Competence in Communication Technologies

MOCA 11-01 | MOCA 22-01

MoCA 2.5 Adapter MoCA 2.5 Adapter Set

Operation instructions





Table of Contents

1. Product description 4
1.1. Area of application 4
1.2. Description 4
1.3. Contents 4
1.3.1. MOCA 11-01 4
1.3.2. MOCA 22-01 4
1.4. How it works 5
1.5. LED indicators 5
2. Mounting 6
3. Installation 7
3.1. Connections and buttons 7
3.2. Power supply 7
3.3. RF connection 7
3.4. Ethernet connections 7
4. Typical applications 8
4.1. Application notes 8
5. Configuration 9
5.1. Status 9
5.2. Configuration 10
5.3. IP Settings 11
5.4. Security 11
5.5. PHY Rate 12
5.6. Upgrade 12
5.7. Reboot 13
6. Technical Specifications 14

⚠ WARNUNG

➔ Please observe the safety instructions supplied with the device! These are also available at the following web address: https://download.axing.com/BAs/Sicherheitshinweise_9sprachig.pdf

➔ Use the device exclusively as described in this operating manual and, in particular, in accordance with the state of the art. No warranty is provided if the device is used for other purposes!

CE

EU Declaration of Conformity:

AXING AG hereby declares that the products bearing the CE mark comply with the applicable EU-wide requirements.



WEEE No. DE26869279 | Dispose of electrical and electronic components separately, not with general waste.

1. Product description

1.1. Area of application

The devices are designed to set up an Ethernet network within a building via a coaxial connection. If the device is used for other purposes, no warranty is provided!

1.2. Description

The MOCA 11-01 adapters establish an Ethernet connection via the coaxial cables of the building's wiring using the MoCA 2.5 standard.

The devices operate in the 1125–1675 MHz frequency range. All components of the distribution system (splitters/taps, antenna sockets) must passively transmit this frequency range in both directions. Important: No television signals may/can be transmitted via the coaxial cable.

1.3. Contents

1.3.1. MOCA 11-01

1 × MOCA 11-01

1 × mains adapter

1 × Ethernet cable

1 × Coaxial cable

1 × F-female to IEC-female adapter

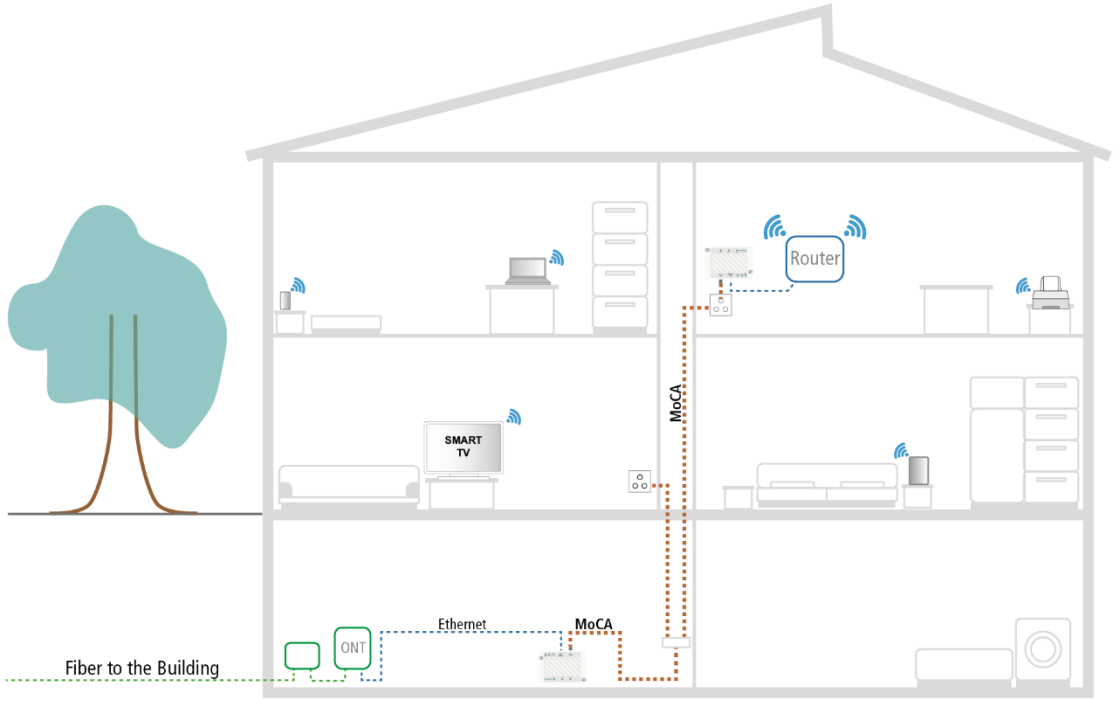
1 × Quick Start Guide (DE/EN)

