Manuals+ — User Manuals Simplified.

HOOC Connect X Physical and Virtual Gateways Instruction Manual

HOOC Connect X Physical and Virtual Gateways

Contents

SCOPE OF DELIVERY

- 1x HOOC gateway (Connect X, XM, XF, XH, XT or XL)
- 1x female plug power supply (Weidmüller BLDF 5.08/03/180 SN BK BX)
- 1x female plug I/O (Weidmüller B2L 3.50/08/180 SN BK BX only for Connect X, XM, XF, XH or XT)
- 1x WiFi antenna (only for Connect X, XM, XF or XH)
- 1x LTE antenna (only for Connect X or XM)
- 1x LoRa antenna (only for Connect X or XF)

WiFi antenna

LTE antenna (mobile network)
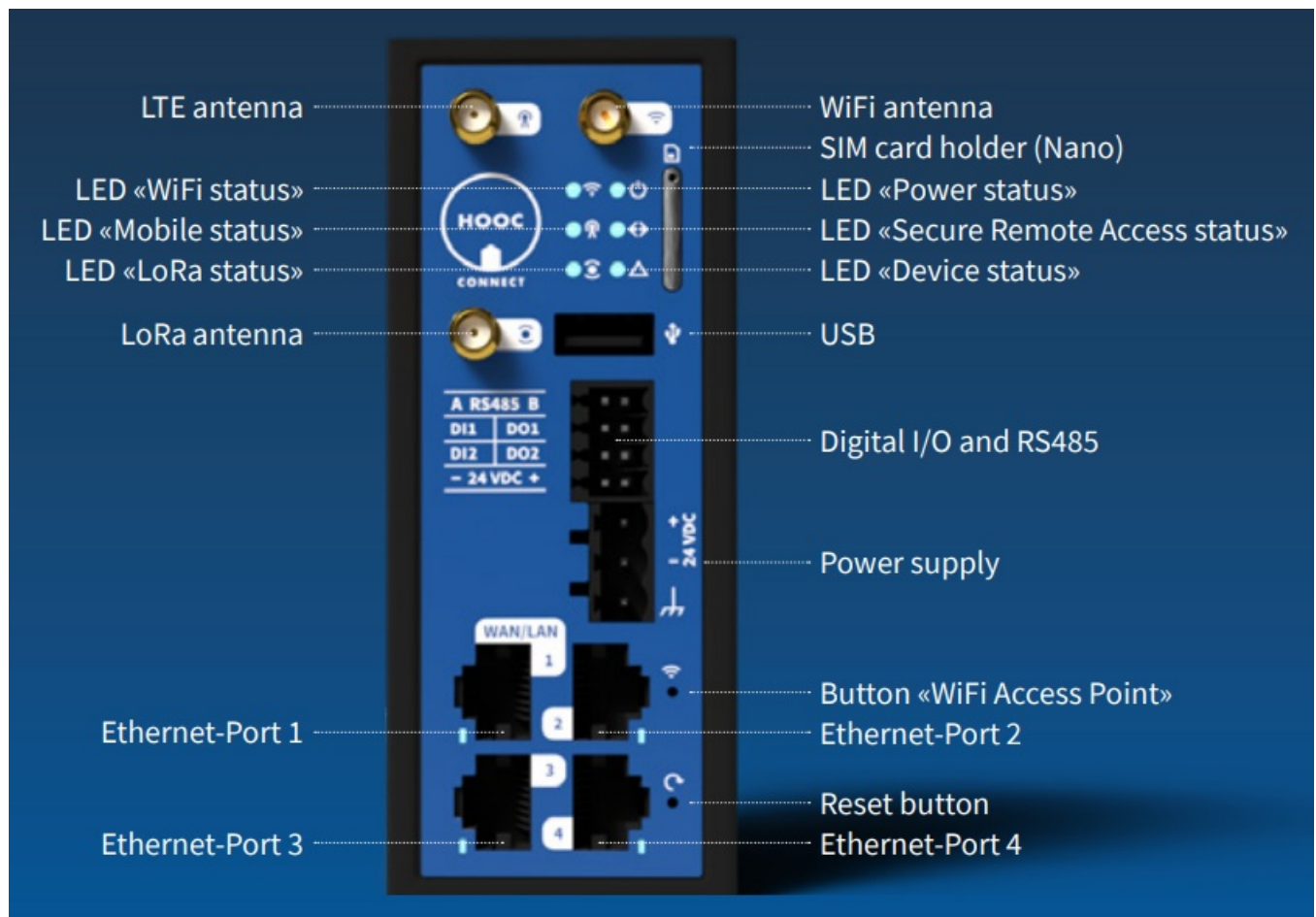
LoRa antenna

LEGAL NOTICE

SAFETY AND RISKS

For safety reasons, always maintain a minimum distance of 20 cm between you and the antennas. Furthermore, do not use the gateway in the following environments:

- in areas where blasting is in progress or where explosive atmospheres may be present, including gas stations, fuel depots and chemical plants;

- in areas that are close to medical equipment, life support machines, aircraft or other installations susceptible to any form of radio interference;

- in all other environments where the standards used by this gateway are not in accordance with those of the corresponding facility.

