1. Connecting the device

1.1. Opening the service slot cover
The service slot must be opened with a Phillips screw driver in order to put the device into operation.

1.2. Power supply connection
24V DC / 230V AC / PoE
The power for this device can be supplied by a 24V DC (2 pin plug), or as an option, via a 230V AC (3 pin plug) or by a PoE connector.

The corresponding COMBICON connectors are included in the scope of delivery.
Connect the device with a suitable power supply unit.

1.3. RJ45 network cable connection
For initial commissioning it is essential to establish a connection between this device and a PC by using a RJ45 network cable.

To connect the device with a PC:
Device host connector <-> PC LAN connector

1.4. Antennae installation
The four or eight antennas supplied with the device work in the 2.4GHz or in the 5GHz frequency range (two or four each).

One to two antennas of the same type are required for each WLAN module for establishing a radio connection.

Depending on the equipment, one or two WLAN modules can be operated in parallel.

Install the antennas at the device.

Note:
We would recommend to make use of our website contents (www.ads-tec.de) in order to ensure an optimised data quality and to be quickly and comprehensively informed of any technical modification.

2. Network adapter configuration / Opening the web interface

2.1. PC-LAN network adapter configuration
(explained on the example of configuration under Windows XP®)
Open the Properties tab of the network adapter used. The directory path is:

Start› Settings› Network connections› LAN connection› Properties

Select the following option in the pop-up dialogue:
Internet protocol (TCP/IP); then click on **"Properties"**
Here select the following item:

"Use following IP address"
Access to the device is only enabled once the following parameters have been entered:
IP address: 192.168.0.100

(The last section of digits must represent a number between 1 and 253; the value "100" was selected in the example)
Once the IP address was entered, you have to input the **"Subnet mask"** address.
If you click into the **"Subnet mask"** box, the correct address is automatically entered.
Subnet mask: 255.255.255.0

You can now close the dialogue boxes by pushing the "OK" button.

2.2. WLAN network adapter configuration
Repeat the configuration steps of 2.1) with the exception, that the IP address must not be identical, in order to configure the WLAN network adapter.
IP address: 192.168.0.200

(The last section of digits must include a number between 1 and 253; the value "200" was selected in the example)

2.3. Opening the device web interface
Start your web browser in order to open the web interface of this device. Now, enter the following IP address into the address line of your browser and confirm it with **"Enter"**:
http:\\192.168.0.254

2.4. Login
In the Login prompt window, the default settings must be entered.
The default settings, as delivered to the customer, are:
User name: admin
Password: admin
Confirm your entry by pushing **"OK"**.
Now the device web interface will appear.

3. Configuration of WLAN module(s)

3.1. Enabling the WLAN module

In order to enable the WLAN module(s), you have to switch to the following web interface page:
WLAN device > Interfaces
Depending on the device equipment options there are one or two WLAN modules available.
Enable the desired WLAN module by ticking the **"Enable interfaces"** checkbox in the web interface.

3.2. WLAN module configuration
Operational mode:
The operational mode must be defined for the device.
Available are: **Access Point** or **Client**

Network name (SSID):
The SSID represents the name of the WLAN radio network.
The default setting is: **ads**
Any name can be assigned for the network ID.

WLAN mode:
Select the WLAN mode you prefer:

Warning:
Please use the WLAN mode actually supported by your WLAN subscribers.

Regulatory domain:
Select your location.

Warning:
Adherence to settings with the applicable requirements by the regulatory authority and observance of valid antenna amplification limits is the responsibility of the operator/operating company.

Channel: The default setting is: **Auto**

The device automatically selects the optimum setting.

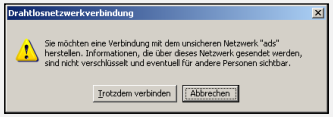
3.3. Saving the settings
The changes you made must finally be activated or saved.
In order to do this, click on the menu item:
Settings› Configuration› General
Click on "**Save**" in the window that appears now. The current configuration is now transmitted and saved.

4. Establishing a connection with the WLAN network

4.1. Establishing a connection with the WLAN network

Click on the WLAN icon  in your taskbar in order to establish a radio connection with the device.
All available WLAN networks are displayed.
Select the radio network with the assigned SSID and click on **"Connect"**.

The following warning will appear:



You have to select **"Connect anyway"** in order to establish a connection with the WLAN network.

