mbXLINK

Technical Data / Installation Guide

V 1.0 - from HW03 - en

XLH 100, XLH 110, XLH 120, XLH 130

THE SECURE CLOUD GATEWAY

1   Brief Description

mbXLINK collects data from the field bus layer and brings it safely into the cloud.

The safety concept is based on a data diode, which allows the communication in one direction only - from the field to the safe network. The return channel is electrically isolated and can only be activated by key switch for configuration purposes.

It is technically impossible to connect to the system from the outside to steal or manipulate data.

Due to the real hardware-based disconnection, the usual weak spots of security-hardware such as faulty configuration through the user or security gaps in the device-software are excluded.

With the "Secure Cloud Gateway" mbXLINK you make your existing systems "Industry 4.0-ready".

Available types

XLH 100 MPI XLH 110 PROFIBUS-SLAVE	XLH 120 ModbusTCP (Master/Slave	XLH 130 PROFINET-IO

2   Technical Data

mbXLINK **- Cloud Gateway**

XLH 100, XLH 110, XLH 120, XLH 130 - from Hardware version: **HW 03**
You can find the hardware version on the device rating plate.
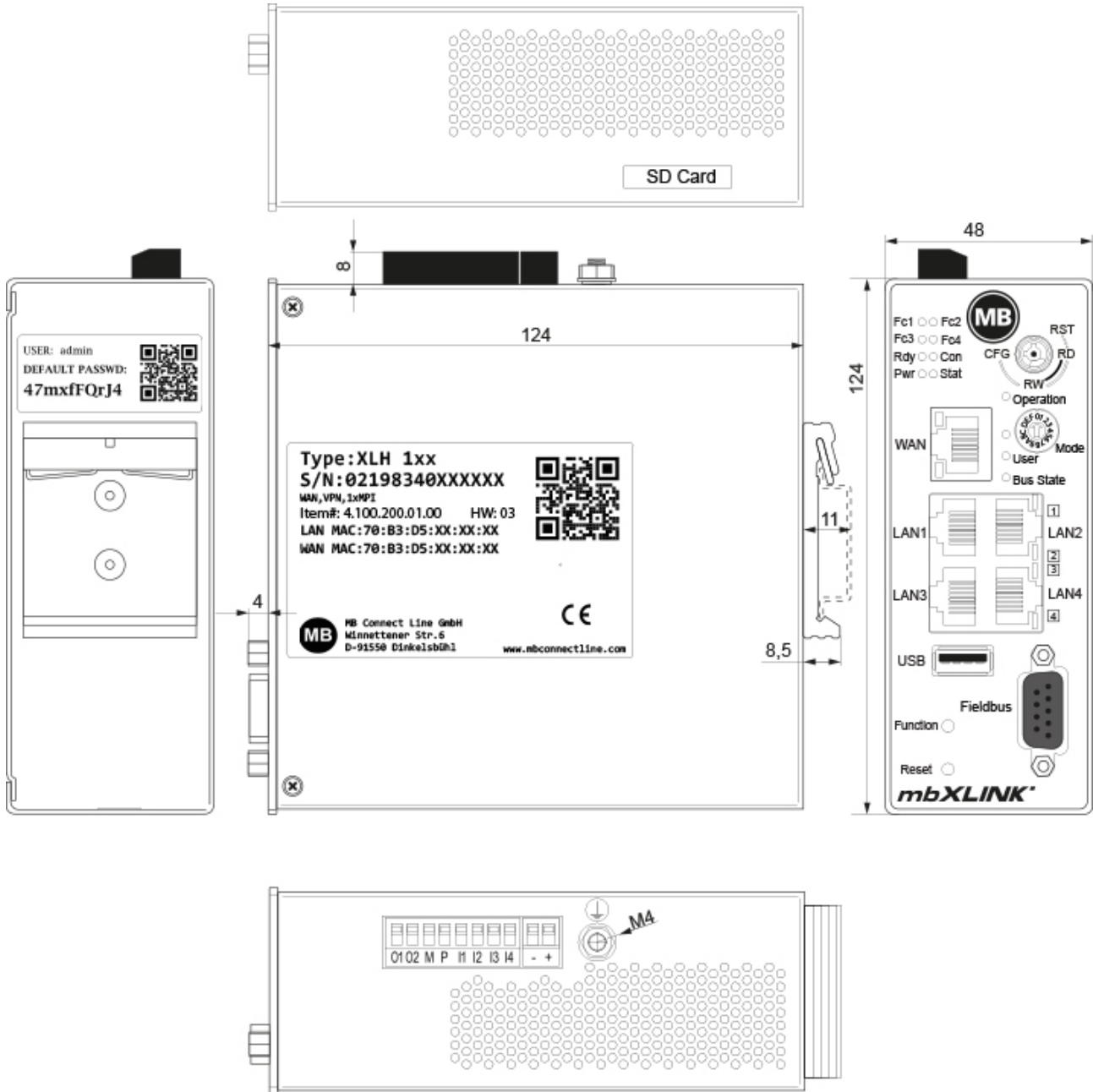
Housing dimensions and views

Image 1: Devices and interfaces vary depending on the device type.

