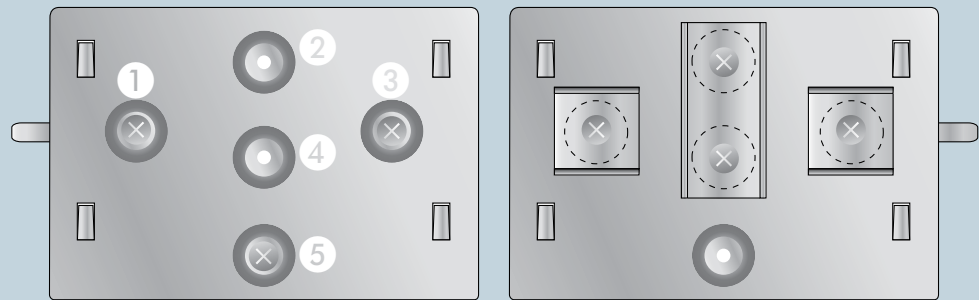


LANCOM IAP-322

Hardware Quick Reference

...connecting your business



Wall mounting

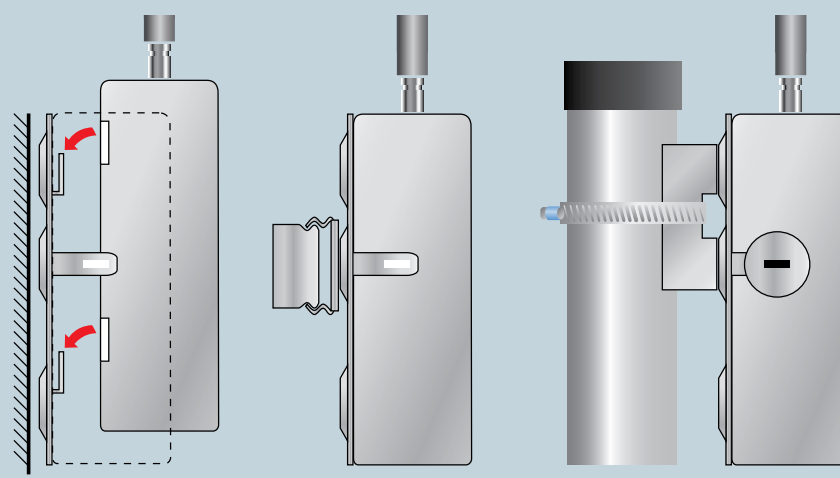
Use the supplied screws to fix the back plate to the wall using the holes 1, 5 and 3.

Top-hat rail mounting

Fix the two top-hat rail clips with the supplied screws through the holes 1 and 3. Leave the screws slightly loose at first so that you can line up the clips properly.

Mast mounting

For mast mounting, use the supplied screws to fix the clamp profile through the holes 2 and 4.



Align the four openings on the rear of the device housing with the clips on the base plate and snap-fit the device.

Top-hat rail mounting only

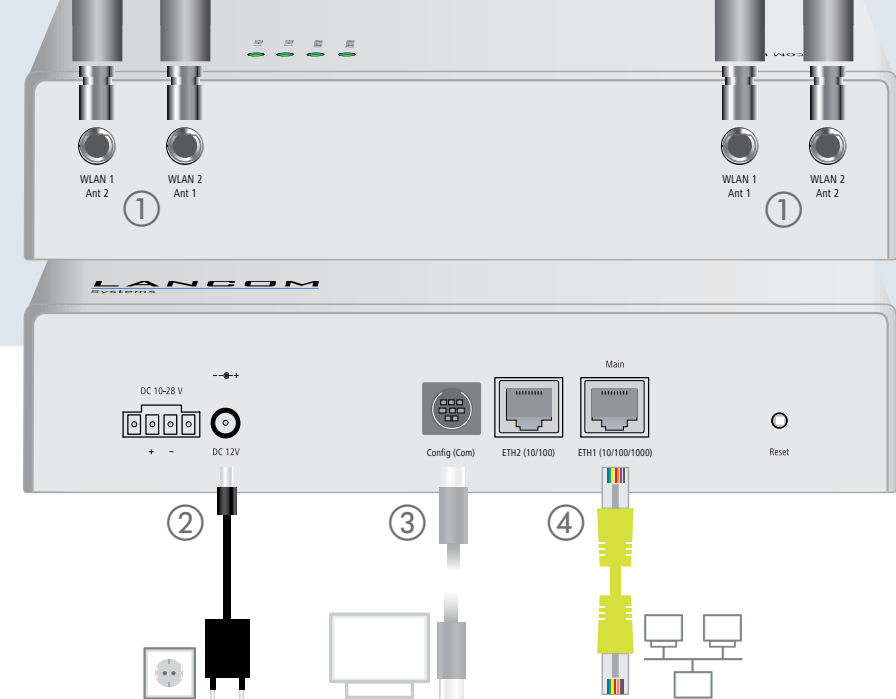
Snap the two top-hat rail clips onto the required position on the top-hat rail.

