# Installation Guide for the INBACMEB***0100 Gateway

**** stands for the gateway capacity and varies depending on the specific gateway purchased.*

Version 1.0.2

**Owner's record**

Find the serial number on the silver label on the right side of the gateway. For sales or technical assistance, we recommend writing it in the space below:

**SN:**

## Safety Information

Follow these instructions carefully. Improper work may seriously harm your health and damage the gateway and/or any other equipment connected to it.

Only technical personnel, following these instructions and the country legislation for installing electric equipment, can install and manipulate this gateway.

Install this gateway indoors, in a restricted access location, avoiding exposure to direct solar radiation, water, high relative humidity, or dust.

All wires for communication and power supply (if needed) must only be connected to networks without routing to the outside plant. All communication ports are considered for indoor use and must only be connected to SELV circuits.

Mount the gateway, preferably, on a DIN rail inside a grounded metal cabinet following the instructions below.

In the case of wall mounting, firmly fix the gateway on a non-vibrating surface following the instructions below.

Disconnect power wires before manipulating and connecting them to the gateway.

Use SELV-rated NEC class 2 or limited power source (LPS) power supply.

Supply the correct voltage to power the gateway. See the Technical Specifications table at the end of this document.

Respect the expected polarity of power (if needed) and communication cables when connecting them to the gateway.

This gateway is designed for installation inside an enclosure. When working inside an enclosure (ex. to make adjustments, set switches, etc.) observe the common antistatic precautions before manipulating the gateway.

Take precautions when installing it outside an enclosure, in environments with static levels above 4 kV, to avoid electrostatic discharges.

These safety instructions in other languages can be found here.

## Configuration

**Use the Intesis MAPS configuration tool to configure the gateway.**

1. See instructions on how to download and install the latest version at: https://www.hms-networks.com/software-and-tools/intesis-maps.
2. Use the Ethernet port to connect the gateway to a PC running the Configuration tool. For more info, refer to the User manual.

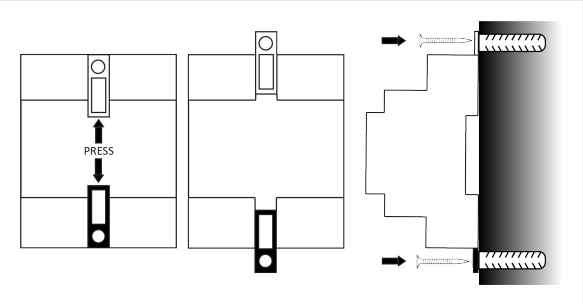
## Mounting

Do not mount the gateway in air-handling units or conducts.

DIN rail mounting inside a grounded metallic cabinet is recommended.

**Wall mounting**

1. Press the rear panel clips outwards until you hear a *click*.
2. Use the clip holes to screw the gateway to the wall.
3. Make sure the gateway is firmly fixed.

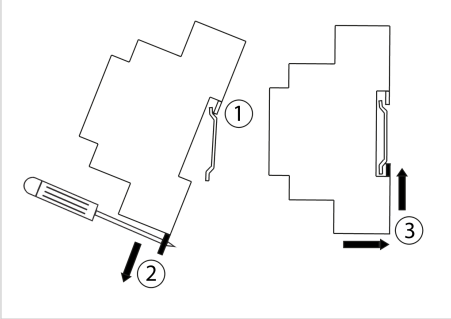



**DIN rail mounting**

Keep the clip in its original position.

1. Fit the gateway's top-side clip in the upper edge of the DIN rail.
2. Press the low side of the gateway gently to lock it in the DIN rail.
3. Make sure the gateway is firmly fixed.

For some DIN rails, to complete step 2, you may need a small screwdriver or similar to pull the bottom clip down.

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## Wiring

- Read the **Safety Information** before wiring the gateway.
- Disconnect all installation equipment from power before wiring the Intesis gateway.

