INKNXMEB***0000

M-BUS to KNX gateway

Order Code: INKNXMEB***0000

*** stands for the Intesis gateway capacity and varies depending on the specific gateway acquired

Installation Sheet version 1.8

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Owner's Record

The serial number is located at the rear of the gateway. Record this information in the space provided below. Refer to it whenever you contact upon your gateway dealer or support team regarding this product.

Serial No. _____

SAFETY INSTRUCTIONS

MANDATORY GROUND CONNECTION

YOU MUST connect the gateway to the installation ground terminal. Always use the gateway's dedicated connector ⏚

NEVER use the positive or negative gateway's connectors to establish this connection. Not following this indication can cause ground loops and damage the gateway and/or any other equipment connected to it.

If the power supply includes a ground connection, that terminal must be connected to ground.

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

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

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

In case of wall mount, fix firmly the Intesis device on a not vibrating surface following the instructions next.

In case of DIN rail mount fix the Intesis device properly to the DIN rail following the instructions below.

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

Always disconnect power of any wires before manipulating and connecting them to the Intesis gateway.

A DC power supply connected to earth, with an NEC Class 2 or Limited Power Source (LPS) and SELV rated is to be used.

Always respect the expected polarity of power and communication cables when connecting them to the Intesis device.

Always supply a correct voltage to power the Intesis device, see details of voltage range admitted by the device in the technical characteristics below.

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions. Battery replacement shall be done by an authorized installer.

CAUTION: The device is to be connected only to networks without routing to the outside plant, all communication ports are considered for indoor only and can be connected SELV circuits 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 HERE.

CONFIGURATION

Use the ***Configuration Tool*** to configure the gateway.

See instructions to download and install the latest version at: https://www.hms-networks.com/software-and-tools/intesis-maps

Use the Ethernet connection or the Console Port (mini USB type B connector included) for communication between the gateway and the configuration tool. See CONNECTIONS below and follow instructions of user's manual for more details.

INSTALLATION

Follow these instructions to install the gateway properly.

Disconnect from mains the power supply before connecting it to the Intesis device.

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

Mount the Intesis device on the wall or DIN rail following the instruction given below, respecting the safety instructions given above.

Connect a NEC Class 2 or Limited Power Source (LPS) and SELV rated DC power supply to the Intesis gateway and always apply a voltage within the range admitted by the Intesis gateway and of enough power (see technical characteristics).

Circuit-breaker must be used before the power supply. Rating 250 V-6 A.

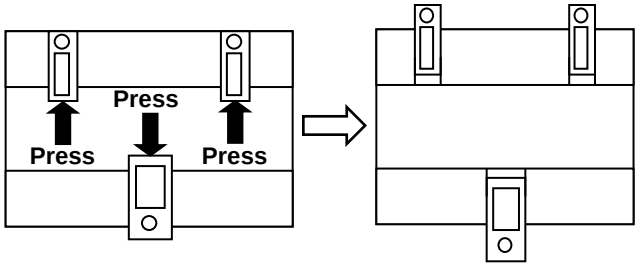
Connect the communication cables to the Intesis gateway, see details on the user's manual.

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

NOTE: The device cannot be installed in air-handling space.

Wall Mount

1. Separate the fixing clips in the bottom of the box, pushing them to the outside until hear the "click" which indicates that now the clips are in position for wall mount, see in the figure below.
2. Use the holes of the to fix the box in the wall using screws. Use the template below for the wall wholes.

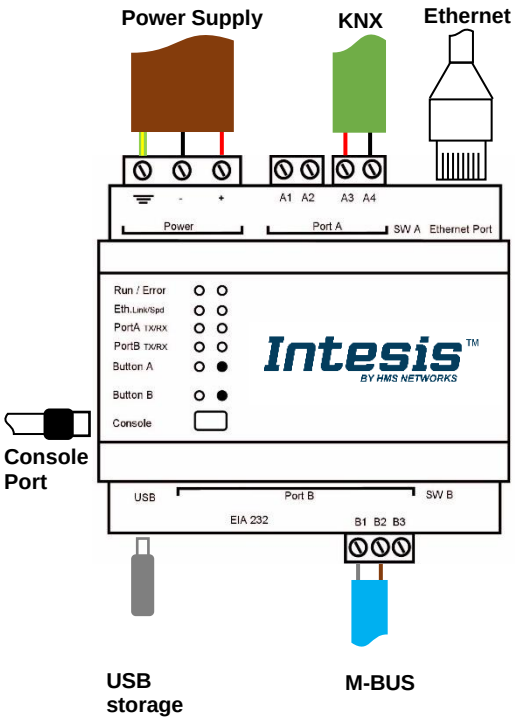


DIN Rail Mount

With the clips of the box in their original position, insert first the box in the upper edge of the DIN rail and later insert the box in the down part of the rail, using a small screwdriver and following the steps in the figure below.

