

LANCOM LW-700

Powerful Wi-Fi 7 - efficient, compact, and economical



The smart entry into the world of Wi-Fi 7: This access point delivers excellent performance and a compelling price-performance ratio—ideal for small to medium environments with moderate Wi-Fi requirements. Thanks to its modern, discreet design, it integrates seamlessly into a wide range of settings—whether in hotels, offices, or medical practices. It can be conveniently managed via the LANCOM Management Cloud (LMC), the intuitive WEBconfig web interface, or alternatively through a WLAN controller.

- Wi-Fi 7 access point with dual-radio Wi-Fi – concurrent operation in 2.4 GHz and 5 GHz
- 2x2 MU-MIMO for concurrent communication with multiple clients in downlink and uplink
- Discreet, practical design with integrated antennas
- 2.5 Gigabit Ethernet port
- Simple management and monitoring thanks to the intuitive web interface (WEBconfig)
- Automated operation via the LANCOM Management Cloud (LMC)
- WLAN controller support (including Layer 3 tunneling)
- Uncompromising and future-proof standards for warranty, support, and software lifecycle management
- Support for the WPA3 security standard



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Faster data transfer

Wi-Fi 7 sets new standards in stability and efficiency for wireless networks. Thanks to Multi-Link Operation (MLO), the optimal available frequency band is always used, or multiple bands are utilized in parallel to maximize bandwidth utilization and minimize latency. Multi-RU (Resource Units) enables even more flexible and efficient use of the radio spectrum during OFDMA transmissions, particularly in environments with numerous simultaneously active client devices. The enhanced 4096-QAM modulation further increases data rates and ensures even more efficient use of channel capacity. The LANCOM LW-700 achieves an aggregated maximum data transfer rate of up to 3.6 Gbps across the supported frequency bands.

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 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

Scan, analyze, and optimize — that's all it takes to make your Wi-Fi more efficient, even at locations with data-intensive applications, high user densities, or interfering external networks. That's exactly the task handled by the LANCOM Active Radio Control 2.0 (ARC 2.0) automation solution! Even under complex conditions, you benefit from holistic, self-learning optimization of your Wi-Fi installation with improved channel distribution, channel width usage, and transmit power. Additionally, ARC 2.0 can prioritize access points managed via the LANCOM Management Cloud according to their actual usage, providing capacity exactly where it is needed based on real usage patterns. This saves your IT administrators manual effort and ensures you get the most out of your Wi-Fi installation. Techpaper: LANCOM Active Radio Control 2.0

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 LW-700 becomes part of a user-friendly, holistic and automated network management system. Even in stand-alone operation, the LW-700 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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Carpooling in the radio field - OFDMA for more efficient data traffic

Orthogonal Frequency Division Multiple Access (OFDMA) also aims to optimize the use of the radio field: The frequency range of a Wi-Fi channel is divided into several frequency blocks within a unit of time, creating sub-channels (sub-carriers) with a narrow channel width of up to 2 MHz. This prevents small data packets, which often originate from IoT devices, from taking up and blocking an entire channel with a width of 20, 40 or even 80 MHz. In addition, the LW-700 bundles several sub-channels and transports them together like a kind of carpool to enable the freest and smoothest possible radio traffic.

Practical housing design

The design of the LANCOM LW-700 is based on decades of market experience and valuable user feedback. The flattened shape on the sides gives it a discreet appearance that blends seamlessly into any environment. The mounting plate included in the accessories is compatible with the drill holes of the previous models LANCOM LW-600 and LANCOM LW-500.



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Wi-Fi product specification

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| Frequency band 2.4 GHz and 5 GHz | 2400-2483.5 MHz (ISM), 5150-5700 MHz (depending on country-specific restrictions) |
| Integrated Antenna Gain (peak gain) | up to 5 dBi in 2.4 GHz and 5 GHz |
| Data rates IEEE 802.11be | → up to 688 MBit/s nach according to IEEE 802.11be with MCS13/QAM-4096 at 2,4 GHz, 2x2 MIMO and 40 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 |
| Data rates IEEE 802.11ax | → 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 → up to 2400 MBit/s according to IEEE 802.11ax with MCS11/QAM-1024 at 5 GHz, 2x2 MIMO and 160 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 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) |

Supported Wi-Fi standards

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| 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

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| Supported features | MLO, OFDMA Multi-RUs, QAM-4096 |
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Standard IEEE 802.11ax

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| 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

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

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| 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

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

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| 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

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| Roaming | IAPP (Inter Access Point Protocol), Fast Roaming (802.11r), OKC, Pre-Authentication, 802.11k |
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LANCOM Active Radio Control

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| 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

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| 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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Layer 2 functions

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| 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, (R)STP |
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Network

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| 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

Internal antenna internal Antennas for WLAN

Hardware

Power consumption idle: 8.0W; max. 15.5W

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

Housing robust housing made of polycarbonate and aluminium, kensington-lock, 185 x 185 x 39 mm

Weight (including mounting plate) 820 g

Power supply 12 V DC external plug-in power supply (not included), PoE (Power-over-Ethernet) according to IEEE 802.3at

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

Conformity*

Europe/EFTA CE

Australia / New Zealand RCM

Applicable for use in medical environments (EN 60601-1-2) conforms to EN 60601-1-2

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, mounting clips for mounting on suspended ceilings

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)



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Support

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| 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 |
| 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

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| 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. |



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LANCOM Management Cloud

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| 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)

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|------------------------|-------|
| LANCOM LW-700 | 61931 |
| LANCOM LW-700 (Bulk 5) | 61932 |