USAGE

The HOOC gateway is designed for the remote control of systems and sites, by means of a secure VPN connection via the Internet. Important: Please note that for proper functioning of the gateway, you should only use the antennas supplied together with the gateway.

CONNECTORS / CONNECTION / LED X XM XF XH XT XL

Power supply	✓	✓	✓	✓	✓	✓
Digital I/O and RS485	✓	✓	✓	✓	✓	–
USB	✓	✓	✓	✓	✓	–
Ethernet Port 1 (WAN / LAN /Configurable software with activity LED)	✓	✓	✓	✓	✓	✓
Ethernet Port 2 to 4 (LAN) with activity LED	✓	✓	✓	✓	✓	✓
LED «Power status»	✓	✓	✓	✓	✓	✓
LED «Secure Remote Access status»	✓	✓	✓	✓	✓	✓
LED «Device status»	✓	✓	✓	✓	✓	✓
Reset button	✓	✓	✓	✓	✓	✓
Button «WiFi Access Point»	✓	✓	✓	✓	–	–
LED «WiFi status»	✓	✓	✓	✓	–	–
WiFi antenna	✓	✓	✓	✓	–	–
LED «Mobile status»	✓	✓	–	–	–	–
LTE antenna	✓	✓	–	–	–	–
SIM card holder (Nano)	✓	✓	–	–	–	–
LED «LoRa status»	✓	–	✓	–	–	–
LoRa antenna	✓	–	✓	–	–	–

QUICK START

STEP 1: SET UP YOUR GATEWAY

- First, install your gateway in your control cabinet («Installation», «Configuration»).
- Then, place the SIM card in the holder («Connection»). Please note that this only applies to the Connect X and XM gateways.
- Now connect the gateway to the power supply and your computer to the network port 2 («Device configuration»).
- Finally, open the URL 192.168.2.1 in your browser and activate the configuration mode (press reset button). The gateway is now ready for configuration.

STEP 2: LINK YOUR GATEWAY

- In order to link your gateway, log into the Management Portal (**https://my.hooc.me**) and create a new site (see «Linking via HOOC Management Portal»).
- There you enter the required information and the 20-digit serial number of your gateway. As a result, the gateway will automatically be connected to the HOOC Cloud and the newly created site.

STEP 3: CONTROL YOUR SITE

- Use your cell phone in order to monitor, program and control your plant remotely («Control via HOOC Client App»).

STEP 1: INSTALLATION

- The gateway can be installed both vertically and horizontally. Make sure to leave enough free space (distance of min. 25 mm) for the ventilation slots.

- Position the antennas in an orthogonal pattern (90° to each other) and lay the cables at a certain distance from the antenna connections.
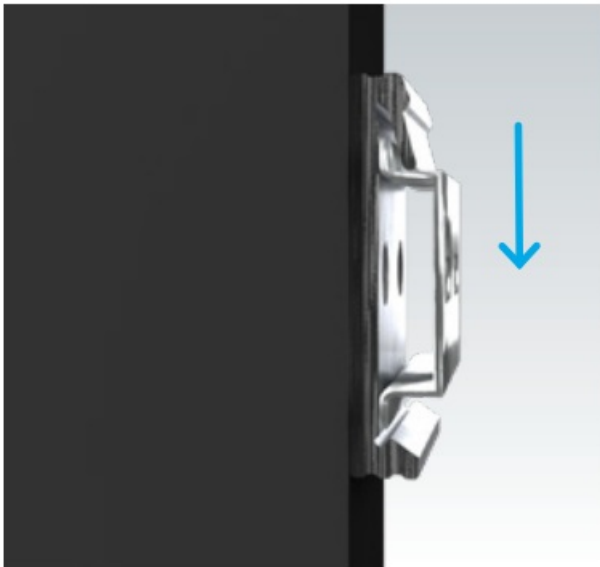- In order to ensure that antenna is used correctly,please pay attention to the antenna connector labels (symbols).

Caution: Avoid installing the gateway near other powerful radio transmitters or sensitive devices that may be affected by the radio signals emitted.