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CONNECTIONS



Power Supply
Must use NEC Class 2 or Limited Power Source (LPS) and SELV rated DC power supply. Respect polarity applied of terminals (+) and (-). Be sure the voltage applied is within the range admitted (check table below). The power supply must be connected to earth.

Ethernet / Console (UDP & TCP)
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.

PortA / KNX
Connect the KNX TP1 bus to connectors A3 (+) and A4 (-) of gateway's PortA. Respect the polarity.

PortB / M-BUS
Connect the MBUS bus to connectors B1 (+) and B2 (-) of gateway's PortB. The Intesis device provides 36VDC M-Bus voltage to the bus.

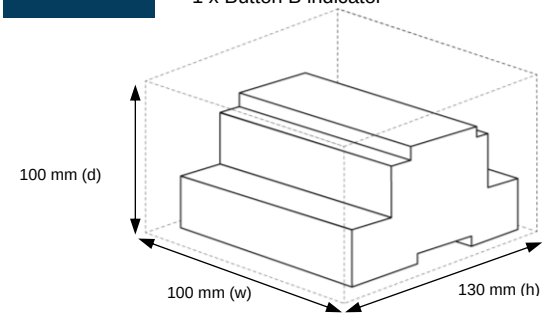
Console Port
Connect a mini-type B USB cable from your computer to the gateway to allow communication between the Configuration Software and the gateway. Remember that Ethernet connection is also allowed. Check the user manual for more information.

USB
Connect a USB storage device (not a HDD) if required. Check the user manual for more information.

ELECTRICAL & MECHANICAL FEATURES

Housing	Plastic, type ABS (UL 94 V-0) Net dimensions (HxWxD): 90x88x56 mm Recommended space for installation (HxWxD): 130x100x100 mm Color: Light Grey. RAL 7035
Mounting	Wall DIN rail EN60715 TH35
Terminal Wiring (for power supply and low-voltage signals)	Per terminal: solid wires or stranded wires (twisted or with ferrule) One core: 0.2 mm²… 2.5 mm² Two cores: 0.2 mm²… 1.5 mm² Three cores: Not permitted If cables are more than 3.05 meters long, Class 2 cable is required.
Power	1 x Plug-in screw terminal block (3 poles) Positive, Negative, Earth 24 VDC
Ethernet	1 x Ethernet 10/100 Mbps RJ45 2 x Ethernet LED: port link and activity
Port A	1 x KNX TP-1 Plug-in screw terminal block orange (2 poles) 2500 VDC isolation from other ports KNX power consumption: 5 mA Voltage rating: 29 VDC 1 x Plug-in screw terminal block green (2 poles) Reserved for future use
Switch A (SWA)	1 x DIP-Switch for PORT A configuration: Reserved for future use
PORT B	1 x Serial EIA232 (SUB-D9 male connector) Reserved for future use 1 x M-BUS Plug-in screw terminal block (3 poles) MBUS power consumption: 210 mA Voltage rating: 36 VDC (except PORT B: EIA232)
Switch B (SWB)	1 x DIP-Switch for PORT B configuration: Reserved for future use

Battery	Size: Coin 20 mm x 3.2 mm Capacity: 3 V / 225 mAh Type: Manganese Dioxide Lithium
Console Port	Mini Type-B USB 2.0 compliant 1500 VDC isolation
USB port	Type-A USB 2.0 compliant Only for USB flash storage device *(USB pen drive)* Power consumption limited to 150 mA *(HDD connection not allowed)*
Push Button	Button A: Programming button (not used) Button B: Not used
Operation Temperature	0°C to +60°C
Operational Humidity	5 to 95%, no condensation
Protection	IP20 (IEC60529)
LED Indicators	10 x Onboard LED indicators 2 x Run (Power)/Error 2 x Ethernet Link/Speed 2 x Port A TX/RX 2 x Port B TX/RX 1 x Button A indicator 1 x Button B indicator



This marking on the product, accessories, packaging or literature (manual) indicates that the product contains electronic parts and they must be properly disposed of by following the instructions at https://www.hms-networks.com/sustainability

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