LANCOM Antenna AirLancer IN-Q180





MOUNTING INSTRUCTIONS

Preparation for wall- and ceiling mounting

Use the antenna as a drilling template to mark out the drill holes for wall- or suspended ceiling mounting. The horizontal and vertical separation of the adjacent holes is 104 mm.

For ceiling mounting, if required, drill a hole into the center of the ceiling board to feed-through the connector cables. Alternatively, you can use the integrated cable duct on the antenna backside to lead the cables sideways.

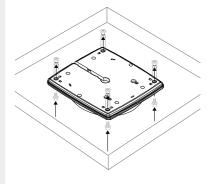
Size of the drill holes

Using the markings as a guide, drill the holes and insert dowels for wall mounting, if appropriate. Depending on the surface material the required size of the holes may vary.

Mounting the antenna

1. Ceiling board mounting with screws and nuts Included: 4 thread screws 30 mm, 4 washers, 4 nuts

From the frontside, stick the thread screws through the appropriate holes of the antenna housing and the previously drilled holes of the ceiling board. Place the washers on the screws from the backside of the ceiling board. Finally, use the nuts for fixing.

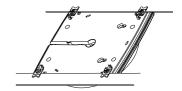


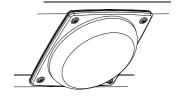
MOUNTING INSTRUCTIONS

2. Ceiling mounting with screws and clips

Included: 4 clips, 4 thread screws 15 mm

Push the clips into the appropriate slides at the backside of the antenna, so that the clips are placed in line with the holes in the antenna housing. Stick the thread screws through the holes in the antenna housing from the front side and loosely connect the screws to the clips. Now the antenna can be moved onto the existing or additionally mounted metal ceiling t-bars. Finally, tighten the screws for proper fixing.

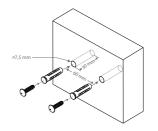


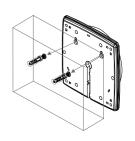


3. Wall mounting with screws & dowels

Included: 4 screws, 4 dowels

Place the antenna with its backside at the wall so that the holes in the antenna housing are in line with the previously inserted dowels. Stick the screws through the holes of the antenna housing into the dowels and tighten the screws.





Operating mode 2x2 MIMO & 2x2 MIMO

The antenna can be operated by two Wi-Fi modules. For this, both red marked antenna connectors are connected to the Wi-Fi module which is operating at 2.4 GHz. Both white marked antenna connectors are connected to the Wi-Fi module which is operating at 5 GHz.

MOUNTING INSTRUCTIONS

Important

Working responsibly with high frequencies

For compliance with protection requirements of the EU directive 2014/53 and EN 62479 in relation to the basic limits for human safety in electromagnetic fields and the "FCC Policy on Human Exposure to Radiofrequency Electromagnetic Fields", it is essential to configure the accurate antenna gain value in the Wi-Fi router or Wi-Fi access point.

Important

Electrical and electronic equipment law

In the interests of recycling, please do not dispose of electrical and electronic waste in your household garbage. Ensure that your electrical and electronic waste is disposed of in accordance with the regulations in your country.

Important Proper handling of antenna cables

Antenna cables are sensitive RF cables. During installation it is important that the cables are not creased and bent as little as possible, otherwise the antenna will suffer a loss in performance. Do not coil the antenna cable in tight loops.

Important

Antenna gain and terminating unused antenna connectors on the access point

It is essential to terminate unused antenna connectors on the access point with the supplied rod antenna. The terminating resistor supplied with the adapter AirLancer AN-RPSMA-NJ is suitable for use with indoor access points. In addition, you have to disable unused antenna connectors in LCOS (changing the antenna grouping of the respective Wi-Fi module), and configure the antenna gain. The settings can be found in LANconfig, resp. in the detail configuration of the LANCOM Management Cloud at: Configuration > Wireless LAN > General > Physical WLAN settings > Radio

| Technical details | |
|---------------------------|--|
| Frequency range | 2400 - 2500 MHz (red marked connectors), 4900 - 5900 MHz (white marked connectors) |
| Antenna characteristics | |
| Radiation characteristics | horizontal (2.4 GHz) 360° vertical (2.4 GHz) 55° horizontal (5 GHz) 220° vertical (5 GHz) 40° |
| Recommended use | Room coverage |
| VSWR | 1.5:1 typ. / 2.5:1 max. |
| Gain | 2.4 GHz 3 dBi max.5 GHz 5 dBi max. |
| Mechanical details | |
| Size | 130 x 130 x 45 mm (length x width x height) |
| Weight | 208 g (antenna without mounting kit) |
| Temperature range | -20 °C to 65 °C |
| Color | White |
| Material | UV-resistant plastic |
| Mounting options | Ceiling- and wall mounting |
| Cables, connectors | 4 x 1 m RG178 cable with RPSMA plug |
| Item | |
| Warranty | 2 years for AirLancer and accessories |
| Item number | 61249 |
| Package content | Antenna, fastening material for ceiling- and wall mounting, mounting instructions |

Antenna patterns

2.4 GHz

5 GHz