Mast mounting only

Insert the supplied worm-drive clip (or one suitable for your pole diameter) around the mounting clamp profile. Finally, adjust the worm-drive clip to fix the device in the desired position on the mast.

Optional: Secure with a Kensington lock

The left side of the device features a slot for a Kensington lock. The Kensington lock securely fixes the device to the mounting plate.

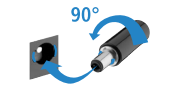


1 WLAN antennas

Screw the WLAN antennas supplied to the connectors WLAN1 Ant 1, WLAN1 Ant 2, WLAN2 Ant 1 and WLAN2 Ant 2. Depending on the antenna ports you use, you may have to configure the 'Antenna grouping' parameter.

2 Power cable

When connecting the cable to the device, turn the bayonet connector 90° clockwise until it clicks into place.



Use only the supplied power adapter. Alternatively, connect the two free pins of the CombiCon connector with a voltage source in the range 10–28 V DC.

3 Optional: Serial configuration cable

Connect the device to a PC with a configuration cable (available as accessory).

4 LAN cable

Use the cable with the green-colored connectors to connect one of the interfaces ETH1 or ETH2 to your PC or a LAN switch. Alternatively, you can connect one of the ETH interfaces to the PoE Injector's 'Power Out' connector.



If you operate separately purchased antennas, please ensure that you do not exceed the maximum allowed transmission power for your system. The system operator is responsible for adhering to the threshold values. For information about calculating the correct antenna setup, please refer to www.lancom-systems.eu.

If you intend to operate both WLAN modules in the same frequency band, we recommend that you connect the antennas via extension cables. In this way they can be positioned further away from one another, which reduces the effects from interference.



Antennas are only to be attached or changed when the device is switched off. Mounting or demounting antennas with the device switched on could destroy the WLAN module!

MOUNTING AND CONNECTING THE DEVICE



1 WLAN1, 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 |

2 ETH1, ETH2

| | |
|-----------------------|-----------------------------------------------------------|
| Off | No networking device attached |
| Green on, permanently | Connection to network device operational, no data traffic |
| Flickering green | Data traffic |

3 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. |
| Blinking red | Charge or time limit reached |

| Hardware | | |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Power supply | 12 V DC, external power adapter (230 V) with bayonet connector to secure against disconnection 24 V DC, input voltage range 10–28 V Via Power-over-Ethernet as per IEEE 802.3af | Please note that depending on the intended use your power supply has to support the extended temperature range. |
| Power consumption | Max. power consumption: 12 W @ 12/24 V | |
| Environment | Temperature range -20 to +50 °C; humidity 0–95%; non-condensing | |
| Housing | Robust metal housing, IP 50 protection class, for wall, mast and top-hat rail mounting, 210 × 152 × 45 mm (length/width/depth), weighs approx. 1.1 kg (without mounting materials) | |

| WLAN | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency band | 2.4 GHz or 5 GHz, 2400–2483.5 MHz (ISM) or 5150–5825 MHz (restrictions vary between countries) |
| 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 | |
|-----------------------------|----------------------------------------------------------------------------------------------------------------|
| ETH1 | 10/100/1000 Mbps auto-sensing, PoE as per IEEE 802.3af |
| ETH2 | 10/100 Mbps auto-sensing, PoE as per IEEE 802.3af |
| External antenna connectors | Four reverse SMA connectors for external LANCOM AirLancer Extender antennas or for antennas from other vendors |
| Config (Com) | Serial configuration interface / COM port (10-pin connector): 19,200–115,000 baud |

| WLAN protocols | |
|----------------|-----------------------------------------------------------------------------------------------------------------|
| Ethernet | PPPoE, Multi-PPPoE, ML-PPP, PPTP (PAC or PNS) and plain Ethernet (with or without DHCP), RIP-1, RIP-2, VLAN, IP |

| Declaration of conformity | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| CE | EN 60950, EN 301489-1, EN 301489-17, EN 300328, EN 301893 |
| UL | UL-2043 |
| Notifications | Certifications notified in Germany, Belgium, Netherlands, Luxembourg, Austria, Spain, Switzerland, UK, Italy, Portugal, Czech Republic, Denmark, France |

| Package content | |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |
| Cable* | Ethernet cable, 3m |
| Split ferrite | Split ferrite (160 ohms @ 10 MHz) for attachment to the Ethernet cable, item no. 74272722 from Würth Elektronik. Please observe a bend radius of at least 3 cm for the Ethernet cable. |
| Combicon connector | For connection to a power supply ranging from 10–28 V DC |
| Antennas | Four 3-dBi dipole dual-band antennas |
| Power adapter* | External power supply adapter (230 V), NEST 12 V/1.5 A DC/S, barrel connector 2.1/5.5 mm bayonet, temperature range -5 to 45°C, LANCOM item no. 110723 (EU), LANCOM item no. 110829 (UK) |

*) not included in bulk pack
License information for the device firmware (LCOS) is available in the file LCOS-Licenses.txt on the data medium supplied.