1 × Safety instructions

1.3.2. MOCA 22-01

2 × MOCA 11-01

1.4. How it works



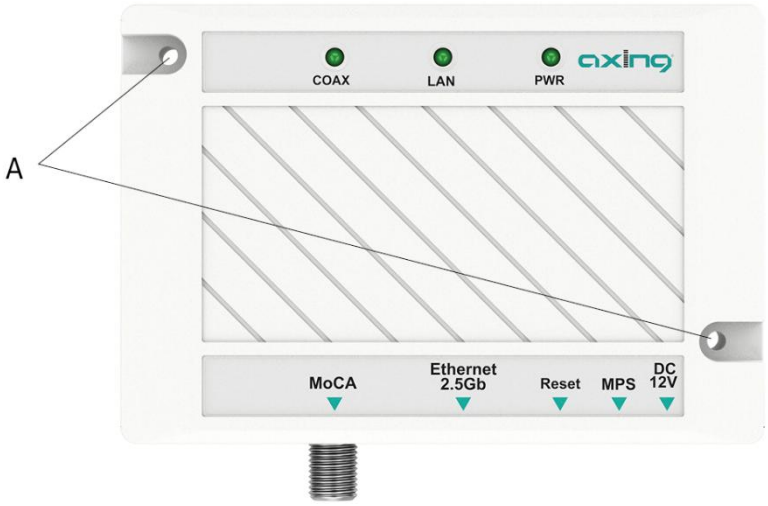
1.5. LED indicators

The device has three LEDs that indicate the status of the power supply and the MoCA connection.

	LED	Status		
		On	Flashing	Off
1	COAX	MoCA connection is active	Receiving/Sending	MoCA connection disconnected
2	LAN	–	Green = 2.5 GB Orange = 1 GB Red = 10/100 MB	Ethernet connection disconnected
3	PWR	Power on	N/A	Power off

2. Mounting

The units can be used as benchtop units or mounted on the wall using two suitable screws (A).

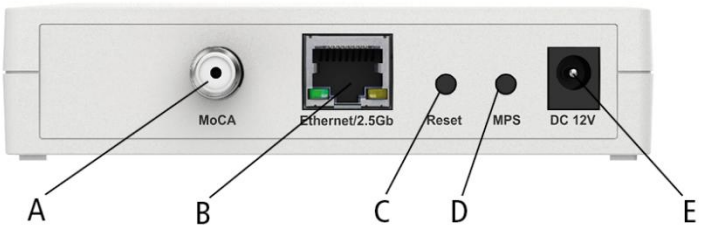


3. Installation

3.1. Connections and buttons

The following connections and buttons are located on the rear of the unit.

	Connection Button	Type	Function
A	MoCA	F	Connection for the coaxial cable
B	Ethernet	RJ-45	Connection for Ethernet-enabled devices
C	Reset	Button	Reset button (factory settings)
D	MPS	Button	MoCA Protected Setup button
E	DC 12V	DC	Connection for the mains adapter



3.2. Power supply

Connect the mains adapter to the DC 12V socket and then plug it into a mains socket.

Notes on the supplied mains adapters

➔Only use the mains adapter supplied with the unit.

The mains socket must be easily accessible. In the event of a malfunction, the mains adapter must be unplugged from the socket immediately. The mains adapter is ready for use as soon as it is plugged into the socket. To switch off the mains adapter, it must be unplugged from the socket. Never pull on the cable to do this.

3.3. RF connection

Use the coaxial cable to connect the MoCA port to the coaxial cable network.

3.4. Ethernet connections

Use the Ethernet cable to connect the Ethernet port to the relevant device. For devices with a 1 Gbps Ethernet port, the 'Auto-Negotiation' function may need to be disabled.

