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LANCOM 730-4G+

The flexible LTE/4G network extension



The easy way to extend your network infrastructure with LTE-Advanced for fast Internet at up to 300 Mbps. The device is ideally suited for the application as modem or "external LTE antenna" for backup purposes. Applied as a router it easily integrates into networks and, thanks to Power over Ethernet, it can operate without an extra power supply unit. So you can position the device wherever the 4G signal is strongest.

- → LTE/4G Internet access router for up to 300 Mbps
- → VRRP support ("external LTE antenna")
- → Professional backup function when combined with a LANCOM router
- → Easily connected to a LANCOM router or PoE switch
- → Gigabit Ethernet
- → Integration into the LANCOM Management Cloud
- → Powered by PoE or power supply unit
- → Also operates as a stand-alone LTE/4G router
- → Maximum future compatibility, reliability, and security "Engineered in Germany"

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Mobile radio with up to 300 Mbps

With an integrated cellular modem that supports LTE/4G advanced, the LANCOM 730-4G+ supports wireless broadband connectivity with speeds up to 300 Mbps. It is also ideally suited for intelligent backup scenarios.

VRRP support

By supporting VRRP, the LANCOM 730-4G+ provides LTE/4G connectivity to other network gateways as "external LTE antenna" within seconds.

Gigabit Ethernet with PoE

The LANCOM 730-4G+ has a PoE-enabled Gigabit Ethernet port. This makes it quick and easy to integrate into the network and the device can be freely positioned wherever the 4G signal is strongest.

Integration into the LANCOM Management Cloud

The LANCOM 730-4G+ is effortlessly managed and monitored by the LANCOM Management Cloud. The LANCOM Management Cloud is the world's first management system for the intelligent organization, optimization and control of your entire network. This radically simplifies the management of installations, from small to very large scenarios.

Maximum future-proofing and digital sovereignty

As an established German manufacturer of IT network solutions, LANCOM stands for reliability and know-how. Software and hardware development as well as production take place primarily in Germany, as does the hosting of the network management. Special attention is given to providing trusted solutions with outstanding security features. Another important security characteristic of the products is that they are free from backdoors, as awarded by the German Federal Ministry of Economy with the quality seal “IT Security made in Germany”. All devices are always equipped with with hardware that is dimensioned for the future. Even across product generations, updates to the LANCOM operating system family LCOS are available several times a year, free of charge. his guarantees a long service life while staying technically up to date, which represents a true protection of your investment. In addition, LANCOM infrastructures are easily scalable thanks to maximum compatibility.

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LTE modem	
Supported standards	LTE, UMTS and HSPA support (mode of transmission automatically or manually adjustable), 2G/GSM is not supported
Supported mobile bands (3G/4G)	Band 1 (2100 MHz), Band 2 (1900 MHz), Band 3 (1800 MHz), Band 4 (2100 MHz), Band 5 (800 MHz), Band 7 (2600 MHz), Band 8 (900 MHz), Band 12 (700 MHz), Band 13 (700 MHz), Band 20 (800 MHz), Band 25 (1900 MHz), Band 26 (800 Mhz), Band 29 (700 MHz), Band 30 (2300 MHz), Band 38 (2600 MHz), Band 41 (2500 MHz)
Maximum transmission power	+23 dBm
Diversity support	Receive diversity on the aux antenna (3G); MIMO (2x2) for LTE (4G)
Supported SIM card formats*	Mini-SIM (2FF), Micro-SIM (3FF) via adaptor, Nano-SIM (4FF) via adaptor
SIM pin	Changing of SIM pin via LANconfig or CLI (command line interface)
*) Note	LANCOM Systems recommends the use of a standard SIM (2FF / Mini-SIM)

Layer 2 features	
VLAN	4.096 IDs based on IEEE 802.1q, dynamic assignment
Multicast	IGMP-Snooping, MLD-Snooping

