Intesis
BY HMS NETWORKS

INBACRTR03200XX
Intesis BACnet MS/TP to BACnet IP router
Order Code: INBACRTR03200XX
** stands for the Intesis gateway capacity and varies depending on the specific gateway acquired

Installation Sheet version 1.7
HMS Industrial Networks S.L.U ©

SAFETY INSTRUCTIONS

⚠ WARNING

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

The gateway must be installed by accredited electrician or similar technical personnel, following all the safety instructions given here and always in accordance with the country legislation for installation of electric equipment.

The gateway cannot be installed outdoors or exposed to direct solar radiation, water, high relative humidity, or dust.

The gateway must only be installed in a restricted access location.

In the case of wall mounting, firmly fix the gateway on a not vibrating surface following the instructions explained below.

In the case of DIN rail mounting, fix the gateway properly to the DIN rail following the instructions below.

Mounting on DIN rail inside a metallic cabinet properly connected to earth is recommended.

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

Use a SELV-rated NEC Class 2 or Limited Power Source (LPS) power supply.

Respect the expected polarity of power and communication cables when connecting them to the gateway.

Supply a correct voltage to power the gateway. See the **Electrical & mechanical features** table below.

CAUTION: Connect the gateway to networks without routing to the outside plant only. All communication ports are considered for indoor only.

This device was designed for installation in an enclosure. To avoid electrostatic discharge to the unit in environments with static levels above 4 kV, precautions should be taken when the device is mounted outside an enclosure. When working in an enclosure (ex. making adjustments, setting switches etc.) typical anti-static precautions should be observed before touching the unit.

Safety instructions in other languages can be found at:
https://intesis.com/docs/manuals/v6-safety

CONFIGURATION

Use the *Configuration Tool* to configure the gateway.

See instructions to download and install the latest version at:
https://intesis.com/docs/software/intesis-maps-installer

Use the Ethernet connection for communication between the gateway and the configuration tool. See **Connections** below. For more details, refer to the user manual.

INSTALLATION

Disconnect the power supply from the power source before connecting it to the gateway.

Disconnect power of any bus or communication cable before connecting it to the gateway.

Mount the gateway in a vertical position on the wall or DIN rail following the instruction below and respecting the **Safety instructions** given above.

IMPORTANT: Connect a SELV-rated NEC Class 2 or Limited Power Source (LPS) power supply to the gateway. Respect the polarity if DC power, or Line and Neutral if AC power. **This power supply must not be shared with other devices.** Always apply a voltage within the range admitted by the gateway and of enough power (see the **Electrical & mechanical features** table below).
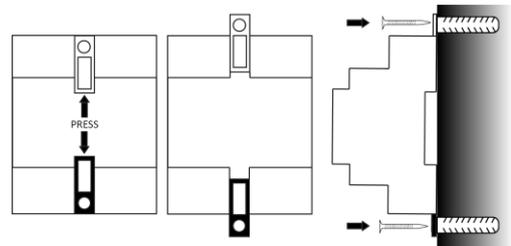
Use a circuit-breaker before the power supply. Rating 250 V, 6 A.

Connect the communication cables to the gateway. For more details, refer to the user manual.

Power the gateway and the rest of devices connected to it.

Wall Mounting

1. Push the rear pannel clips until you hear a *click*.

2. Use the clip holes to screw the gateway on the wall.

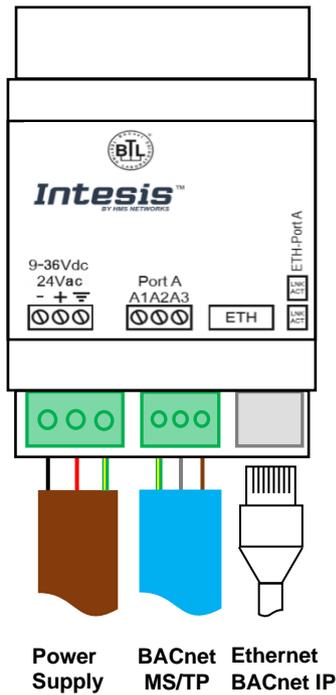3. Make sure the gateweay is firmly fixed.

