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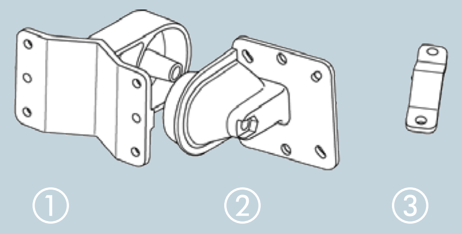
LANCOM OAP-322

Quick Reference Guide

LANCOM
Systems

Mounting

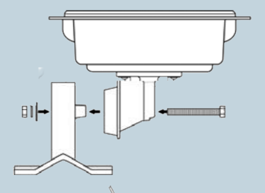


Screw the connector flange ② to the back of the housing with the four screws and their washers.

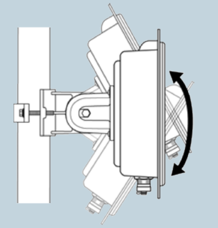
Wall mounting
Use the mounting arm ① as a template. Fix the mounting arm to the wall with the supplied screws and dowling plugs.

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 ③. Use the M8×110 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.

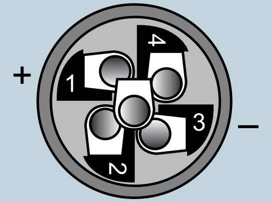


Observe the mounting instructions in the accompanying LANCOM Outdoor Wireless Guide. Installing access points and/or external antennas without adequate lightning protection can lead to serious damage to the devices and/or to the associated network infrastructure.

Assembling a 12–28 V connector cable

As an alternative to PoE power supply, the device can be operated with the LANCOM OAP-320 PSU. If other cable lengths (>15 m) are required, you can assemble these to suit. Observe the following guidelines for cable assembly:

- Use only an outdoor-grade cable with protection class IP67.
- Use a cable with a cross section of the cores of 0.75 mm². The permissible outer diameter of the cable is between 6 and 8 mm.
- For the pin assignment, use pin 1 (positive) and pin 3 (negative). The other pins remain unconnected.
- Use wire-end ferrules that are suitable for the cable you are using.



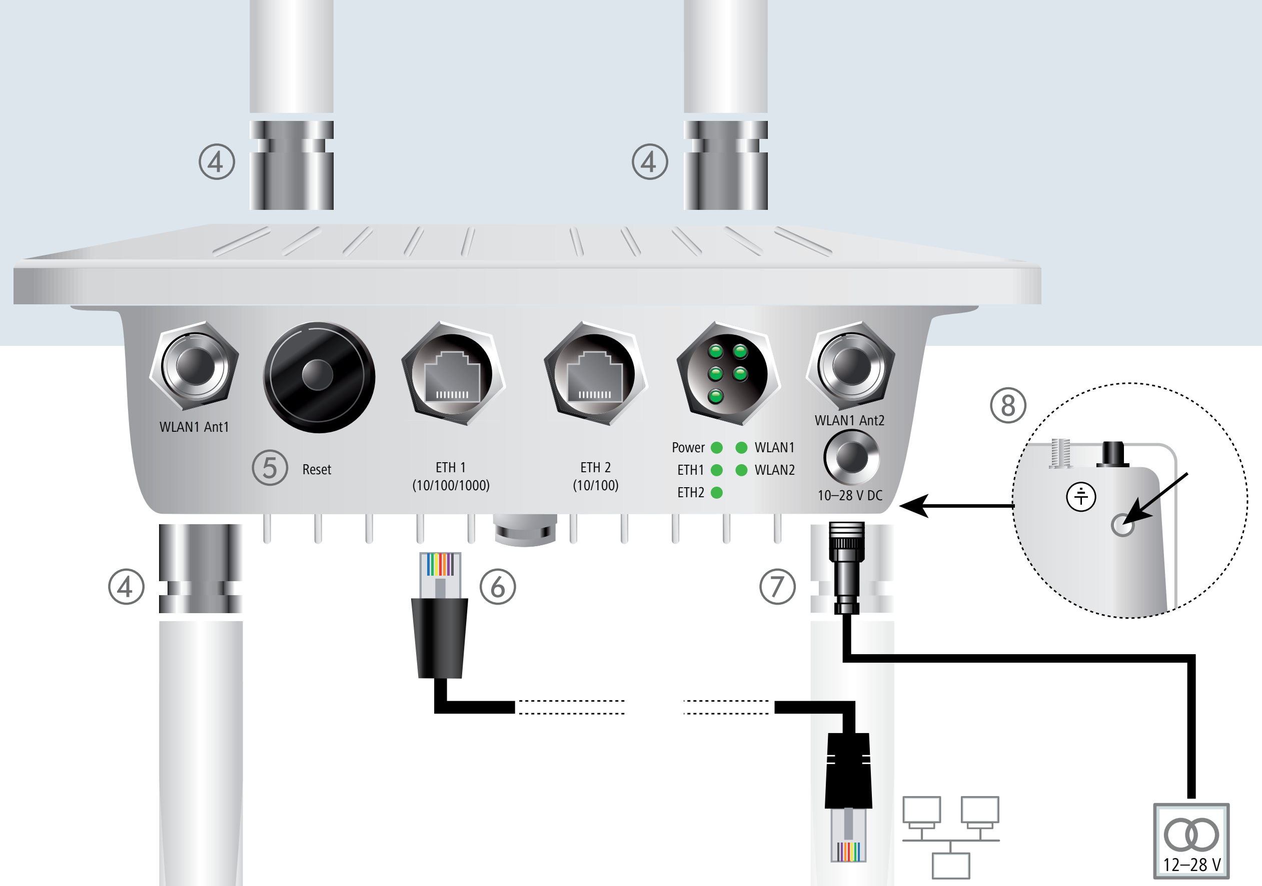
The maximum cable length depends on the supply voltage and ambient temperature. The longer the cable, the greater the power loss. Consider this loss when you select your power supply.