1. Hold the gateway at a slight angle over the upper edge of the top-hat rail. Then click it into the upper opening (behind the suspension).
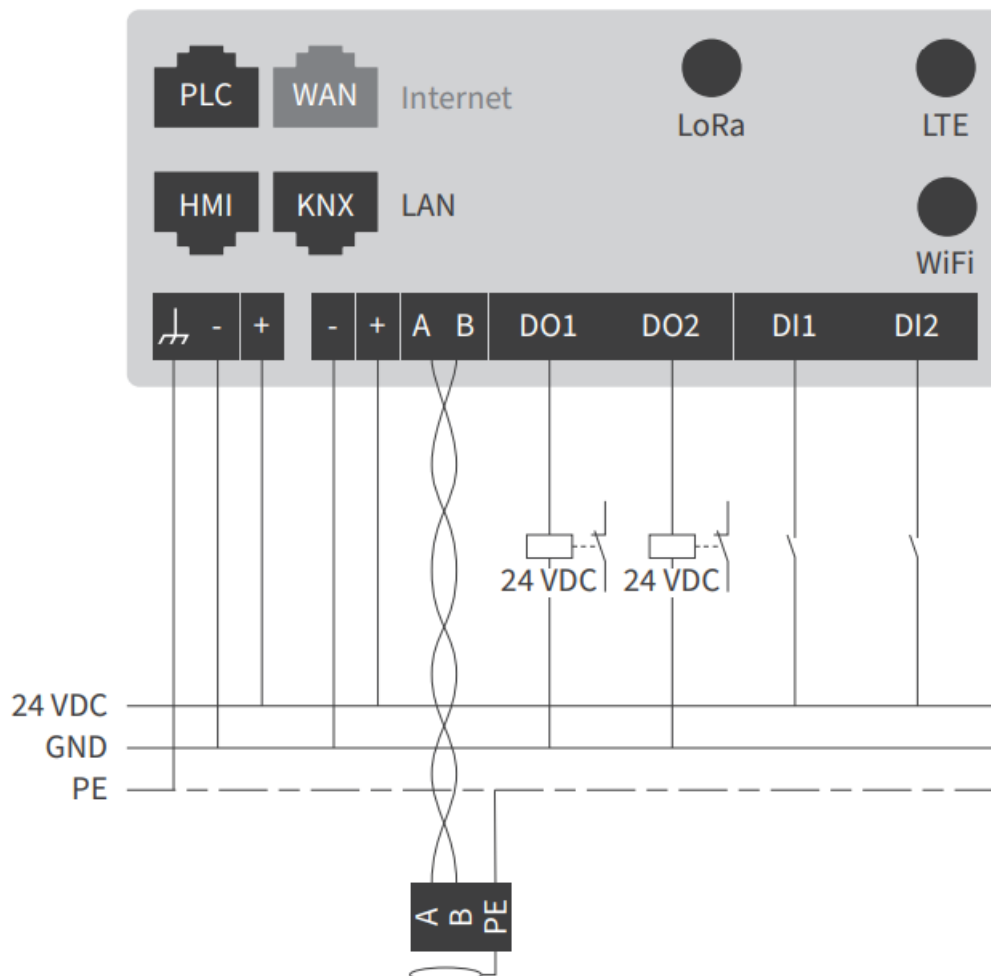

2. Now press the gateway straight down. Make sure not to release it until it has clicked into the lower fixture.

STEP 1: TYPICAL CONNECTION DIAGRAM

The gateway provides an additional connection ⏚ for the functional earth. It is recommended to connect it to the protective earthing in the control cabinet. This will improve the immunity of the device to conducted and radiated RF interference, as well as to electrical transients that may propagate through the ethernet cables. For the installation, a suitable separating device is required.

STEP 1: CONNECTION (MODELL X, XM)

SIM CARD (NANO, FORM FACTOR 4FF)

1. Press with a small tool on the holder and pullet out.

2. Place the SIM card from behind on the holder.

3. Push the holder back with light pressure.

STEP 1: CONFIGURATION

- Connect your HOOC gateway to the power supply.
- Connect your computer to the LAN network (ethernet port 2 of your gateway).
- Open the default IP address of your gateway (URL 192.168.2.1) in your browser (preferably Google Chrome).
- Activate the configuration mode by briefly pressing the reset button (the power LED lights up red).
- Configure your gateway using the following controls:

 Reject configuration

 Save configuration

 Exit configuration

IMPORTANT
After five minutes without any browser activity, the configuration mode will be automatically disabled and all unsaved changes will be lost.
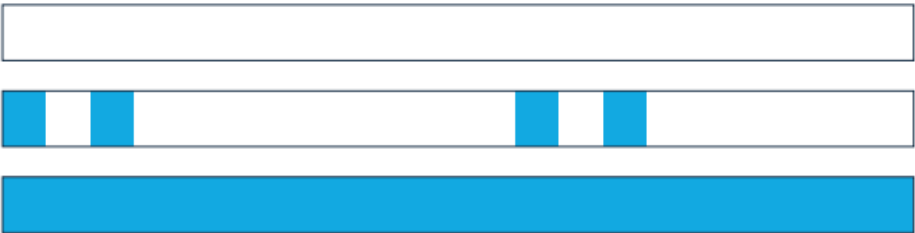
STEP 1: COLOR AND BLINK CODES

POWER LED

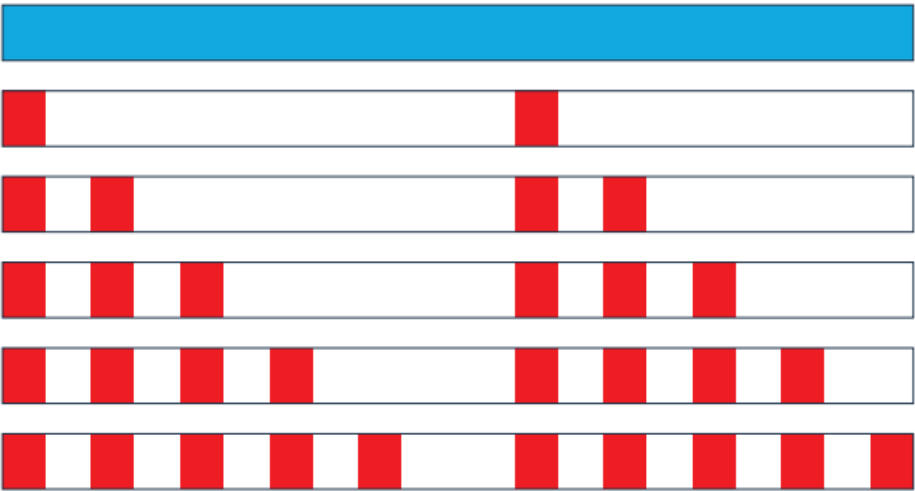Starting up Normal operation Configuration mode active

LED FOR WIFI, VPN, MOBILE & LORA

Switched off Initialization Connected

STATUS LED

Normal operation No connection to the Internet Cannot obtain an IP address Standard gateway not accessible DNS server not accessible No connection to HOOC Cloud
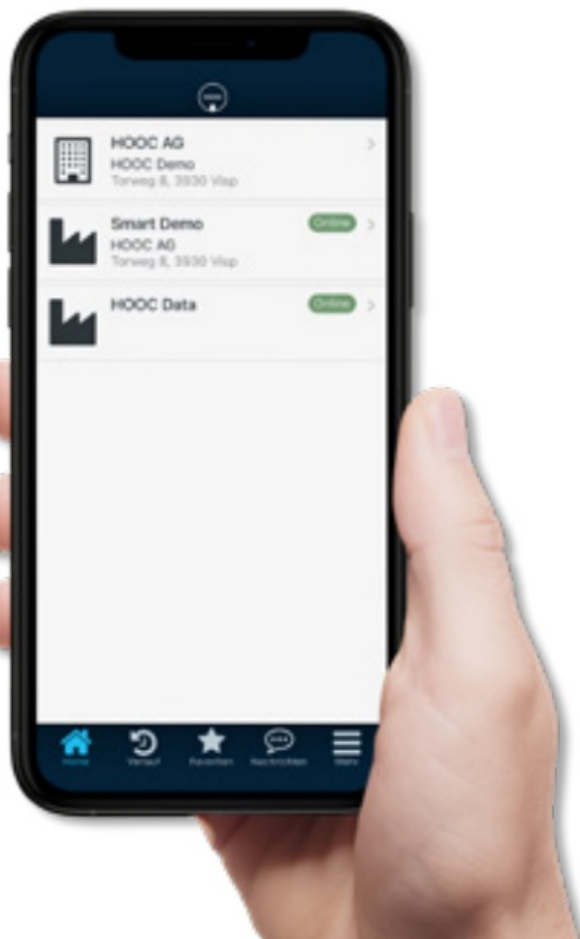
STEP 2: LINKING VIA HOOC MANAGEMENTPORTAL

- Log in to the HOOC Management Portal (**https://my.hooc.me**).