General Data

Performance data

Voltage === V (DC)	10 – 30 V DC (ext. power supply or SELV power supply, 10-30 V DC, max. 40 A)
Current consumption	max. 1300 mA @ 24 V
IP Protection class	IP 30* * at full occupancy of all connections and interfaces. Alternatively, unused interfaces can be covered with dust protection plugs.
Area of use	Dry environment
Temperature (operating)	-40 – +75 °C
Temperature (storage)	-40 – +85 °C
Humidity	0 – 95% non-condensing
Real-time clock	In the event of a power failure, the date and time are maintained for up to 7 days (depending on the ambient temperature).
Dimensions (max.)	48 mm x 137 mm x 140 mm (W x D x H)
Weight (max.)	650 g
Housing/material	Metal
Installation	DIN-top hat rail mounting

I/Os and standard interfaces

Digital inputs	4 pieces, 1030 V DC (electrically isolated), (low 0 – 3.2 V DC, high 8 – 30 V DC)
Digital outputs	2 pieces, 10-30 V DC (electrically isolated), to a maximum of 1.5 A per output
WAN interfaces	10/100MBit/s full and half duplex operation, automatic detection patch cable/cross-over cable (auto detection)
LAN interfaces	4 pieces, 10/100MBit/s full and half duplex operation, automatic detection patch cable/cross-over cable (auto detection)
USB interfaces	USB Host 2.0
SD card slot	For SD cards (32 x 24 x 2.1 mm) SDHC max. 32 GB; FAT/FAT32 - occupied by *mbEDGE* .

VPN

VPN protocol	IPsec/PPTP/OpenVPN, 64 Tunnel
Encryption method	Blowfish, AES, DES/3DES
Encryption algorithms	MD5, SHA1
Authentication	Pre-Shared-Key, X.509

Network/security

Firewall	1:1 NAT, IP-Filter, port forwarding, stateful inspection
IP router	NAT-IP, TCP/IP routing, IP forwarding
Services	DHCP server, DHCP client, DNS server, NTP client, PPP server, DynDNS
Time levelling	NTP server

Optional Interfaces "Fieldbus"

Type	Interface	Quantity
XLH 100 MPI	SUB D connector	1 x
XLH 110 PROFIBUS-Slave	SUB D connector	1 x
XLH 120 ModbusTCP (Master/Slave)	Ethernet connector	1 x
XLH 130 PROFINET-IO	Ethernet connector	2 x

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SIMPLIFIED EU DECLARATION OF CONFORMITY

MB connect line GmbH hereby declares that the device mbXLINK (XLH 100, XLH 110,XLH 120 und XLH 130) corresponds to the 2014/30/EU and 2011/65/EU directives.
A copy of the EU declaration of conformity is available at the following Internet address:
www.mbconnectline.com

![mbXLINK logo]

3   mbXLINK Installation

**Installation position/minimum clearances**

The mbXLINK is designed to be mounted on DIN top hat rails (in accordance with DIN EN 50 022) and for installation in a control cabinet.

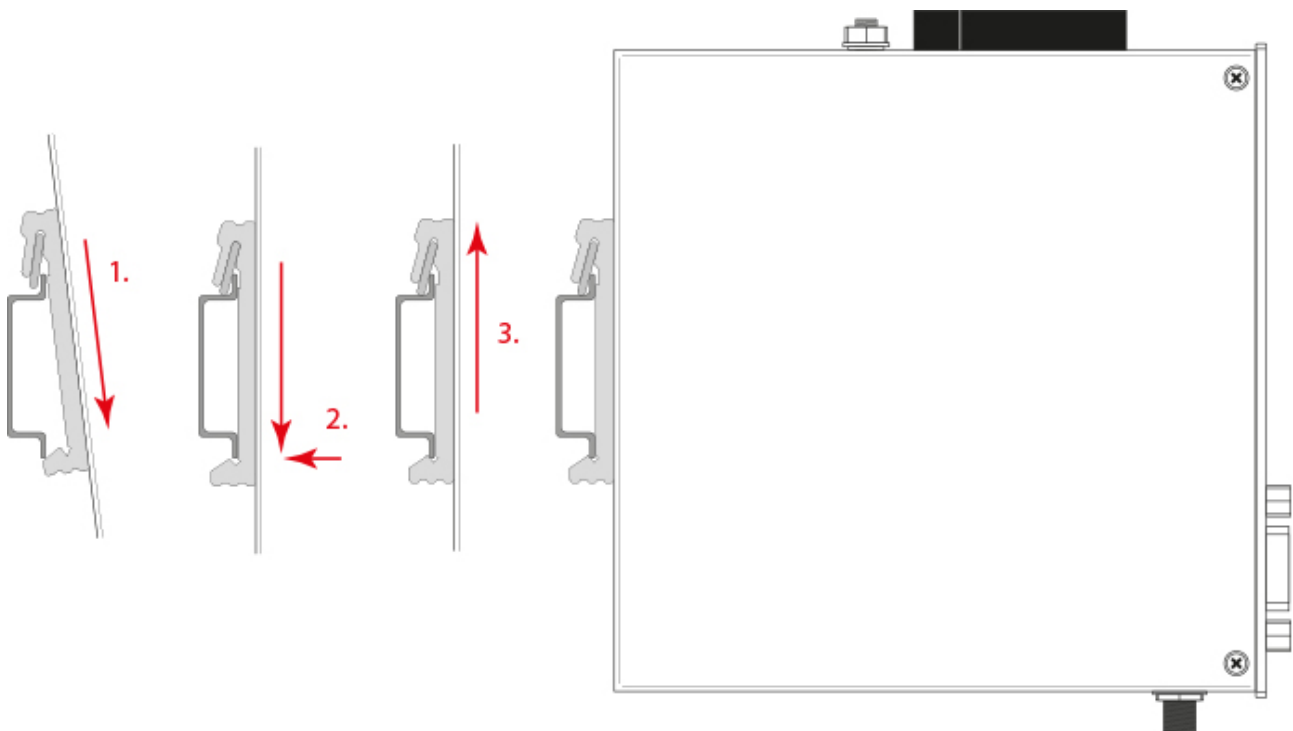The installation and assembly must be carried out according to VDE 0100/IEC 364.

