

Installation Sheet for INMBSMEBxxx0100

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

Version: 1.0.0

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.

For safety instruction in other languages, see

<https://intesis.com/docs/manuals/v6-safety>

Configuration

Use the Configuration tool to configure the gateway.

1. See instructions on how to download and install the latest version at: <https://www.intesis.com/products/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



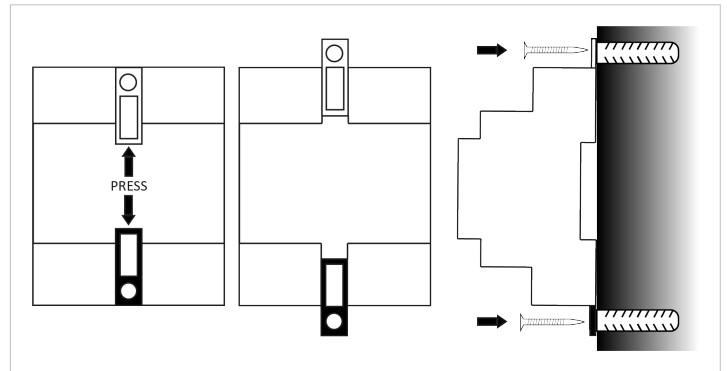
Do not mount the gateway in air-handling units or conducts.



DIN rail mounting inside a grounded metallic cabinet is recommended.

Wall mounting

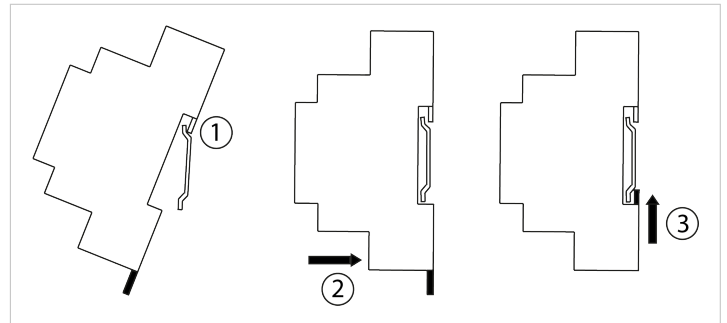
1. Press the rear panel clips until you hear a *click*.
2. Use the clip holes to screw the gateway to the wall.
3. Make sure the gateway is firmly fixed.



DIN rail mounting

Keep the top side clip in its original position.

1. Insert the gateway in the upper edge of the DIN rail.
2. Fit the low side of the gateway in the DIN rail.
3. Push the bottom clip back to its original position, locking the gateway to the rail.
4. Make sure the gateway is firmly fixed.



Wiring



- Read the Safety Instructions before wiring the gateway.
- Disconnect all installation equipment from the power source before wiring the Intesis gateway.

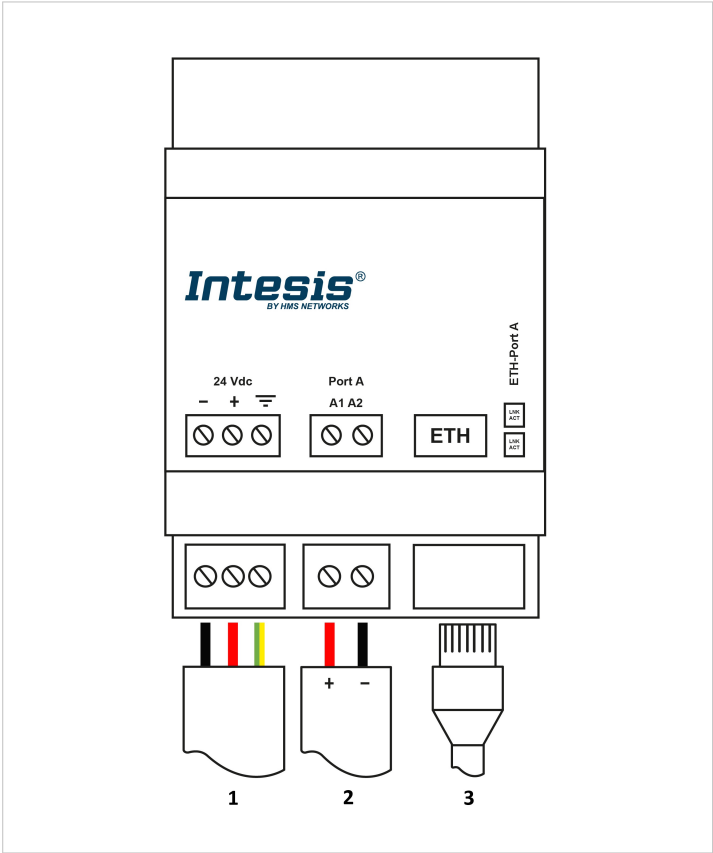


Figure 1. Wiring diagram (wire colors are indicative only)

Connectors		
1 Power supply (24 VDC)	2 Port A: M-Bus	3 Ethernet: Modbus TCP 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 Modbus TCP 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	-

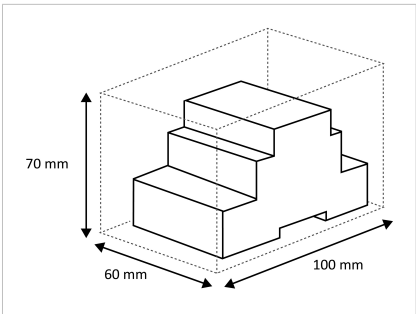
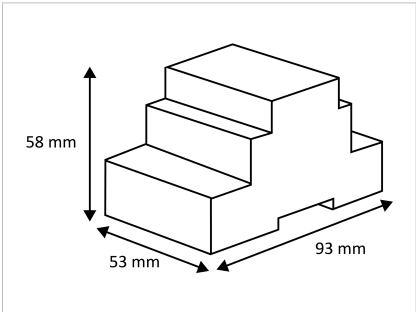
- The gateway provides 36 VDC voltage to the M-BUS bus.



Keep communication cables away from power and ground wires.

Technical Specifications

Enclosure	Plastic, type PC (UL 94 V-0) Net dimensions (DxWxH): 93 x 53 x 58 mm / 3.7 x 2.1 x 2.3" Recommended space for installation (DxWxH): 100 x 60 x 70 mm / 4 x 2.4 x 2.8" 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: 1 core: 0.5 to 2.5 mm² (24 to 11 AWG) 2 cores: 0.5 to 1.5mm² (24 to 15 AWG) 3 cores: not permitted
Power supply	1 x Green pluggable terminal block (3 poles) 24 VDC, Max.: 220 mA, 5.2 W 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 2 x Ethernet LED: port link and activity
Port A: M-Bus	1 x Green pluggable terminal block (2 poles) M-Bus power consumption: 90 mA Voltage rating: 36 VDC
Operational temperature	Celsius: 0 to +60°C 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.intesis.com/weee-regulation>

For further information on the installation, connection, and configuration of this gateway, refer to the [User manual](#).