

MOD WiFi Communication Module

Quick Start

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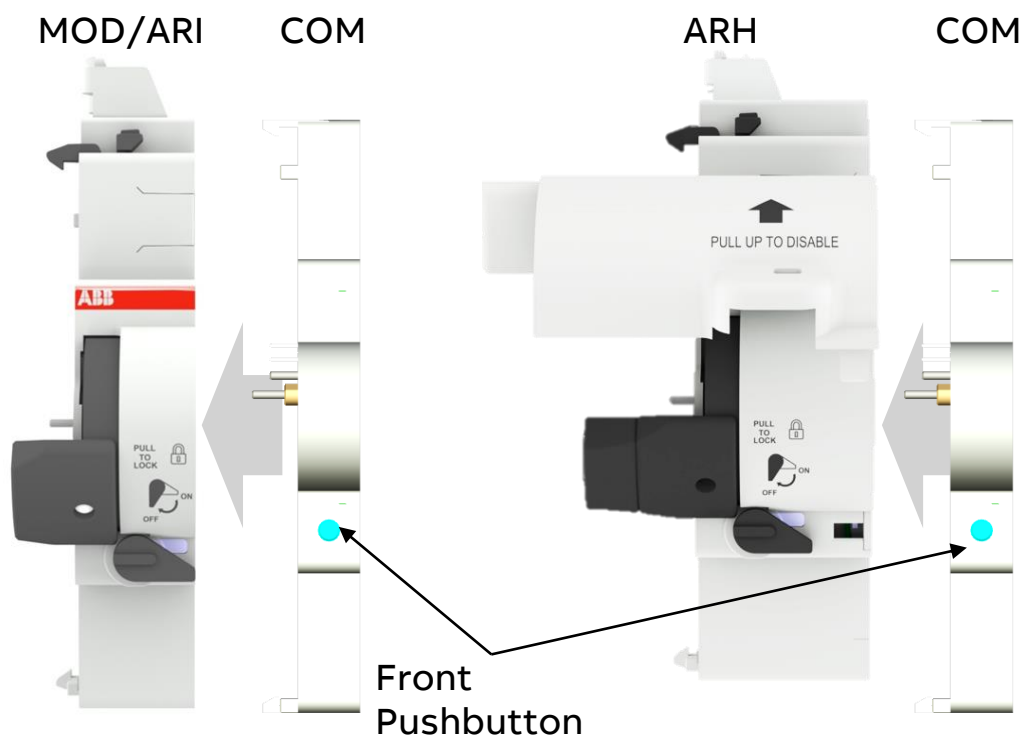
1. Purpose and Basic Description

This document describes the procedure of configuration of MOD WiFi Communication Module. The description contains basic connection diagram, Access Point mode, WiFi provisioning and setting of MODBUS TCP.

2. Electrical connections

The WiFi COM module is designed to be used with MOD, ARI or ARH device.

It shall be installed on the right side of MOD/ARI/ARH. Communication and power supply for COM module will be provided using board to board connector. No additional wiring is required.



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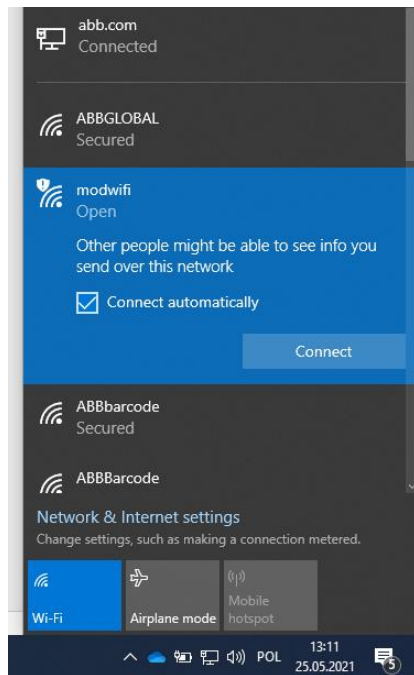
3. Connection and Configuration

3.1. Access Point mode (default)

The device by default is in **Access Point Mode** – it provides its own 2.4GHz WiFi network with SSID name starting from “**modwifi-xxxx**”.