The device may be only mounted vertically as described.

NOTICE

Non-compliance with the minimum distances can destroy the device at high
ambient temperatures!
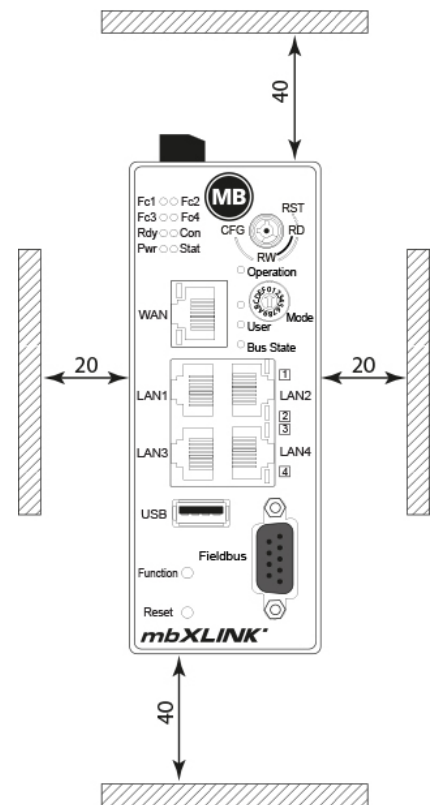
Top hat rail mounting

Click the device into the DIN top hat rail. To do this, attach the upper guide to the top hat rail and then press the device down against the top hat rail until it fully engages.

4   Starting the mbXLINK

NOTICE

Before you connect the device (mbXLINK) to a network or a PC, make sure that the device is properly connected to the power supply. Otherwise, other devices may be damaged.

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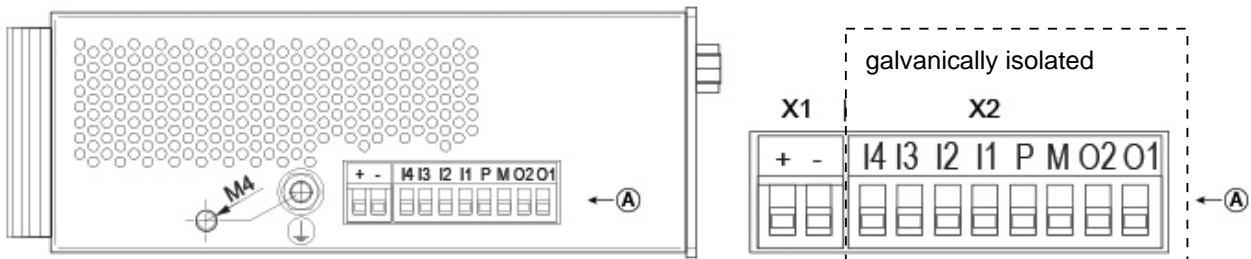
1 Connect the equipotential bonding to the grounding screw on the top side of the device.

2 Connect the power supply (10-30 V DC) to **terminals X1** of the device.

NOTICE

 Ensure polarity is correct!

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3 Now, switch on the power supply.

   ° After switching on the power supply, the **Pwr**LED is permanently lit.

   ° After about 90-120 seconds (depending on the device type), the **Rdy** LED is permanently lit.

4 The ***mbXLINK*** is now ready for operation.

TIP

You can obtain further information about the ***mbXLINK*** Cloud Gateway and support on our homepage in the Support-Forum at www.mbconnectline.com

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MBCONNECT LINE

MB connect line GmbH offers universal solutions for
worldwide remote maintenance of machines and equipment.
The specialists at MB connect line can draw on years of
experience and extensive know-how.

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Despite a detailed description of the device and its functions, we cannot be held liable for the correctness of the content. The latest information can be obtained on our homepage. We welcome any comments or suggestions for improvement.