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- an 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

LANCOM
Systems

LANCOM LW-600

Dual concurrent Wi-Fi with an aggregated datarate 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).

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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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 (per antenna (2))	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
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
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
Standard IEEE 802.11ac	
Supported features	2x2 MIMO, 80 MHz channels, MU-MIMO, QAM-256
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
Operating modes	
Modes	Standalone, WLC-managed or LANCOM Management Cloud managed
Wi-Fi security	
Encryption options	IEEE 802.1X (WPA3-Enterprise, WPA2-Enterprise), WPA3-Personal, IEEE 802.11i (WPA2-Personal), WEP, LEPS-U (Private PSK), LEPS-MAC
Encryption algorithms	AES-CCMP, AES-GCMP, TKIP, RC4

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Wi-Fi security	
EAP types (authenticator)	EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-FAST
Roaming	
Roaming	IAPP (Inter Access Point Protocol), Fast Roaming (802.11r)
LANCOM Active Radio Control	
Band Steering	Steering of 5GHz clients to the corresponding high-performance frequency band; support for 802.11v
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
Interfaces	
Ethernet ports	1 x 100/1000BASE-T autosensing (RJ-45), IEEE 802.3az, PoE (Power over Ethernet) at LAN1
Internal antenna	Both internal antennas are used by both radio modules via an internal diplexing cirtuit
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, external Syslog, Packet Capturing
Monitoring	LANCOM Management Cloud, WLAN-Controller, WEBconfig, LANmonitor, SNMP
Declarations of Conformity	
CE	EN 62368-1:2014+AC:2015+A11:2017, EN 60601-1-2:2015, EN 62479:2010, EN 301 489-1 V2.1.1, EN 301 489-17 V3.1.1, EN 300 328 V2.2.2, EN 301 893 V2.1.1
Country of Origin	Software designed in Germany, Assembled in Taiwan
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)
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)
Support	
Warranty	3 years support
Software updates	Regular free updates
Options	
LANCOM Warranty Basic Option S	Option to extend the manufacturer´s warranty from 3 to 5 years, item no. 10710
LANCOM Warranty Advanced Option S	Option to extend the manufacturer´s warranty from 3 to 5 years and replacement of a defective device, item no. 10715

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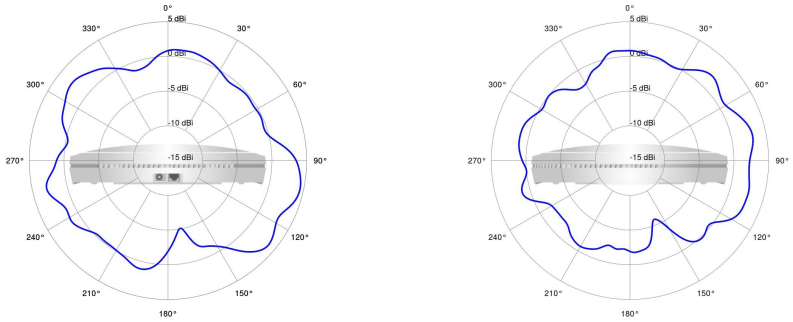
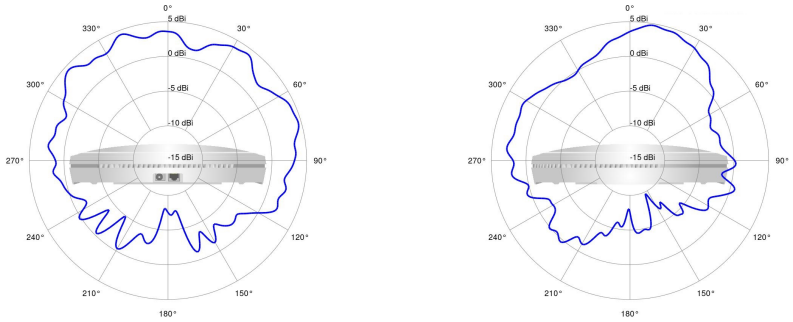
LANCOM Management Cloud	
LANCOM LMC-A-1Y LMC License	LANCOM LMC-A-1Y License (1 Year), enables the management of one category A device for one year via the LANCOM Management Cloud, item no. 50100
LANCOM LMC-A-3Y LMC License	LANCOM LMC-A-3Y License (3 Years), enables the management of one category A device 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	
antenna pattern, 5.6 GHz