4. Typical applications

4.1. Application notes

You can find application notes on the installation and configuration of the devices on the AXING website.
https://axing.com/service/application-notes/

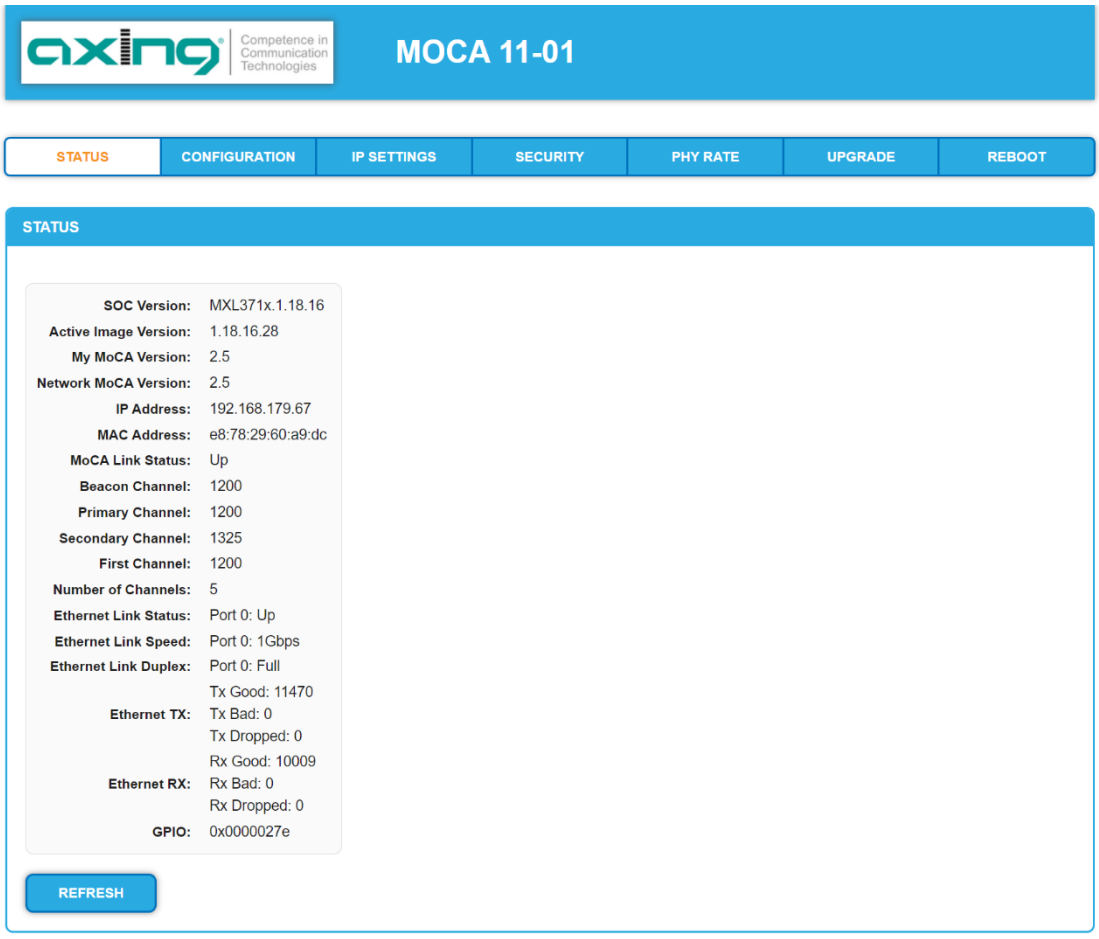
5. Configuration

The devices are designed for plug-and-play, which is why configuration is not usually required. In exceptional cases, however, settings can be adjusted. The access details, such as the IP address, username and password, are shown on the type plate on the underside of the device.

To access the graphical user interface, the PC and device must be on the same subnet. If the MOCA adapter has the IP address 192.168.0.150 (default address on delivery), the PC must have an address in the range 192.168.0.xxx (e.g. 192.168.0.200).