An operating voltage of 10–28 V is necessary at the device. The following guidelines apply for two typical applications:

- Power supply with 12 V: Max. cable length of 30 m at ambient temperatures of 55 °C
- Power supply with 20–24 V: Max. cable length of 150 m at ambient temperatures of up to 70 °C

The cable must be connected with care to ensure that the device remains sealed. Any work required for the electrical installation must be carried out by a trained electrician.

MOUNTING AND CONNECTING THE DEVICE



④ **WLAN antennas**
For the WLAN1 module, screw the supplied WLAN antennas to the terminals WLAN1 Ant1 and WLAN1 Ant2. The terminals for WLAN2 module are located on the reverse side of the device.

⑤ **Reset**
Use a coin to loosen the screw cap. 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.

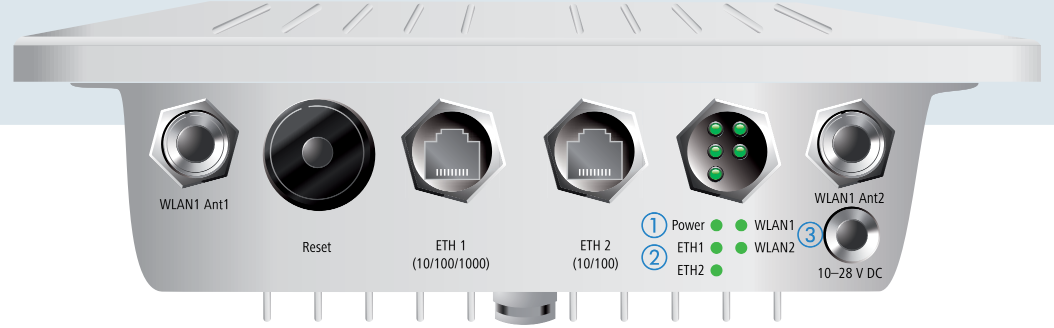
⑥ **LAN**
Using the supplied outdoor Ethernet cable, connect the 'LAN-In' port to a free network socket for your local network.

Alternatively, use PoE to supply power to the device via LAN.

⑦ **Power**
Use an M12 industrial connector to connect your self-assembled cable to a voltage source ranging from 10-28 V DC.

⑧ **Ground**
Screw one end of the green grounding wire to the housing and attach the other end to a suitable ground.

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.



① Power	
Off	Device switched off
Green on, permanently	Device operational
Blinking green	Configuration password not set. Without a configuration password, the configuration data in the device is unprotected.

② ETH1 and ETH2	
Off	No networking device attached
Green on, permanently	Connection to network device operational, no data traffic
Flickering green	Data traffic

③ WLAN1 and WLAN2	
Off	No WLAN network defined or WLAN module deactivated. The WLAN module is not transmitting beacons.
Green	At least one WLAN network is defined and WLAN module activated. The WLAN module is transmitting beacons.
Green inverse flashing	Number of flashes = number of connected WLAN 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.
Blinking green	DFS scanning or other scan procedure

TECHNICAL DETAILS

Hardware	
Power supply	10–28 V DC device operating voltage; alternatively PoE according to IEEE 802.3af
Power consumption	For 12 V: 12 W (as measured by the OAP) For PoE: 12.95 W (as measured by the OAP)
Environment	For 10–28 V: -33°C to +55 °C For 24–28 V: -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 × 250 × 80 mm (length/width/depth)
WLAN	
Frequency band	2.4 GHz or 5 GHz, 2400–2483.5 MHz (ISM) or 5150–5825 MHz (restrictions vary between countries)
Range (outdoor/P2P)	Several kilometers in the 5-GHz band. The Antenna Distance Calculator is available for free from www.lancom.eu.
Minimum transmission power	Transmission-power reduction in software by 1dB steps to min. 0.5 dBm
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	
LAN port (ETH1)	10/100/1000 Mbps, pre-configured LAN port, re-configurable to WAN port
LAN port (ETH2)	10/100 Mbps, pre-configured LAN port, re-configurable to WAN port
External antenna connectors	4 N connectors
Declaration of conformity	
CE	EN 60950-1, EN 60950-22, EN 301489-1 V1.9.2, EN 301 489-17 V2.2.1, EN 300328 V1.8.1, EN 301893 V1.7.1
Notifications	Certifications notified in Germany, Belgium, Netherlands, Luxembourg, Austria, Spain, Switzerland, UK, Italy, Portugal, Czech Republic, Denmark, France
Package content	
Cable	Water-resistant, UV-resistant Ethernet cable with screw connector, 15 m
Manual	Quick Reference Guide (DE/EN), Installation Guide (DE/EN/FR/ES/IT/PT/NL)
CD/DVD	Data medium with management software (LANconfig, LANmonitor, WLANmonitor) and LCOS documentation
Antennas	Four 3-dBi dipole dual-band WLAN antennas
Adapter	5-pin cable connector for a self-assembled cable, LANCOM item no. 110885, can be ordered for free with a coupon
Mounting kit	Equipment for wall and pole mounting, screws included
Covering cap	Ensures that the unit remains sealed in case an Ethernet port is unused