Layer 3 features	
Firewall	Stateful inspection firewall including paket filtering, extended port forwarding, N:N IP address mapping, paket tagging, support for DNS targets, user-defined rules and notifications
Quality of Service	Traffic shaping, bandwidth reservation, DiffServ/TOS, packetsize control, layer-2-in-layer-3 tagging
Security	Intrusion Prevention, IP spoofing, access control lists, Denial of Service protection, detailed settings for handling reassembly, session-recovery, PING, stealth mode and AUTH port, URL blocker, password protection, programmable reset button
PPP authentication mechanisms	PAP, CHAP, MS-CHAP, and MS-CHAPv2
High availability / redundancy	VRRP (Virtual Router Redundancy Protocol), analog/GSM modem backup
Router	IPv4-, IPv6-, NetBIOS/IP multiprotokoll router, IPv4/IPv6 dual stack
Router virtualization	ARF (Advanced Routing and Forwarding) up to separate processing of 2 contexts
IPv4 services	HTTP and HTTPS server for configuration by web interface, DNS client, DNS server, DNS relay, DNS proxy, dynamic DNS client, DHCP client, DHCP relay and DHCP server including autodetection, NetBIOS/IP proxy, NTP client, SNTP server, policy-based routing, Bonjour-Proxy, RADIUS
IPv6 services	HTTP and HTTPS server for configuration by web interface, DHCPv6 client, DHCPv6 server, DHCPv6 relay, DNS client, DNS server, dynamic DNS client, NTP client, SNTP server, Bonjour-Proxy, RADIUS
Dynamic routing protocols	RIPv2

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Layer 3 features	
IPv4 protocols	DNS, HTTP, HTTPS, ICMP, NTP/SNTP, NetBIOS, PPPoE (server), RADIUS, RADSEC (secure RADIUS), RTP, SNMPv1,v2c,v3, TFTP, TACACS+, IGMPv3
IPv6 protocols	NDP, stateless address autoconfiguration (SLAAC), stateful address autoconfiguration (DHCPv6), router advertisements, ICMPv6, DHCPv6, DNS, HTTP, HTTPS, PPPoE, RADIUS, SMTP, NTP, Syslog, SNMPv1,v2c,v3, MLDv2, NPTv6 (NAT66)
Tunneling protocols (IPv4/IPv6)	6to4, 6in4, 6rd (static and over DHCP), Dual Stack Lite (IPv4-in-IPv6-Tunnel), 464XLAT

Security	
Intrusion Prevention	Monitoring and blocking of login attempts and port scans
IP spoofing	Source IP address check on all interfaces: only IP addresses belonging to the defined IP networks are allowed
Access control lists	Filtering of IP or MAC addresses and preset protocols for configuration access
Denial of Service protection	Protection from fragmentation errors and SYN flooding
General	Detailed settings for handling reassembly, PING, stealth mode and AUTH port
Password protection	Password-protected configuration access can be set for each interface
Alerts	Alerts via e-mail, SNMP traps and SYSLOG
Authentication mechanisms	EAP-TLS, EAP-TTLS, PEAP, MS-CHAP, MS-CHAPv2 as EAP authentication mechanisms, PAP, CHAP, MS-CHAP and MS-CHAPv2 as PPP authentication mechanisms
Adjustable reset button	Adjustable reset button for 'ignore', 'boot-only' and 'reset-or-boot'

High availability / redundancy	
VRRP	VRRP (Virtual Router Redundancy Protocol) for backup in case of failure of a device or remote station.
FirmSafe	For completely safe software upgrades thanks to two stored firmware versions, incl. test mode for firmware updates
LTE-Backup	In case of failure of the main connection, a backup connection is established over the internal LTE modem; automatic return to the main connection
Analog/GSM modem backup	Optional operation of an analog or GSM modem at the serial interface

Performance	
Routing-Performance	Data regarding the overall routing performance can be found inside the LANCOM tech paper "Routing-Performance" on www.lancom-systems.com

Interfaces	
ETH1 (PoE)	10/100/1000 Base-T, autosensing, auto node hub, PoE compliant with IEEE 802.3af/at. The port supports energy saving according to IEEE 802.3az

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Interfaces	
Serial interface	Serial configuration interface / COM port (8 pin Mini-DIN): 9,600 - 115,000 baud, suitable for optional connection of analog/GPRS modems. Supports internal COM port server and allows for transparent asynchronous transmission of serial data via TCP
External antenna connectors	Two SMA antenna connectors for external LTE antennas (Ant 1, Ant 2)