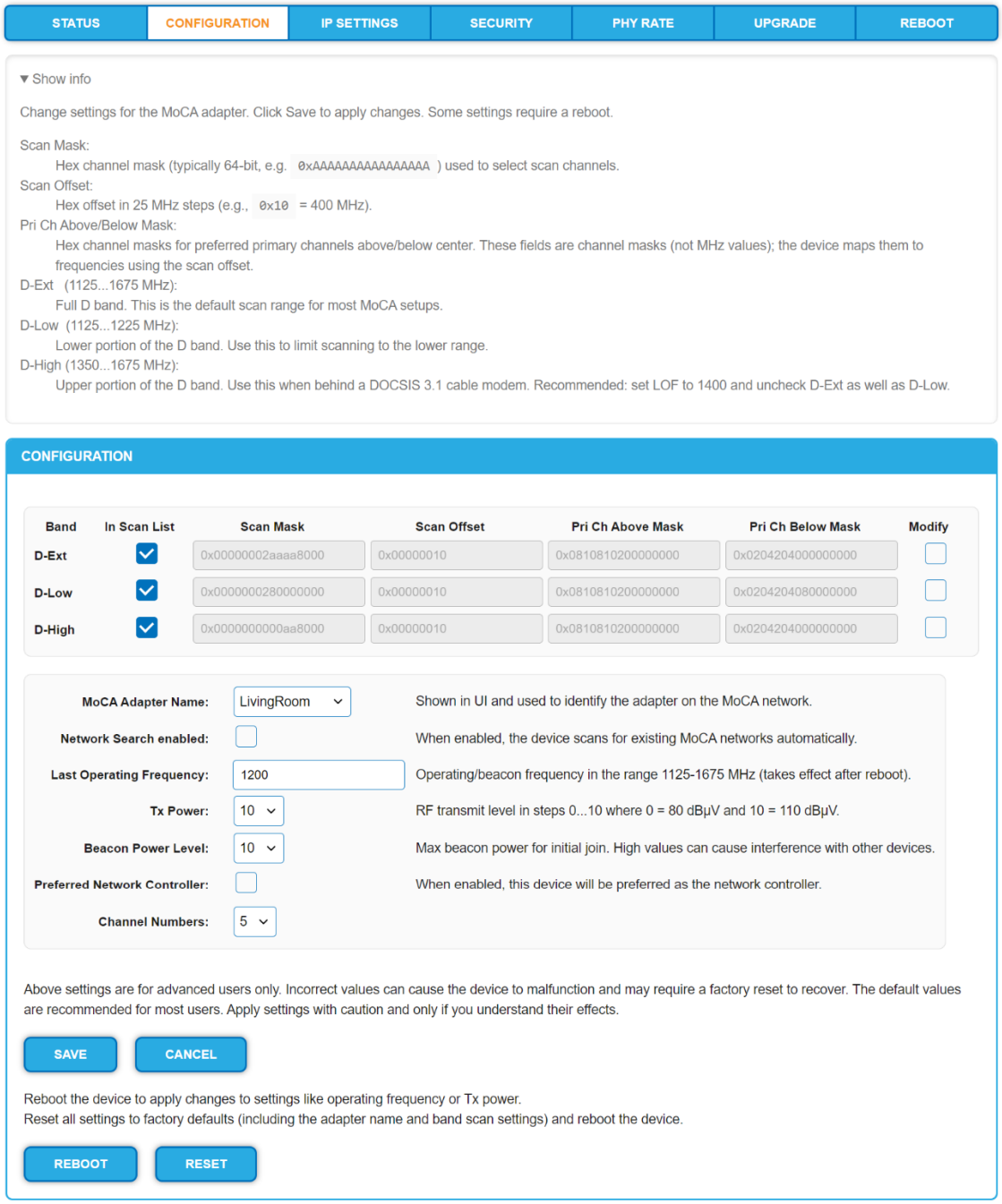
5.1. Status

Displays the current operating status of the device: firmware version, MoCA and network parameters, IP and MAC address, link status, and details regarding channels and the Ethernet connection. This section is for information and diagnostic purposes only; no settings can be changed.