Warning:
The current WLAN connection is not encrypted. We recommend using an encryption method. You'll find further information on the issue of encryption in the manual.

5. Security instructions

Note:
Please observe applicable security measures when handling electronic components sensitive to electrostatic charges.

(DIN EN61340-5-1 / DIN EN 61340-5-2).

Warning:
Any installation works on the device is only permitted if the power supply is switched off, and handling the device is safe.

Note:
Hereby, ads-tec GmbH, declares that this WLAN Access Point / Access Client is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The declaration of conformity is available at www.ads-tec.de in the download area.

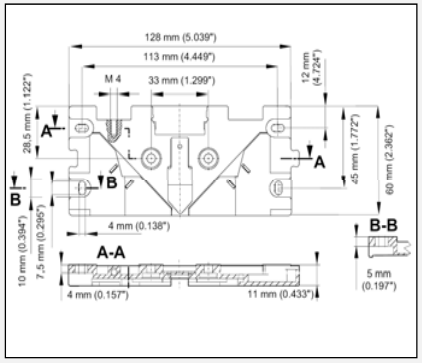
1. Fixing the installation bracket

1.1. Bracket installation

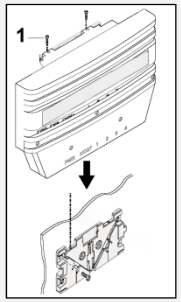
The installation bracket is fixed to the device in the state of delivery.

a) Loosen the Allen screws (M4x12) in order to fix the device at the selected position. **(1)**

b) Fix the installation bracket excluding the device at position you have selected. Make sure that the installation bracket is securely fixed with a minimum of two screws on opposite ends.



c) Attach the device to the fixed installation bracket and ensure that device and installation bracket is flush.

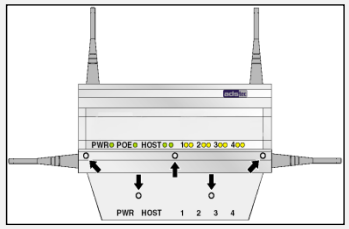


Fix the device on the installation bracket by using both Allen screws previously removed. **(1)**

2. Connecting the supply cables

2.1. Opening the service slot cover

The service slot must be opened in order to install the cables. Remove the five screws indicated by arrows (M3x8).



2.2. Power supply connection

The power for this device can be supplied by a 24V DC (2 pin plug), or as an option, via a 230V AC (3 pin plug) or by a PoE connector.

24 V DC power supply

PIN NUMBER	SIGNAL NAME
1	24V DC
2	N

110/230V AC power supply

PIN NUMBER	SIGNAL NAME
1	L
2	PE
3	N

PoE (Power over Ethernet)

PIN NUMBER	SIGNAL NAME
1	TX +
2	TX -
3	RX +
4	PoE/G
5	PoE/G
6	RX -
7	PoE/-48V
8	PoE/-48V

The PWR LED will continuously light green as soon as the power supply is connected with the device.
For initial commissioning it is essential to establish a connection between this device and a PC by using a RJ45 network cable.

To connect this device with a PC: Device host connector <-> PC LAN connector

3. Routing cables through grommets

3.1. Cable installation

Existing grommets are used for cable protection and in order to ensure compliance with the IP65 protection class.
Insert the connected cables into the grommets so that the grommets fully enclose the cables.

Select the grommet size in accordance with the corresponding cable diameter.
Then put the cable, including the grommet, in the recess provided for it.

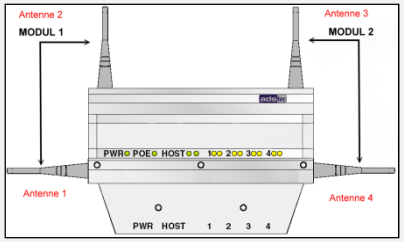
3.2. Closing the service slot

Make sure that all grommets are properly seated in the recesses provided for them.
Now close the service slot and fix it using the previously removed screws (M3x8).

4. Montage der Antennen

4.1. Antennae installation

Two antennas should be installed for operating a WLAN module.



The device is capable of operating two modules for different WLAN networks in parallel mode.
The correct antenna installation for one module includes one horizontally aligned and one vertically aligned antenna.
The four or eight antennas supplied with the device work in the 2.4GHz or in the 5GHz frequency range (two or four each).
Install the antennas at the device.

5. Drill template (1:1)