- If you already have an account, go directly to «sites» and click on the + icon right next to «management of sites» in order to create a new site. Then fill in the empty fields.
- If you do not have an account, you first want to register as a HOOC reseller (as described in the opening pop-up). You will then receive an e-mail from HOOC. Click on the link contained therein to complete the registration.
- Enter the 20-digit serial number of your gateway and click on «Link HOOC Connect» in order to connect your gateway to your account.

STEP 3: CONTROL YOUR SITE

- Computer: You can also download it from the Mac App Store for macOS. For your Windows operating system, the
  ClientApp is available in the HOOC Manage-mentPortal under «Downloads Software and Tools».
- After that, log in the ClientApp with the same user data as in the HOOC Manage-mentPortal
- Now you are ready to go: Access, monitor, program and control your plant remotely.

INSTRUCTIONS FOR USE

INSTALLATION

Please install your gateway in such a way, that there is enough free space around it, so that it can always cool down

USE
The gateway is intended for indoor use only

PROTECTION
Keep your gateway away from heat and do not expose it to cold temperatures or humidity. Make sure that it does not come into contact with liquids in order to prevent corrosion of the electrical circuits. Also protect the gateway from dirt and dust. However, do not clean it with chemicals, compressed air, cleaning agents or solvents. If necessary, clean it carefully with a dust cloth. Furthermore, you should avoid any external mechanical influences (e.g. shock). In any case, do not try to open it.

DISPOSAL
Do not dispose of your gateway in the household waste. Instead, take it to an authorized collection point for electronic waste.

TECHNICAL DATA

EXTERNAL POWER SUPPLY REQUIREMENTS

- Limited current source according to IEC60950-1 or PS2 classified IEC62368-1, short circuit current <8A

POWER SUPPLY (EXCL. I/O)

- Supply voltage: 24 VDC, reverse polarity protection
- Maximum power consumption:

POWER SUPPLY (EXCL. I/O)

- Supply voltage: 24 VDC, reverse polarity protection
- Maximum power consumption:

X	XM	XF	XH	XT	XL
15 W	13 W	13 W	8 W	8 W	8 W

I/O SPECIFICATION

- Supply voltage: 24 VDC, reverse polarity protection
- Maximum power consumption: 8 W
- 2x digital inputs, galvanic isolation, current limit 15 mA, input voltage nominal: 0-30 V, value at input voltage 0-5 VDC is ‹inactive›, value input voltage >15 VDC is ‹active›
- 2x digital outputs, galvanic isolation, type: SSR, output voltage 24 VDC +/- 5 % of supply voltage, maximum 100 mA per channel
- RS485 transceiver, galvanic isolation, 1/8 load unit, software configurable, Modbus/TCP-Modbus/RTU converter

USB PORT

- 1x USB 2.0, type A, maximum permissible load: 500mA

WIFI FEATURES

- WiFi access point or WiFi client
- IEEE 802.11 b/g/n, max. 150 Mbps
- Supported encryption protocol: WPA2-PSK
- Supported WiFi channels: 1-11

- Maximum output power: 20 dBm

ETHERNET PORTS

- 1x RJ45 as WAN connection, 10/100 Mbps, alternatively usable as LAN port
- 3x RJ45 as LAN connection, 10/100 Mbps
- RJ45 isolation: 1500 Vrms

CERTIFICATIONS CONNECT XH, XT, XM, XL

- CE
- RoHS
- FCC

This device complies with Part 15 of the FCC rules. Operation is subject to te following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CERTIFICATIONS CONNECT X, XF

- CE
- RoHS

MODEM FEATURES

- Region: GLOBAL
- LTE Cat 4

Technology	supported frequency bands
LTE-FDD	B1/B2/B3/B4/B5/B7/B8/ B12/B13/B18/B19/B20/B25/ B26/B28
LTE-TDD	B38/B39/B40/B41
WCDMA	B1/B2/B4/B5/B6/B8/B19
GSM	B2/B3/B5/B8

MECHANICAL PROPERTIES

- 110 mm x 44.5 mm x 127 mm (H x B x T)
- Weight 400 g
- Storage temperature from -40°C to +70°C
- Operating temperature from -20°C to +60°C
- Maximum mounting height < 2m

Customer Support

HOOC AG | Torweg 8 | 3930 Visp | +41 27 948 46 00 | **info@hooc.ch**
www.hooc.ch/connect

Documents / Resources

	HOOC Connect X Physical and Virtual Gateways [pdf] Instruction Manual Connect X Physical and Virtual Gateways, Physical and Virtual Gateways, Virtual Gateways, Gateways

References

- **Gateways für VPN, Alerting & mehr | KNX, LoRa, Modbus, TCP | HOOC**
- **my.hooc.me**