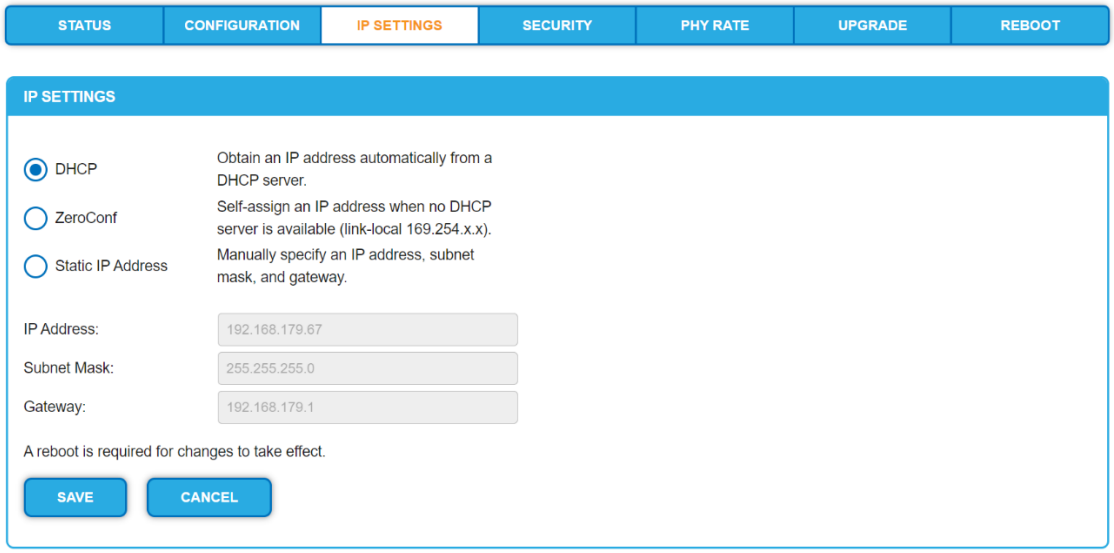
5.2. Configuration

This is where the MoCA-specific transmission parameters are set, in particular the frequency range to be used (e.g. D-Ext, D-Low, D-High) as well as the channel and scan settings. These settings determine the frequency band in which the device operates and must be adapted to the specific installation conditions (e.g. operation behind a DOCSIS 3.1 cable modem). Changes are applied by clicking "Save" and may require a restart.



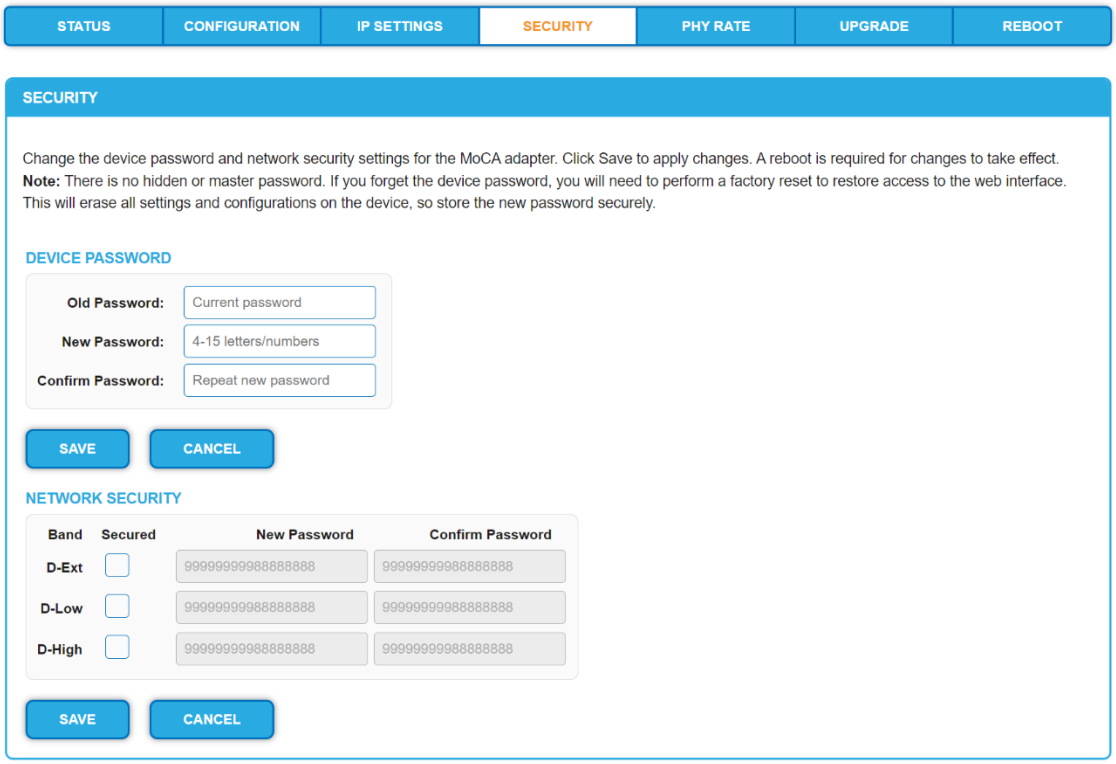
5.3. IP Settings

Configuration of network parameters. You can choose between DHCP, ZeroConf and a static IP address. For static allocation, the IP address, subnet mask and gateway are entered manually. A new IP address only becomes active after a restart.



