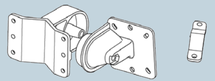
SECURE. NETWORKS.

LANCOM OAP-821
Quick Reference Guide

LANCOM
Systems

Mounting

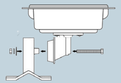


Screw the connector flange ② to the back of the housing with the four screws and their washers.

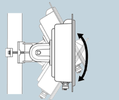
Wall mounting
Use the mounting arm ① as a template. Fix the mounting arm to the wall with the supplied screws and dowling plugs.

Pole mounting
Place the clamp profile ③ around the pole. Screw the clamp profile onto the mounting arm with the supplied screws.

Attach the access point with the connector flange ② to the mounting arm ①. Use the M8 x 110 bolt with spring locking washer, washer and nut.



The main beam direction of the integrated antenna can be adjusted by tilting the access point up or down by rotating the connection flange about the mounting arm.



Installing access points and/or external antennas without adequate lightning protection can lead to serious damage to the devices and/or to the related network infrastructure. Screw one end of the green grounding wire to the housing and attach the other end to a suitable ground.

④ Antennas
For 2.4 GHz wireless links, screw the supplied dipole dual-band antennas (not included with the Bridge Kit) to the two N connectors on the underside of the device. Antennas are only to be attached or changed when the device is switched off. Mounting or demounting antennas while the device switched on may cause the destruction of the Wi-Fi module!

⑤ Ethernet interface
Plug in the supplied waterproof power cable to the ETH 1 port on the underside of the device and carefully tighten the threaded connector. Connect the other end of the network cable to the 'Unprotected side' interface of the AirLancer SN-LAN (included with the LANCOM OAP-821 Bridge-Kit).

⑥ Reset button
The reset button is part of the LED block.
To restore the device to its default configuration, keep the reset button on the device pressed until the LEDs on the device go out. The automatic restart that follows restores the default configuration to the device.

⑦ PoE power supply
Connect the PoE injector to a power socket. Use an Ethernet cable to connect the injector's ‚Data-In' interface to a free socket of your local network. Use another Ethernet cable to connect the injector's ‚Data + Power Out' interface to the ‚Protected Side' interface of the AirLancer SN-LAN (included with the LANCOM OAP-821 Bridge-Kit).

⑧ Grounding terminal
Connect one end of the supplied grounding cable to the grounding terminal of the LANCOM OAP-821. Connect the other end of the grounding cable to a suitable grounding system.

The housing of the device may become warm during operation. If the device is operated with outside temperatures exceeding 60 °C, it should be mounted with protection against contact.

A LAN-side surge arrestor AirLancer SN-LAN is an essential requirement for outdoor installations. It is shipped as a standard component of the LANCOM OAP-821 Bridge Kit.

MOUNTING AND CONNECTING THE DEVICE

① Power	
Off	Device switched off
Green, permanently*	Device operational, resp. device paired / claimed and LANCOM Management Cloud (LMC) accessible
Green, blinking	Configuration password not set. Without a configuration password, the configuration data in the device is unprotected.
1x green inverse blinking*	Connection to the LMC active, pairing OK, device not claimed
2x green inverse blinking*	Pairing error, resp. LMC activation code not available
3x green inverse blinking*	LMC not accessible, resp. communication error

② ETH1	
Off	No networking device attached
Green, permanently	Connection to network device operational, no data traffic
Green, flickering	Data traffic

③ WLAN1	
Off	No Wi-Fi network defined or Wi-Fi module deactivated. The Wi-Fi module is not transmitting beacons.
Green	At least one Wi-Fi network is defined and Wi-Fi module activated. The Wi-Fi module is transmitting beacons.
Green, inverse flashing	Number of flashes = number of connected Wi-Fi stations and P2P wireless connections, followed by a pause (default). Alternatively the frequency of the flashing can indicate signal strength over the defined P2P link or the signal strength between the access point and the device operating in client mode.
Green, blinking	DFS scanning or other scan procedure

*) The additional power LED statuses are displayed in 5-seconds rotation if the device is configured to be managed by the LANCOM Management Cloud.

Hardware	
Power supply	Via Power over Ethernet, compliant to IEEE 802.3af / IEEE 802.3at
Power consumption	Maximum of 11 watts, measured on the PoE injector
Environment	-33° C to +70° C
Housing	Robust metal housing, protection class IP66 for wall and pole mounting. Note: For installations in salt-water environments, use a suitable protective housing Dimensions 255 mm x 250 mm x 80 mm (length/width/depth) Weighs ca. 2.8 kg incl. the full pole-mounting equipment
LED displays	3 LEDs for Power, Ethernet and WLAN
Wi-Fi	
Frequency band	2.4 GHz or 5 GHz, 2400-2483.5 MHz (ISM) or 5150-5825 MHz (restrictions vary between countries)
Antenna gain	Up to 18 dBi at 5 GHz on the integrated dual polarization antenna
Range (outdoor/P2P)	The Antenna Distance Calculator is available for free from www.lancom-systems.com.
Radio channels 2.4 GHz	Up to 13 channels, max. 3 non-overlapping (2.4 GHz band)
Radio channels 5 GHz	Up to 26 non-overlapping channels (channels available vary according to country regulations; DFS for automatic dynamic channel selection required)
Interfaces	
ETH	10 / 100 / 1000 Mbps auto-sensing, PoE as per IEEE 802.3af / IEEE 802.3at
External antenna connectors	Two NJ ports
Internal antenna	15° beam angle, 2x2 MIMO, 5 GHz, 18 dBi antenna gain
Declaration of Conformity	
Hereby, LANCOM Systems declares that this radio equipment is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.lancom-systems.com/ce/	
Package content LANCOM OAP-821	
Cable	Waterproof, UV resistant Ethernet PoE cable, screw connector at one end, 15 m
Documentation	Quick Reference Guide (DE/EN), Installation Guide (DE/EN)
Antennas	Two 3 dBi dipole dual band antennas
Power adapter	PoE injector for power supply via Power over Ethernet
Mounting kit	Equipment for wall and pole mounting, screws included
Surge arrestor	Not included. AirLancer SN-LAN optionally available (item no. 61261)
Covering cap	Ensures that the unit remains sealed in case an Ethernet port is unused
Grounding cable	To avoid electrostatic charge
Package content LANCOM OAP-821 Bridge Kit	
Cable	Per LANCOM OAP-821 one waterproof, UV resistant Ethernet PoE cable, screw connector at one end, 15 m
Documentation	Quick Reference Guide (DE/EN), Installation Guide (DE/EN)
Antennas	-
Power adapter	Per LANCOM OAP-821 one PoE injector for power supply via Power over Ethernet
Mounting kit	Equipment for wall and pole mounting, screws included
Surge arrestor	Per LANCOM OAP-821 one AirLancer Extender SN-LAN
Covering cap	Ensures that the unit remains sealed in case an Ethernet port is unused
Grounding cable	To avoid electrostatic charge

This product contains separate open-source software components which are subject to their own licenses, in particular the General Public License (GPL). The license information for the device firmware (LCOS) is available on the device's WEBconfig interface under "Extras > License information". If the respective license demands, the source files for the corresponding software components will be made available on a download server upon request.

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TECHNICAL DETAILS