3.1.1. Connection procedure

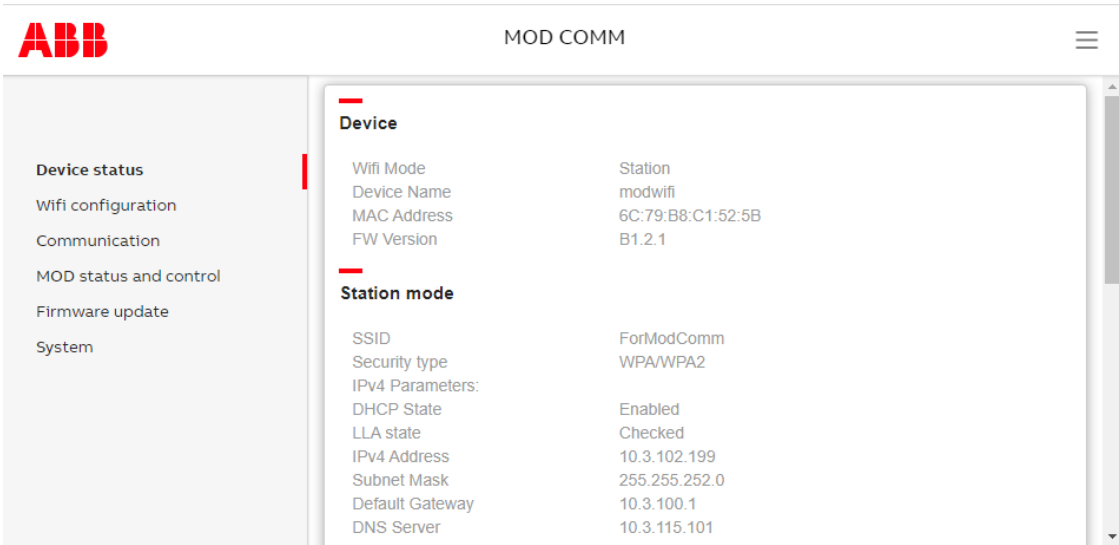
1. Connect to “**modwifi-xxxx**” network with computer or mobile device
By default the **modwifi-xxxx** network is not protected by password.



2. Open web browser (Firefox or Chrome suggested) and type IP address:
https://192.168.0.1
3. Password prompt should be displayed.
The temporary credentials for webserver access are:
Login: **admin**
Password: **admin**

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4. Device status page should be displayed after successful connection:



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3.2. Station mode

In station mode the device connects to user's WiFi network. This mode allows to access MOD from local network.

3.2.1. Connection procedure

1. Connect to device in Access Point Mode, go to <https://192.169.0.1> and log in, as specified in 3.1.
2. Select **WiFi Configuration** from menu
3. Select the WiFi network you want to connect from the list and press **SELECT**
If SSID is hidden, type the network name in **SSID** field
4. Set security type (default WPA/WPA2)
5. Enter WiFi Password in **Security key** field
6. Change WiFi mode to **STATION** and press **CONNECT**
7. Device will connect to specified network.

If connection fails, e.g. due to wrong configuration, after 60s the device will go back to **Access Point Mode**

The screenshot shows the ABB MOD COMM web interface. On the left is a sidebar menu with options: Device status, **Wifi configuration** (highlighted), Communication, MOD status and control, Firmware update, and System. The main content area is titled 'MOD COMM' and has two sections: 'Wi-Fi mode' and 'Station mode'. In the 'Wi-Fi mode' section, the 'Current mode' is 'Station' and there is a red 'ACCESS POINT' button. In the 'Station mode' section, there are input fields for IP (10.3.102.199), SSID (ForModComm), Security type (WPA/WPA2), and Security key (Open). Below these is a table titled 'Choose network' with columns 'L.', 'SSID', and 'Security'. The table lists seven networks. At the bottom of the 'Station mode' section are red 'REFRESH' and 'SELECT' buttons.

L.	SSID	Security
1	SCU200_AP_27	WPA/WPA2
2	SCU200_AP	WPA/WPA2
3	SBED_MobileAP	WPA/WPA2
4	Guest-ABB	Open
5	ABBfacility	WPA/WPA2
6	ABBPDAWLAN	WPA/WPA2
7	ABBBBarcode	WPA/WPA2

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ABB MOD COMM

Device status
Wifi configuration
 Communication
 MOD status and control
 Firmware update
 System

Advanced... ▼

Access point mode

SSID: modcomm-C1525B
 Security type: Open ▼
 Security key: Enter security key..
 Hidden SSID: Disable ▼
 Channel: 1

APPLY
 Settings will take effect after reset

Advanced... ▼

Device Name

Device Name: modwifi
 Domain Name: www.modcomm.net

APPLY

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3.3. Switching between Access Point and Station Mode

To switch between **Station Mode** and **Access Point Mode** the front switch can be used. Short press changes to other mode of operation.