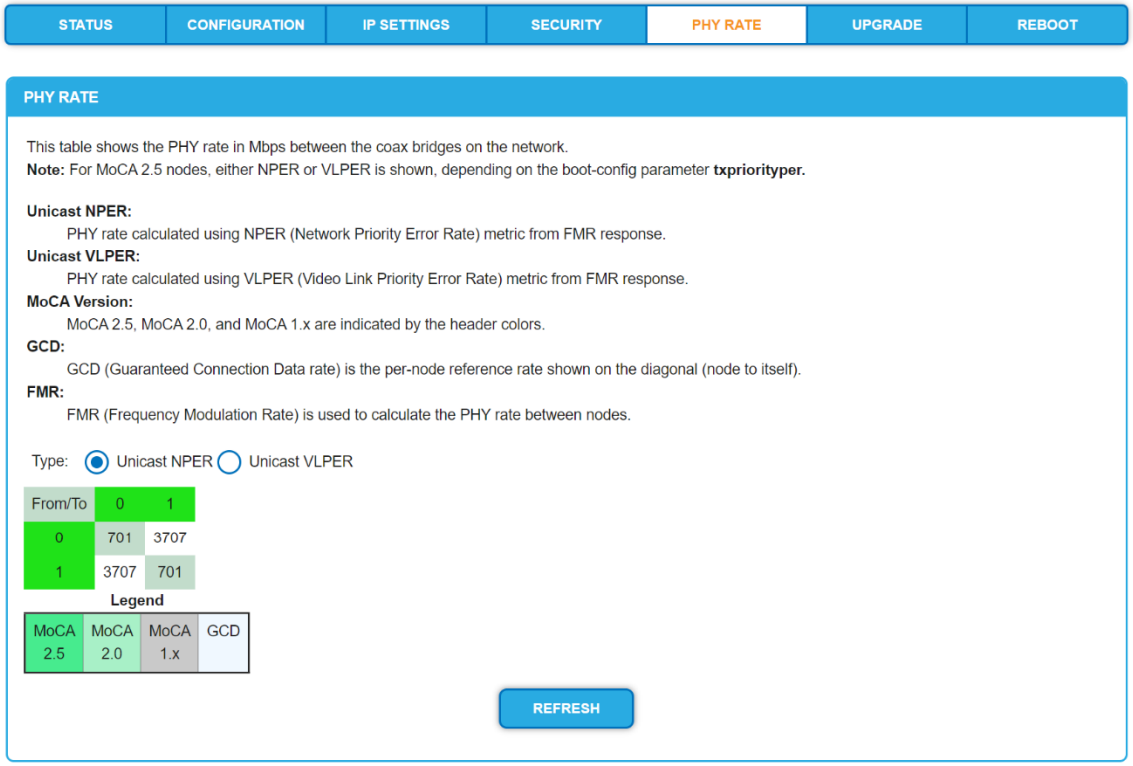
5.4. Security

Password management. Here, you can change the device password (access to the web interface) and the password for MoCA network security. For security reasons, the factory settings should be changed after initial setup.



