cloud (LMC) or as a stand-alone device using the intuitive web interface (WEBconfig). WLAN controller-based operation is also possible.

- 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
- Discreet smoke detector design with integrated antennas
- Intuitive web interface (WEBconfig) for easy management and monitoring
- Zero-touch deployment with a LANCOM WLAN controller or LANCOM Management Cloud
- Support of the security standard WPA3
- Uncompromising and future-proof standards for warranty, support, and software lifecycle management

LCOS LX 6.12

LANCOM LW-600

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

The LANCOM LW-600 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 LW-600 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.

Modern web interface for stand-alone operation

For stand-alone operation, the intuitive web interface of the new WEBconfig provides the best overview for comprehensive management and monitoring. The device is set up in a few moments. Modern dashboards clearly display the current Wi-Fi status and enable the simple configuration of individual Wi-Fi networks (SSID) and the associated network keys. Other options include smart features such as the easy integration of new clients using QR codes.

Operates via the LANCOM Management Cloud

The LANCOM LW-600 offers unsurpassed user-friendliness: Managed through the LANCOM Management Cloud, it integrates into a holistic, automated network orchestration system based on software-defined networking technology. Zero-touch deployment also enables quick and easy network integration as well as automatic assignment of the configuration—without manual effort. After network authentication, the access point immediately receives the right configuration. WLAN anomaly detection is also possible. This function supports the administrator in securing network availability by allowing the LANCOM Management Cloud to identify anomalies in the Wi-Fi and to offer recommendations for solutions that the administrator can implement if desired.

Operation via a WLAN controller

The LANCOM LW-600 offers the best possible flexibility in terms of operating mode. In addition to stand-alone operation or integration into the LANCOM Management Cloud, management can also be performed centrally via a WLAN controller.

Modern smoke detector design

The white, understated housing of the LANCOM LW-600 is ideally suited for discreet use in hotel floors, meeting rooms or classrooms. It fits seamlessly into any environment.

Flexible power supply

Thanks to the power supply via power over Ethernet as per IEEE 802.3af, the LANCOM LW-600 operates at any PoE-powered Ethernet port. Alternatively, the access point operates with a power supply unit supplied with various plug adapters (EU, UK, US, AU).

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LANCOM security for wireless networks

WPA3, the successor of WPA2, offers important upgrades and security features for small ("WPA3-Personal") and large networks ("WPA3-Enterprise"). WPA3-Personal uses the modern and secure authentication method Simultaneous Authentication of Equals (SAE).

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LANCOM LW-600

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)
Integrated Antenna Gain	up to 3 dBi in 2.4 GHz, up to 4 dBi in 5 GHz
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)
Output power at radio module WLAN-1, 2.4 GHz and per chain	→ IEEE 802.11b: +17 dBm @ 1 Mbps, +17 dBm @ 11 Mbps → IEEE 802.11g: +17 dBm @ 6 Mbps, +15 dBm @ 54 Mbps → IEEE 802.11n: +17 dBm @ MCS0/20 MHz, +15 dBm @ MCS7/20 MHz → IEEE 802.11ac/ax: +13 dBm @ MCS9/40 MHz, +10 dBm @ MCS11/40 MHz
Output power at radio module WLAN-2, 5 GHz and per chain	→ IEEE 802.11a: +17 dBm @ 1 Mbps, +16 dBm @ 54 Mbps → IEEE 802.11n: +17 dBm @ MCS0/20 MHz, +16 dBm @ MCS7/20 MHz → IEEE 802.11ac/ax: +14 dBm @ MCS9/80 MHz, +10 dBm @ MCS11/80 MHz
Receiver sensitivity WLAN-1, 2.4 GHz	→ IEEE 802.11b: -95 dBm @ 1 Mbps, -87 dBm @ 11 Mbps → IEEE 802.11g: -89 dBm @ 6 Mbps, -70 dBm @ 54 Mbps → IEEE 802.11n: -89 dBm @ MCS0/20 MHz, -70 dBm @ MCS7/20 MHz → IEEE 802.11ac/ax: -55 dBm @ MCS9/80 MHz, -55 dBm @ MCS11/40 MHz
Receiver sensitivity WLAN-2, 5 GHz	→ IEEE 802.11a: -89 dBm @ 1 Mbps, -70 dBm @ 54 Mbps → IEEE 802.11n: -89 dBm @ MCS0/20 MHz, -70 dBm @ MCS7/20 MHz → IEEE 802.11ac/ax: -58 dBm @ MCS9/80 MHz, -52 dBm @ MCS11/80 MHz
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 16 (simultaneous use of up to 8 independent Wi-Fi networks at WLAN interface 1 and up to 8 independent Wi-Fi networks at WLAN interface 2); time-controlled activation and deactivation of Wi-Fi networks
Concurrent Wi-Fi clients	Up to 128 clients
Hotspot	Support for the Cloud-managed Hotspot in combination with the LANCOM Management Cloud

LANCOM LW-600

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
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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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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

Interfaces

Ethernet ports 1 x 100/1000BASE-T autosensing (RJ-45), IEEE 802.3az, PoE (Power over Ethernet)