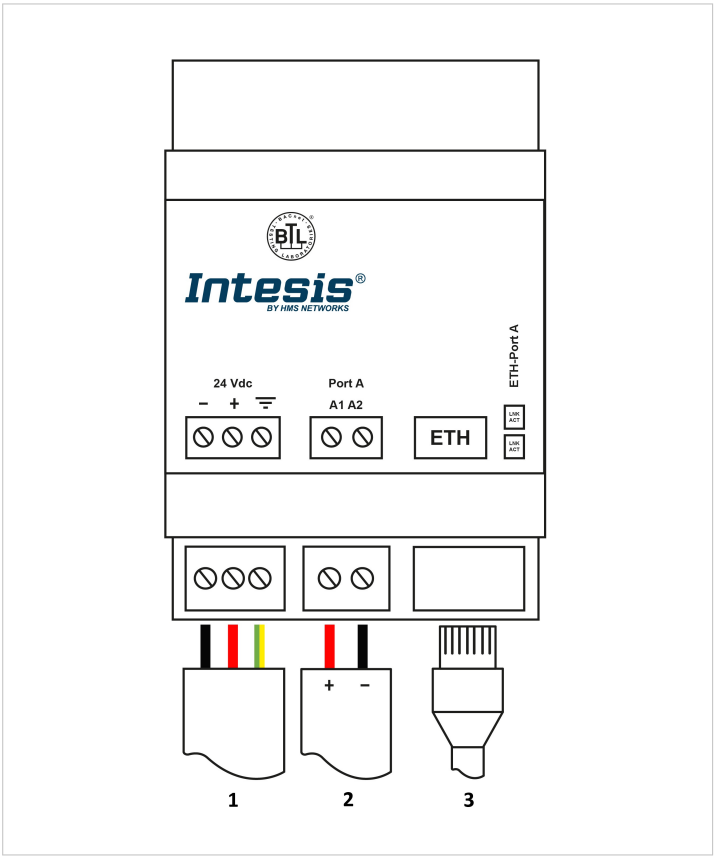



Figure 1. Wiring diagram *(wire colors are indicative only)*

| Connectors | | |
|---|---|---|
| **1** Power supply (24 VDC) | **2** Port A: M-Bus | **3** Ethernet: BACnet/IP and console |

**Wiring procedure**

1. Connect a SELV-rated NEC class 2 or limited power source (LPS) power supply to the Intesis gateway.
   - This power supply must not be shared with other devices.
   - Apply the correct voltage and power. Recommended: 24 VDC +/-10% (see the Technical Specifications table at the end of this document).
   - Connect the gateway's ground terminal to the installation grounding.
   - Use a circuit breaker before the power supply. Rating: 250 V, 6 A.
2. Connect the BACnet/IP bus to the Ethernet port of the gateway.
   - Use an Ethernet CAT5 or higher cable.
   - In using the building LAN, contact the network administrator and make sure traffic is allowed.
   - When starting up the gateway for the first time, DHCP will be enabled for 30 seconds. After that time, the default IP 192.168.100.246 will be set.
3. Connect the M-BUS bus to the Port A of the gateway.
   - Respect the polarity:

| Port A connectors | M-Bus wires |
|---|---|
| A1 | + |
| A2 | - |

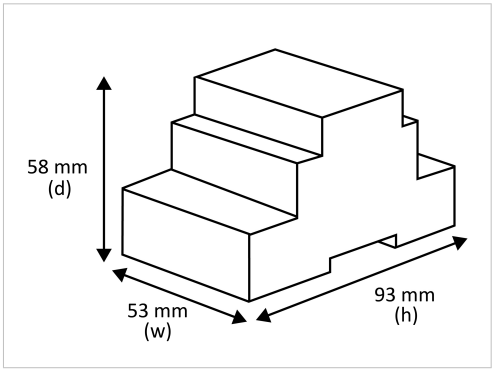
   - The gateway provides 36 VDC voltage to the M-BUS bus.

Keep communication cables away from power and ground wires.

## Dimensions

- **Net dimensions (HxWxD):**
  Millimeters: 93 x 53 x 58 mm
  Inches: 3.7 x 2.1 x 2.3”

Leave enough clear space to wire the gateway easily and for the subsequent manipulation of elements.




## Technical Specifications

| | |
|---|---|
| **Housing** | Plastic, type ABS (UL 94 V-0)<br>Net dimensions (HxWxD): 93 x 53 x 58 mm / 3.7 x 2.1 x 2.3”<br>Color: Light grey. RAL 7035 |
| **Weight** | 175 g (6.2 oz) |
| **Terminal wiring for low-voltage signals** | Per terminal: solid wires or stranded wires (twisted or with ferrule). Wire cross-section/gauge:<br>One core: 0.2 to 2.5 $mm^2$ (24 .. 11 AWG)<br>Two cores: 0.2 to 1.5 $mm^2$ (24 .. 15 AWG)<br>Three cores: Not permitted |
| **Power supply** | 1 x Green pluggable terminal block (3 poles)<br>24 VDC, Max.: 220 mA, 5.2 W<br>Use SELV-rated NEC class 2 or limited power source (LPS) power supply |
| **Mounting** | Wall or DIN rail |
| **Ethernet port** | 1 x Ethernet 10/100 Mbps RJ45<br>2 x Ethernet LED: port link and activity |
| **Port A: M-Bus** | 1 x Green pluggable terminal block (2 poles)<br>M-Bus power consumption:<br>• Normal operating level: 90 mA (50 M-Bus unit loads + 20%)<br>• Collision detection: 25 mA<br>• Overload level: 215 mA<br>Voltage rating: 36 VDC |
| **Operational temperature** | Celsius: 0 to +60°C<br>Fahrenheit: 32 to 140°F |
| **Operational humidity** | 5% to 95%, non-condensing |
| **Protection** | IP20 (IEC60529) |

## Disposal and Recycling

This product contains electronic components and must be properly disposed of according to local laws and regulations. For further information, refer to: https://www.hms-networks.com/corporate-social-responsibility

For further information on the installation, connection, and configuration of this gateway, refer to the User manual.

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