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.

Intesis
BY HMS NETWORKS

| URL | https://www.intesis.com |
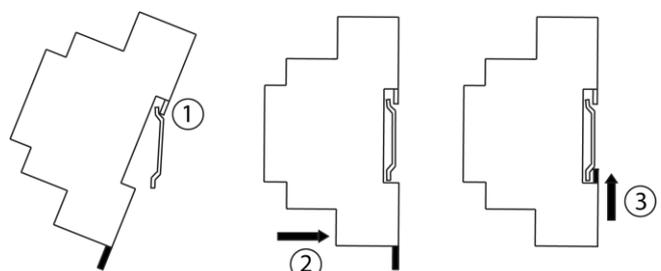
CONNECTIONS

Power Supply | **BACnet MS/TP** | **Ethernet BACnet IP**

Power Supply

Must use NEC Class 2 or Limited Power Source (LPS) and SELV rated power supply. Respect polarity applied of terminals (+) and (-). Be sure the voltage applied is within the range admitted (check table below). The power supply can be connected to earth but only through the negative terminal, never through the positive terminal.

Ethernet / BACnet IP

Connect the cable coming from the IP network to the connector ETH of the gateway. Use an Ethernet CAT5 cable. If communicating through the LAN of the building, contact the network administrator and make sure traffic on the port used is allowed through all the LAN path (check the gateway user manual for more information). With factory settings, after powering up the gateway, DHCP will be enabled for 30 seconds. After that time, if no IP is provided by a DHCP server, the default IP 192.168.100.246 will be set.
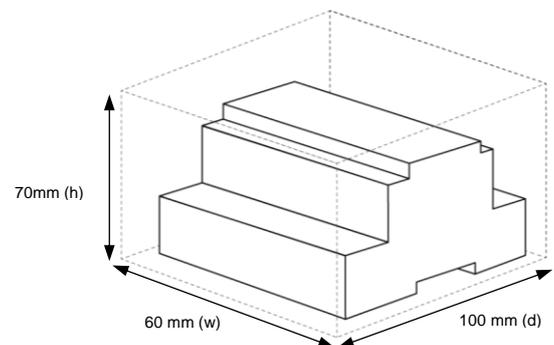
Port BACnet MS/TP

Connect the EIA485 bus to connectors A1: SGND, A2: A-, and A3: B+ of gateway's Port A. Respect the polarity.

Note for MS/TP port: Remember the characteristics of the standard EIA485 bus: maximum distance of 1200 meters (3937 ft), maximum 32 devices connected to the bus, and in each end of the bus it must be a termination resistor of 120 Ω.

ELECTRICAL & MECHANICAL FEATURES

Enclosure	Plastic, type PC (UL 94 V-0) Net dimensions (dxwxh): 93x53x58 mm / 3.66x2.08x2x28" Clearances for installation (dxwxh): 100x60x70mm / 3.93x2.36x2.75" Color: Light Grey. RAL 7035
Mounting	Wall or DIN rail EN60715 TH35
Terminal Wiring (for power supply and low-voltage signals)	Cross-section/Gauge per terminal: 1 core: 0.2 .. 2.5mm^2 (24 .. 14 AWG) 2 cores: 0.2 .. 1.5mm^2 (24 .. 16 AWG) 3 cores: not permitted Use solid or stranded wires (twisted or with ferrule)
Power	1 x Plug-in screw terminal block (3 poles) Positive, Negative, Earth 9-36 VDC / 24 VAC / 50-60 Hz / 0.140 A / 1.7 W
Ethernet	1 x Ethernet 10/100 Mbps RJ45 2 x Ethernet LED: port link and activity
Port	1 x Serial EIA485 (Plug-in screw terminal block 3 poles) **A1**: SGND (Reference ground or shield), **A2**: A-, **A3**: B+ 1500VDC isolation from other ports
Operation Temperature	0°C to +60°C
Operational Humidity	5 to 95%, no condensation
Protection	IP20 (IEC60529)

70mm (h)
60 mm (w)
100 mm (d)

Intesis®
BY HMS NETWORKS

URL | https://www.intesis.com