

LANCOM LW-500

Great value Wi-Fi for smaller environments



The LANCOM LW-500 features high-throughput 802.11ac Wave 2 wireless LAN (Wi-Fi 5) and is ideal for hotels. It is suitable for inconspicuous ceiling mounting with an understated design that blends harmoniously into any environment. The access point is easily integrated into the network via the LANCOM Management Cloud (LMC) or a WLAN Controller; alternatively, it can be managed as a stand-alone device using the intuitive web interface (WEBconfig). This makes it the ideal solution for expanding your wireless infrastructure at an unbeatable price.

- Dual concurrent Wi-Fi—parallel operation at 2.4 GHz and 5 GHz with IEEE 802.11ac Wave 2 (Wi-Fi 5) and IEEE 802.11n (Wi-Fi 4)
- Unobtrusive 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
- Power supply optionally by Power over Ethernet (IEEE 802.3af) or with included power supply (EU, incl. adapter for UK, US, AU)
- User-friendly, secure integration of external users with the hotspot function of the LANCOM Management Cloud (LMC) or via LANCOM router with public spot option
- Available as individual items or as 10-piece bulk items (shipped without power adapters) for large installations

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LANCOM LW-500

Dual concurrent Wi-Fi with up to 867 Mbps

The LANCOM LW-500 features two Wi-Fi radio modules, one offering IEEE 802.11ac Wave 2 and the other offering IEEE 802.11n. This provides fast Wi-Fi to 11n clients in the 2.4 GHz frequency band and also the growing number of modern 11ac-enabled devices in the 5 GHz band.

Understated smoke-detector design

The white LANCOM LW-500 with integrated antennas has an unobtrusive and harmonious form. The round design similar to a smoke detector makes it ideal for unobtrusive use in hotel lobbies or conference rooms. It blends seamlessly into any environment.

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 moment. 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-500 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.

Flexible power supply

Thanks to the power supply via power over Ethernet as per IEEE 802.3af, the LANCOM LW-500 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).

Zero-touch deployment

Quick and easy network integration of the LANCOM LW-500 as well as automatic assignment of the configuration—without manual effort. In combination with the LANCOM Management Cloud, the access point receives the right configuration immediately after network authentication.

LANCOM security for wireless networks

With numerous integrated security features such as IEEE 802.1X, this access point provides optimal security for networks. Administrators and employees alike benefit from professional security policies on the network.

LANCOM LW-500

Secure integration of external users

Offer your guests a secure and user-friendly hotspot with the LANCOM LW-500. Since the access point is operated in the LANCOM Management Cloud, all you need is any Public Spot-enabled LANCOM device in your network. As a hotspot provider, rest assured that your internal network remains fully isolated from the hotspot.

LANCOM LW-500

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 802.11ac/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	IEEE 802.11b: +20 dBm @ 1 MBit/s, +20 dBm @ 11 MBit/s, IEEE 802.11g: +20 dBm @ 6 MBit/s, +17 dBm @ 54 MBit/s, IEEE 802.11n: +20 dBm @ MCS0/20 MHz, +16 dBm @ MCS7/20 MHz, +20 dBm @ MCS0/40 MHz, +16 dBm @ MCS7/40 MHz, +14 dBm @ MCS9/40 MHz
Output power at radio module WLAN-2, 5 GHz	IEEE 802.11a: +19 dBm @ 1 MBit/s, +16 dBm @ 54 MBit/s, IEEE 802.11n: +19 dBm @ MCS0/20 MHz, +16 dBm @ MCS7/20 MHz, +18 dBm @ MCS0/40 MHz, +16 dBm @ MCS7/40 MHz IEEE 802.11ac: +18 dBm @ MCS0/80 MHz, +16 dBm @ MCS7/80 MHz, +14 dBm @ MCS9/80 MHz
Receiver sensitivity WLAN-1, 2.4 GHz	IEEE 802.11b: -92 dBm @ 1 MBit/s, -86 dBm @ 11 MBit/s, IEEE 802.11g: -86 dBm @ 6 MBit/s, -67 dBm @ 54 MBit/s, IEEE 802.11n: -82 dBm @ MCS0/20 MHz, -66 dBm @ MCS7/20 MHz, -79 dBm @ MCS0/40 MHz, -63 dBm @ MCS7/40 MHz, -57 dBm @ MCS9/40 MHz
Receiver sensitivity WLAN-2, 5 GHz	IEEE 802.11a: -85 dBm @ 6 MBit/s, -68 dBm @ 54 MBit/s, IEEE 802.11n: -85 dBm @ MCS0/20 MHz, -64 dBm @ MCS7/20 MHz, -82 dBm @ MCS0/40 MHz, -63 dBm @ MCS7/40 MHz IEEE 802.11ac: -78 dBm @ MCS0/80 MHz, -61 dBm @ MCS7/80 MHz, -54 dBm @ MCS9/80 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 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
Concurrent Wi-Fi clients	Up to 512 clients
Hotspot	Support for the Cloud-managed Hotspot in combination with the LANCOM Management Cloud

Supported Wi-Fi standards

IEEE standards	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 802.11ac

Supported features	2x2 MIMO, 80 MHz channels, MU-MIMO, QAM-256
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LANCOM LW-500

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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Protocols	LLDP, Proxy ARP
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Interfaces

Ethernet ports	2 x 10/100/1000BASE-T autosensing (RJ-45), IEEE 802.3az, PoE (Power over Ethernet) at LAN1
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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 802.3af
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Environment	Temperature range 0–40 °C. Humidity 0–90 %; non-condensing
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Housing	Robust synthetic housing, ready for ceiling mounting, dimensions 176 mm x 30 mm (D x H)
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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
North America	FCC/IC
Australia / New Zealand	RCM
Singapore	IMDA
Country of Origin	Software designed in Germany, Assembled in China
*) 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)

Accessories

LANCOM LW-500 PSU (WW, Bulk 10)	10x black LANCOM LW-500 PSU, 100-240V to 12V/1A DC power adapter, plug adapter for (EU, UK, US, AU) inclusive, item no. 61819
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)

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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
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 LW-500 (WW)	61694
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Item number(s)

LANCOM LW-500 (Bulk 10)

61695