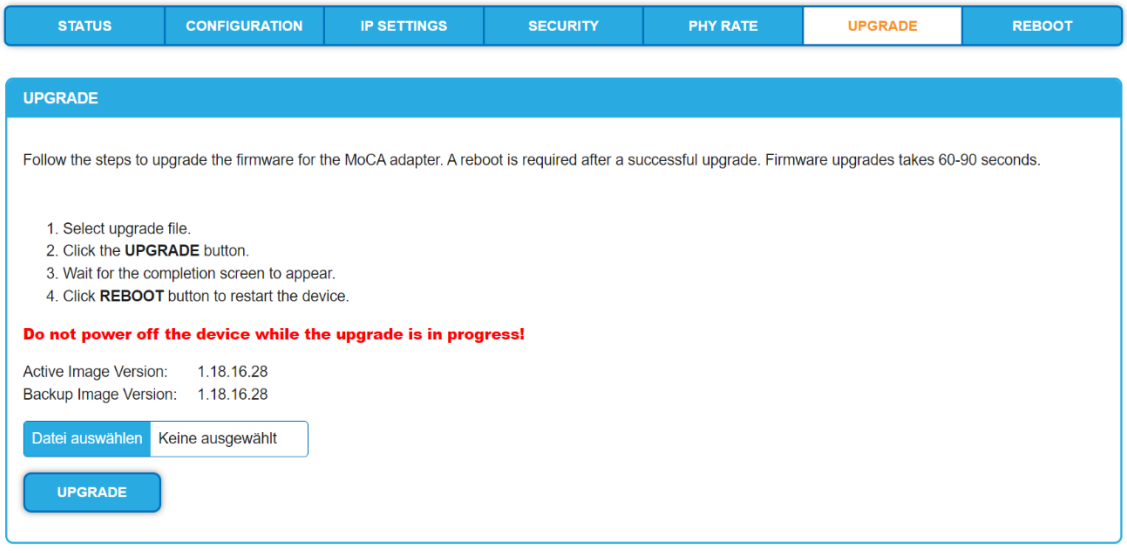
5.5. PHY Rate

Displays the current physical transmission rates (PHY rate in Mbps) between the nodes registered in the MoCA network. Used to assess the connection quality between individual devices. No settings can be changed.



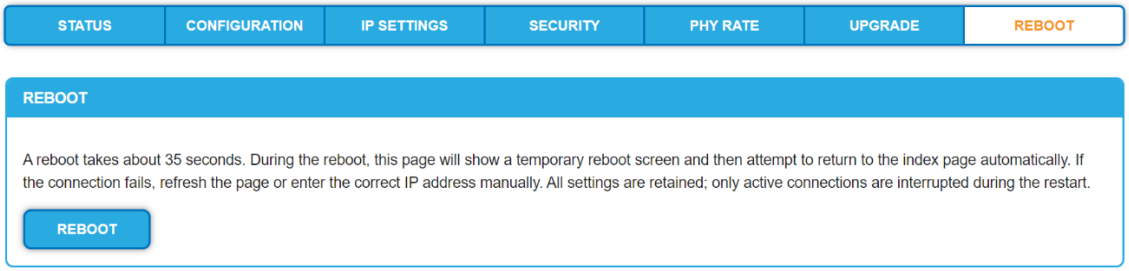
5.6. Upgrade

Allows the device firmware to be updated. The power supply must not be interrupted during the process, as this may cause permanent damage to the device.



5.7. Reboot

Restarts the device. The restart takes approx. 35 seconds; the web interface then reconnects automatically. A restart is required after certain configuration changes (e.g. IP settings).



6. Technical Specifications

Type	MOCA 11-01
Frequency range	1125 … 1675 MHz
Maximum permissible attenuation in the coaxial network	30 dB @ 2500 Mbps 40 dB @ 2200 Mbps 50 dB @ 1100 Mbps
Data over Coax	
Standard	MoCA 2.5
Net data rate (PHY)	2500 Mbps
Encryption	AES 128-bit
Max. number of devices in the coaxial network	16
Connections	1 × F-type socket
Interfaces	
Ethernet ports	1 × RJ 45
Ethernet standards	IEEE 802.3u 100BaseT Fast Ethernet IEEE 802.3ab 1000BaseT Gigabit Ethernet IEEE 802.3bz 2.5GBaseT 2.5 Gigabit Ethernet
General	
Operating temperature range	5°C … 40°C
Operating voltage	12 VDC
Power consumption	2.5 W
Dimensions (W × H × D) approx.	120 x 82 x 29 mm
External accessories	
Switched-mode power supply	100–240 VAC/50–60 Hz | 12 VDC/1.0 A

Information on Regulation (EU) 2019/1782 External plug-in power supply	
Manufacturer's name or trade name and address	Global Yeou Diann Electric Industrial Co., Ltd No. 378, Kaisyuan 4th Rd., Cianjhen District, Kaohsiung City, 806, Taiwan
Model identification	AMS195-1201000FV
Input voltage	100 … 240 V
Input AC frequency	50 … 60 Hz
Output voltage	12.0 V
Output current	1.0 A
Output power	12.0 W
Average operating efficiency	
Load condition 1 – 100% ±2%	84.3%
Load condition 2 – 75% ±2%	84.6%
Load condition 3 – 50% ±2%	84.7%
Load condition 4 – 25% ±2%	84.0%
Efficiency at low load (10%)	81.8%
Power consumption at no load	0.07 W

Hersteller | Manufacturer
AXING AG
Gewerbehaus Moskau
8262 Ramsen

EWR-Kontaktadresse | EEA contact address
Bechler GmbH
Am Rebberg 44
78239 Rielasingen