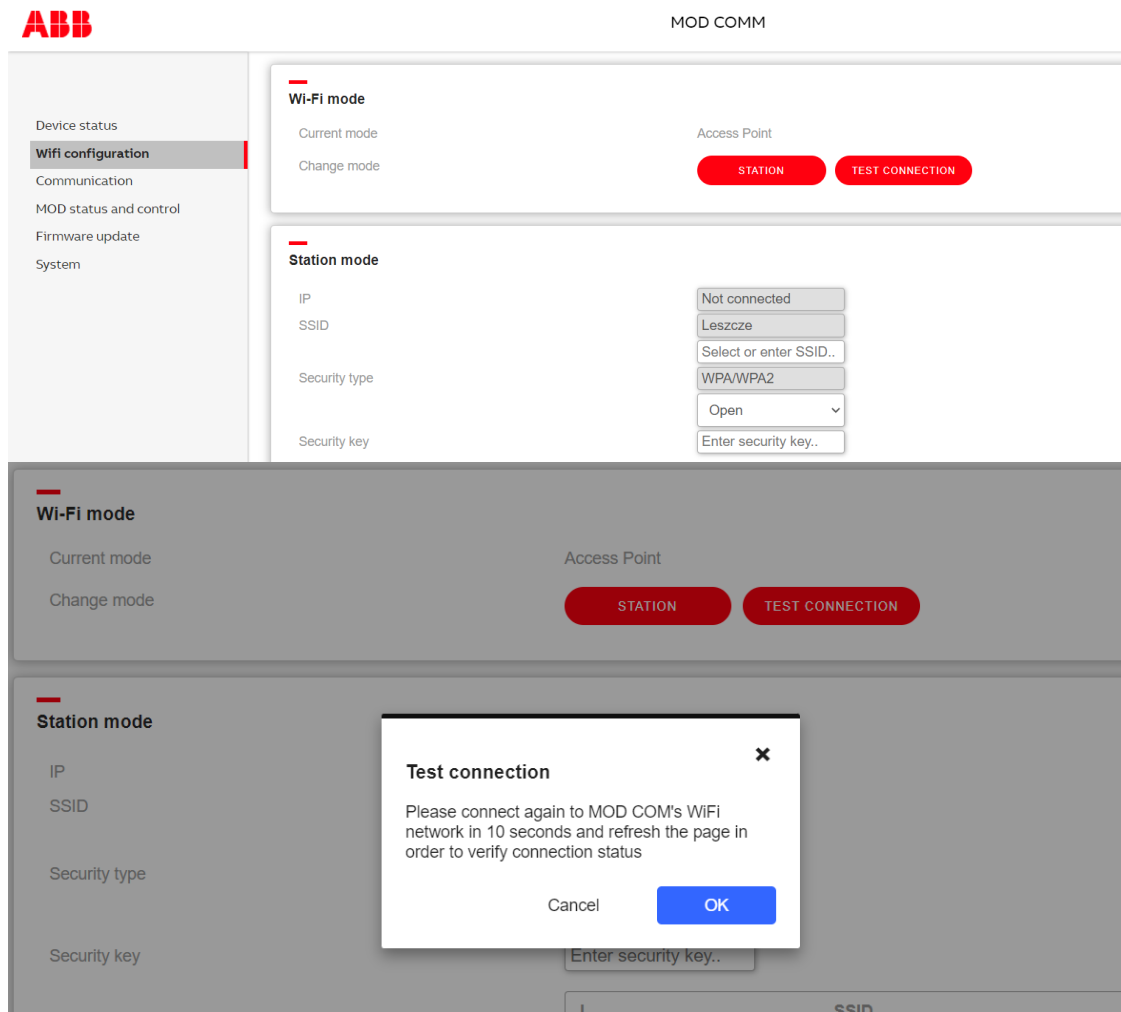
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3.4. IP check in Station Mode

In case of automatic-assign of IP address in **Station Mode** there is a possibility to check which address was assigned.

1. Follow the connection procedure to connect to specified WiFi network in **Station Mode**

Alternatively instead of selecting **Station Mode** it is possible to use **Test Connection** button. In this case the device will go back to Access point mode automatically and step 2. can be skipped. This is handy when there is no physical access to the device's button.



2. After successful connection press the front switch shortly to change to **Access Point Mode**
3. Connect to device in **Access Point Mode** and open <https://192.168.0.1> webpage
4. Go to **Device Status** and find the IP address assigned to device in **Station Mode**

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MOD COMM

Device status

Wifi configuration

Communication

MOD status and control

Firmware update

System

Device

Wifi Mode

Station

Device Name

modwifi

MAC Address

6C:79:B8:C1:52:5B

FW Version

Station mode

SSID

ForModComm

Security type

WPA/WPA2

IPv4 Parameters:

DHCP State

Enabled

IPv4 Address

10.3.102.199

Subnet Mask

255.255.252.0

Default Gateway

10.3.100.1

DNS Server

10.3.115.101

IPv6 Parameters:

Local Address State

Disabled

Local IPv6 Address

0:0:0:0:0:0:0

Global Address State

Disabled

Global IPv6 Address

0:0:0:0:0:0:0

DNS IPv6 Address

0:0:0:0:0:0:0

Access Point

Channel

1

SSID

modcomm-C1525B

Security Type

Open

Domain Name

www.modcomm.net

IPv4 Address

192.168.0.1

Subnet Mask

255.255.255.0

3.5. MODBUS TCP configuration

The MODBUS TCP can be used in **Access Point** and **Station Mode**.

The MODBUS TCP address is set in “**Communication**” tab.

Figure 1 Communication settings - MODBUS TCP configuration

3.6. Switching operation

The MOD switch can be controlled from webserver. To do it select **MOD status And Control** from menu. The position of the switch is controlled using the Red/Green switch icon.

Color indicates the current position (RED=ON, GREEN=OFF).

The change of position requires confirmation – dialog will be displayed.

Figure 2 MOD status and control

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4. Revisions

Rev.	Page (P) Chapt. (C)	Description	Date Dept./Init.
1.0		1 st revision	2022-11-07

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