Management and monitoring	
Management	LANCOM Management Cloud, LANconfig, WEBconfig, LANCOM Layer 2 management (emergency management)
Management functions	Alternative boot configuration, voluntary automatic updates for LCMS and LCOS, individual access and function rights up to 16 administrators, RADIUS and RADSEC user management, remote access (WAN or (W)LAN, access rights (read/write) adjustable seperately), SSL, SSH, HTTPS, Telnet, TFTP, SNMP, HTTP, access rights via TACACS+, scripting, timed control of all parameters and actions through cron job
FirmSafe	Two stored firmware versions, incl. test mode for firmware updates
automatic firmware update	configurable automatic checking and installation of firmware updates
Monitoring	LANCOM Management Cloud, LANmonitor, WLANmonitor
Monitoring functions	Device SYSLOG, SNMPv1,v2c,v3 incl. SNMP-TRAPS, extensive LOG and TRACE options, PING and TRACEROUTE for checking connections, internal logging buffer for firewall events
Monitoring statistics	Extensive Ethernet, IP and DNS statistics; SYSLOG error counter, accounting information exportable via LANmonitor and SYSLOG
IPerf	IPerf is a tool for measurements of the bandwidth on IP networks (integrated client and server)
SLA-Monitor (ICMP)	Performance monitoring of connections
Netflow	Export of information about incoming and outgoing IP traffic

Hardware	
Weight	1,1 lbs (500 g)
Power supply	Via Power over Ethernet, compliant with IEEE 802.3af/at
Environment	Temperature range 0° to +40°C a vertical mounting position using the LANCOM Wall Mount; Temperature range 0° to 35°C a horizontal mounting position and adequate ventilation; humidity up to 95%; non-condensing; In order to prevent overheating of the device the LTE module is deactivated automatically.
Housing	Robust synthetic housing, rear connectors, ready for wall mounting, Kensington lock; 210 x 45 x 140 mm (W x H x D)
Fans	None; fanless design without rotating parts, high MTBF
Power consumption (max)	Approx. 12 W via power adapter (value refers to the overall power for thedevice and power adapter), about 11 W via PoE (value refers to the power for the device only)

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Declarations of conformity*	
Europe/EFTA	CE
IPv6	IPv6 Ready Gold
Country of Origin	Made in Germany
*) Note	You will find all declarations of conformity on our website at www.lancom-systems.com/doc

Scope of delivery	
Manual	Hardware Quick Reference (DE/EN), Installation Guide (DE/EN)
Cable	1 Ethernet cable, 3 m
Antennas	Two 2 dBi LTE/UMTS-antennas
Power supply unit	External power adapter (230 V), NEST 12 V/2.0 A DC/S, coaxial power connector 2.1/5.5 mm, temperature range from -5 to +45° C, LANCOM item no. 111303 (EU)

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
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)

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Support	
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

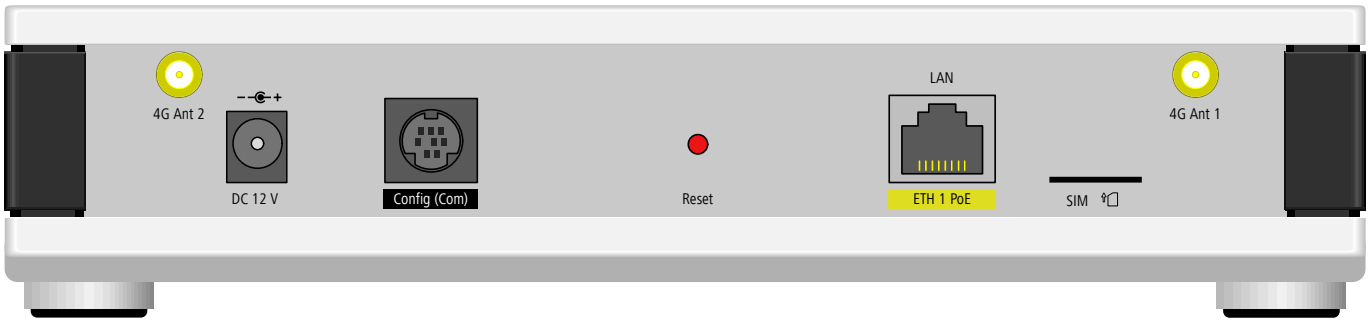
Accessories	
External antenna	AirLancer I-360D-5G, omnidirectional outdoor antenna MIMO (2x2), for all 4G/5G bands (698-3800 MHz), item no. 60919
External antenna	AirLancer O-360D-5G, omnidirectional outdoor antenna MIMO (2x2), for all 4G/5G bands (698-3800 MHz), item no. 61233
19" Rack Mount	19" rack mount adaptor, item no. 61501
19" Rack Mount	19" rack mount plus adaptor, item no. 61644
LANCOM Wall Mount	For simple, theft-proof mounting of LANCOM devices with plastic housings, item no. 61349
LANCOM Wall Mount (White)	For simple, theft-proof mounting of LANCOM devices with plastic housings, item no. 61345

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Item number(s)	
LANCOM 730-4G+ (EU)	61705



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