

### Flexibly usable LTE/4G Internet access router

The LANCOM 730-4G offers a convenient way to enhance your network infrastructures with LTE/4G. The Gigabit Ethernet port allows the high-speed integration of the LANCOM 730-4G into your network. At the same time Power over Ethernet saves the need for an additional power supply unit. The device can thus be freely positioned wherever the best 4G signal is available to fully exploit the LTE/4G data rates of up to 100 Mbps. Thereby, it is an ideal and fully integrated solution for a mobile Internet connection, especially for critical installations, or where you need a backup connection.

- > Flexibly usable LTE/4G Internet access router for up to 100 Mbps
- > Support of VRRP
- > Professional backup function when combined with a LANCOM router
- > Easily connected to a LANCOM router or PoE switch
- > Gigabit Ethernet
- > Full integration into the LANCOM Management Cloud
- > Powered by PoE or power supply unit
- > Also operates as a stand-alone LTE/4G router
- > Backwards compatible to older cellular standards (2G/3G)



#### **Highest operational security**

Thanks to VRRP support, the LANCOM 730-4G supplies an LTE connection to other gateways within the network within seconds.

#### Integrated 4G modem for data rates up to 100 Mbps

With an integrated cellular modem that supports LTE/4G, the LANCOM 730-4G supports wireless broadband connectivity with speeds up to 100 Mbps. It is also ideally suited for intelligent backup scenarios.

#### Maximum future-proofing

LANCOM products are based on professional expertise, years of experience in IT, and high-quality materials. All of our devices are equipped with hardware that is dimensioned for the future and, even reaching back to older product generations, updates to the LANCOM Operating System—LCOS—are available several times a year, free of charge. This guarantees a long service life while staying technically up to date, which represents a true protection of your investment.

#### **Security Made in Germany**

In a market with a strong presence of American and Asian products, LANCOM offers maximum security "Made in Germany". The entire LANCOM core product range is developed and manufactured in Germany and tested according to the highest standards of security, data protection and quality. The company's own "closed-source" operating system LCOS is developed at the company headquarters in Germany. Our own team of developers works in a highly secure environment as certified by the BSI (German Federal Office for Information Security), all of which is subject to the highest standards of security, encryption, and quality.

#### **Easy network installation**

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.

#### Full 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.



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LTE modem	
Supported standards	LTE, UMTS, HSPA, Edge and GPRS support (mode of transmission automatically or manually adjustable)
LTE-bands	800/900/1800/2100/2600 MHz (automatically or manually adjustable)
UMTS and HSPA bands	900/2100 MHz
EDGE/GPRS bands	850/900/1800/1900 MHz
Maximum transmission power UMTS/HSxPA	+24 dBm
Diversity support	Receive diversity on the aux antenna (2G + 3G); MIMO (2x2) for LTE (4G)
Supported SIM card formats	Mini-SIM (2FF), Micro-SIM (3FF) via adaptor, Nano-SIM (4FF) via adaptor
Multi-SIM support	Supported
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, Q-in-Q tagging
Multicast	IGMP-Snooping
Layer 3 features	
Firewall	Stateful inspection firewall including paket filtering, extended port forwarding, N:N IP address mapping, paket tagging, 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, DHCF 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
IPv6 compatible LCOS applications	WEBconfig, HTTP, HTTPS, SSH, Telnet, DNS, TFTP, firewall, RAS dial-in
Dynamic routing protocols	RIPv2
IPv4 protocols	DNS, HTTP, HTTPS, ICMP, NTP/SNTP, NetBIOS, PPPoE (server), RADIUS, RADSEC (secure RADIUS), RTP, SNMPv1,v2c,v3, TFTP, TACACS-
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
Tunneling protocols (IPv4/IPv6)	6to4, 6in4, 6rd (static and over DHCP), Dual Stack Lite (IPv4-in-IPv6-Tunnel)
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



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Security	
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 PPF 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" or www.lancom-systems.eu
WAN operating mode	
UMTS/LTE	GPRS, Edge, UMTS, HSPA or LTE with internal mobile modem
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
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
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
SD-LAN	SD-LAN – automatic LAN configuration via the LANCOM Management Cloud
SD-WAN	SD-WAN – automatic WAN configuration via the LANCOM Management Cloud
Hardware	
Weight	1,1 lbs (500 g)
Power supply	12 V DC, external power adapter (230 V) with bayonet cap to protect against accidentally unplugging
Power supply	Via Power over Ethernet, compliant with IEEE 802.3af*/at
Environment	Temperature range 0–35° C; humidity 0–95%; non-condensing
Housing	Robust synthetic housing, rear connectors, ready for wall mounting, Kensington lock; 210 x 45 x 140 mm (W x H x D)
5	None; fanless design without rotating parts, high MTBF
Fans	



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Hardware	
Power consumption (max)	Approx. 16.8 W via 12V/1.5 A power adapter (value refers to the overall power for thedevice and power adapter), about 19 W via PoE (value refers to the power for the device only)
*) Note	The 3G/4G modes are supported using PoE IEEE 802.3af power supply. In case the WWAN radio is operated in 2G mode, LANCOM recommends using an IEEE 802.3at-capable PoE-adaptor or switch.
Declarations of conformity*	
CE	EN 60950-1, EN 55022, EN 55024
IPv6	IPv6 Ready Gold
Country of Origin	Made in Germany
*) Note	You will find all declarations of conformity in the products section of our website at www.lancom-systems.eu
Scope of delivery	
Manual	Hardware Quick Reference (DE/EN), Installation Guide (DE/EN)
Cable	1 Ethernet cable, 3 m
Antennas	Two 2 dBi Edge/UMTS/LTE-antennas
Power supply unit	External power adapter (230 V), NEST 12 V/1.5 A DC/S, coaxial power connector 2.1/5.5 mm bayonet, temperature range from -5 to +45° C, LANCOM item no. 111301 (EU)/LANCOM item no 110829 (UK)
Support	
Warranty	3 years support
Software updates	Regular free updates (LCOS operating system and LANtools) via Internet
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
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 Extender O-360-3G 4 dBi omnidirectional GSM/GPRS/EDGE/3G outdoor antenna, item no. 61225
External antenna	AirLancer Extender I-360-3G 2dBi GSM/GPRS/EDGE, 5dBi 3G, omnidirectional indoor antenna, item no. 60916
External antenna	AirLancer Extender O-360-4G omnidirectional GSM/GPRS/EDGE/UMTS/HSPA+/LTE outdoor antenna, item no. 61227
External antenna	AirLancer Extender I-360-4G, +2.5 dBi 4G/3G/2G antenna, 698-960 and 1710-2700 MHz, omnidirectional MIMO indoor antenna, item no. 60918
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
Item number(s)	
LANCOM 730-4G (EU)	61710



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 Item number(s)

 LANCOM 730-4G (UK)
 61711





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