Internal antenna Both internal antennas are used by both radio modules via an internal diplexing circuit

Hardware

Power supply 12 V DC, external power adapter (230 V), PoE (Power over Ethernet), compliant with IEEE 802.3af

Power consumption (max) Approx. 11.04 W via 12 V / 1 A power adapter (value solely refers to the power consumption of the access point),
Approx. 10.9 W via PoE (value solely refers to the power consumption of the access point)

Environment Temperature range 0–40 °C. Humidity 0–90 %; non-condensing

Housing Robust synthetic housing, ready for ceiling mounting, dimensions 177.7 mm x 37.7 mm (D x H)

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

United States FCC

Australia / New Zealand RCM

Country of Origin Software designed in Germany, Assembled in Taiwan

*) 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 kit Mounting kit for wall mounting, ceiling mounting and T-rail mounting

Cable Ethernet cable, 1 m

Power supply unit External power adapter (100-240 V), model no. WA-12M12R, 12 V/1 A DC, incl. interchangeable AC plug for EU, UK, US, AU (not included in bulk delivery)

LCOS LX 6.12

LANCOM LW-600

Accessories

LANCOM LW-600 PSU (WW, Bulk 10) 10x white LANCOM LW-600 PSU, 100-240V to 12V/1A DC power adapter, plug adapter for (EU, UK, US, AU) inclusive, item no. 61832

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)

Support

Warranty 3 years
 For details, please refer to the General Warranty Conditions at: www.lancom-systems.com/warranty-conditions

Software updates Regular free updates as part of the LANCOM Lifecycle Managements (www.lancom-systems.com/lifecycle)

Manufacturer support Technical manufacturer support as part of a support contract (LANcommunity partner, LANcare Direct, or LANcare Premium Support)

LANcare Basic S Security updates and manufacturer support until EOL status (min. 5 years, support contract required: LANcommunity partner, LANcare Direct, or LANcare Premium Support), 5 years replacement service with shipment of the device within 5 days after arrival of the faulty device (8/5/5Days), item no. 10720

LANcare Advanced S Security updates and manufacturer support until EOL status (min. 5 years, support contract required: LANcommunity partner, LANcare Direct, or LANcare Premium Support), 5 years NBD advance replacement with delivery of the device on the next 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

LCOS LX 6.12

LANCOM LW-600

Software

Anti-backdoor policy	Products from LANCOM are free of hidden access paths (backdoors) and other undesirable features for introducing, extracting or manipulating data. The trust seal "IT Security made in Germany" (ITSMIG) and certification by the German Federal Office for Information Security (BSI) confirm the trustworthiness and the outstanding level of security.
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LANCOM Management Cloud

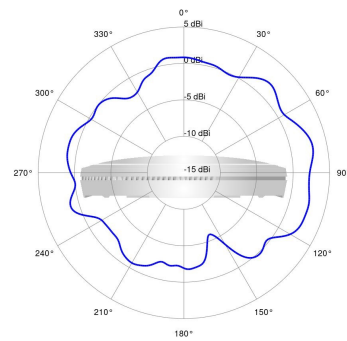
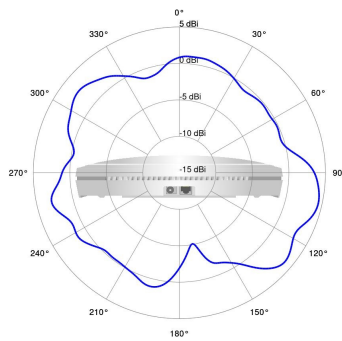
LANCOM LMC-A-1Y LMC License	LANCOM LMC-A-1Y License (1 Year), enables the management of one category A device for one year via the LANCOM Management Cloud, item no. 50100
LANCOM LMC-A-3Y LMC License	LANCOM LMC-A-3Y License (3 Years), enables the management of one category A device for three years via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

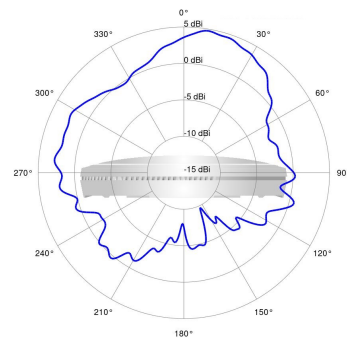
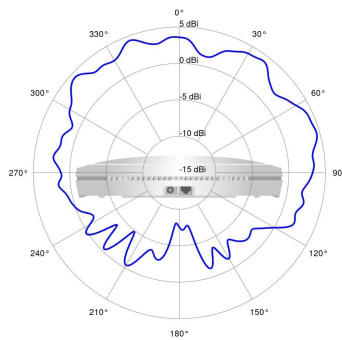
LANCOM LW-600 (WW)	61829
LANCOM LW-600 (WW, Bulk 10)	61831

Antenna Gain

antenna pattern, 2.4 GHz



antenna pattern, 5.2 GHz



LANCOM LW-600

Antenna Gain

antenna pattern, 5.6 GHz

