Quick Start

Universal BACnet Router
Universal Gateway

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Imprint
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1 Introduction

Quick Start

This manual enables the basic installation and configuration work to be carried out on the device.

It must be read carefully before installation and commissioning.

Comprehensive information is provided online in the manual for the respective device:

www.mbs-solutions.de/dokumentation

Target group

This manual is intended exclusively for specialist personnel who are familiar with gateway and router configuration in building automation.

Intended use

The device is only intended for the coupling of networks in building and industrial automation with the connection values specified by the manufacturer.

2 Safety

The hardware and software present no direct hazards. However, in their function as a router or gateway between networks in building infrastructures, they are able to seriously disrupt the interaction of network components.

Warning

Misconfiguration of hardware and software!

Faulty configuration of hardware and software can cause malfunctions in the building infrastructure on network components, sensors or actuators, **for example**:

- Monitoring devices, such as fire alarm or intrusion detection systems, are deactivated.
- Machines and fans start up unexpectedly.
- Gate valves and other valves open or close unintentionally.

Under certain circumstances, this can lead to serious injuries or death.

The device should only be configured by specialist personnel who are familiar with network configuration!

A connection to a network must not be established, before the device has been fully configured!

3 Specifications

Mechanical data

Casing	Metal casing for top-hat rail mounting
Protection class	IP20
Assembly	DIN top-hat rail TS35 in accordance with EN 60715
Weight	depending on type, see manual
H/W/D dimensions	depending on type, see manual

Ambient conditions

Ambient temperature	0...45°C, 32...113°F
Ambient humidity	20 to 80 percent relative humidity, non-condensing
Recommended lateral spacing	≥ 15 mm to other devices on the top-hat rail

Power supply BACnet Router

UBR-01 I Mk II	Wide range input (PELV) 12 to 24 Volt direct voltage or 12 to 24 Volt alternating voltage
UBR I LON	
UBR-02	
Power consumption	depending on type, see manual

Power supply Gateways X-Serie

Single-X	Wide range input (PELV) 12 to 24 Volt direct voltage or 12 to 24 Volt alternating voltage
Double-X	
Triple-X	
Power consumption	depending on type, see manual

Power supply Gateways A-Serie

maxi | Mk II, Single-A	+12 to +24 Volt direct voltage (PELV) tolerance +/- 15%
maxi | Mk II, Double A	
Power consumption	depending on type, see manual

Network connection for configuration

Ethernet	10/100 Mbit, RJ45 socket

4 Installation

Warning

Electric shock injury hazard!

The device may only be installed in a control cabinet (top-hat rail) when the power is disconnected.

The system must be disconnected for installation.

Assembly / Disassembly

The device must be mounted on a top-hat rail (DIN top hat TS35 according to EN60715). The top-hat rail bracket is pre-assembled on the back of the device. The bracket is hooked into the top-hat rail from above and fixed to the underside of the bracket with a clearly perceptible click.

Notice

A sufficient distance **(≥ 15 mm)** to the other components on the top-hat rail is recommended for mounting the device in the control cabinet.

This ensures better heat dissipation, which can have a positive influence on the service life of the device.

Disassembly is carried out by unlocking the bracket on the underside and carefully removing it from the top-hat rail.

Notice

Connecting cables should be unplugged during disassembly, to avoid damage.

Power connection

The device is **exclusively** operated with protective extra low voltage. The permissible voltage range depends on the **type of device** and must be taken from chapter 3 *Specifications*.

Warning

Electric shock injury hazard and damage to device!

Connecting the device to deviating, excessively high supply voltages may lead to serious injuries or death.

The device is operated exclusively with Protective Extra-Low Voltage. No supply voltages that deviate from the connection values specified in the technical data may be used.

The device is supplied with a reverse polarity protected plug that is already pre-assembled in the [PWR] socket.
To connect the supply lines, it is recommended to remove the plug. The cable cores are connected and screwed according to the marking [+24 / GND].

5 Configuration

Connection to the device

Web server

The device has an integrated web server for configuration. The web server provides the configuration settings in the form of websites.

Under **factory settings**, the web server is accessible at the following IP address:

IP address	169.254.0.1
Subnet mask	255.255.0.0

Network connection

For configuration, the device must be connected to the computer using a network cable.

The computer then **automatically** (*APIPA*) receives a free IP address in the address range 169.254.x.x and can communicate directly with the device.

If there is no direct (point to point) connection between the device and the computer or if the IP address is not assigned automatically, it must be configured **manually** on the computer (e.g. IP address 169.254.0.5 / subnet mask 255.255.0.0).

Notice

It is important that the manually configured IP address is not already in use by other devices on the network.

The way to configure the network connection on the computer depends on its operating system.

Configuration interface

To open the configuration interface, the following address is entered in a web browser:
http://169.254.0.1 or **https://169.254.0.1**

Logging on

To log in to the web server for the first time, enter the user name and the preset password.

Universal BACnet Router

User name	admin
Password	admin

Universal Gateway

User name	gw
Password	GATEWAY

The password should be changed on the configuration pages (Menu item GENERAL / USER /...).

> **Notice**
>
> The preset password can be restored by a hardware reset.

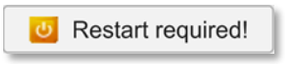
Usage

For working with the configuration interface, the following notes must be observed:

The “REFRESH” symbol must always be used to update the screen in the web server.

Using the web browser’s standard refresh button will log you out of the web server.

All changes must be saved by clicking <Save>**.** Following changes to the network configuration, it is sometimes necessary to restart the gateway.



Certain configurations require the device to be restarted. The web server will show at the upper edge, this button.

Further configuration

The configuration of the respective device is explained in the associated manual. The manual is available online at ***www.mbs-solutions.de/dokumentation***.

Reset

Hard-Reset

With the hardware-reset button, the device can also be reset without calling up the configuration interface.

Notice

You can find the reset button on the front of the device. The button may only be pressed with a suitable tool.

Depending on the duration of pressing, the following changes are executed:

after 1 second	Restart (Status-LED flashes green quickly)
after 10 seconds	The IP address will be set to 169.254.0.1 (default) until the next restart (Status-LED flashes yellow quickly).
after 30 seconds	Factory reset (Status-LED flashes red quickly)

Soft-Reset

This reset is carried out via the configuration interface. Details on this are explained in the device manual.

6 Product support

Manufacturer	MBS GmbH Römerstraße 15 47809 Krefeld
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E-Mail	support@mbs-solutions.de
Internet	www.mbs-solutions.de
	wiki.mbs-software.info
Service times	Monday to Friday: 8:30 to 12:00 13:00 to 17:00

7 Notes