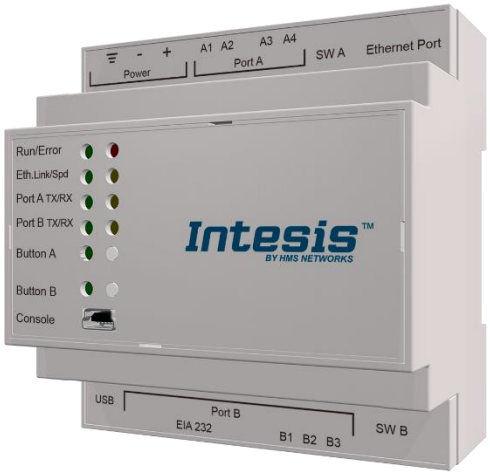
INMBSKNX***0000

KNX to Modbus Slave gateway

Order Codes:

INMBSKNX1000000 (100 points)
INMBSKNX2500000 (250 points)
INMBSKNX6000000 (600 points)
INMBSKNX1K20000 (1200 points)
INMBSKNX3K00000 (3000 points)



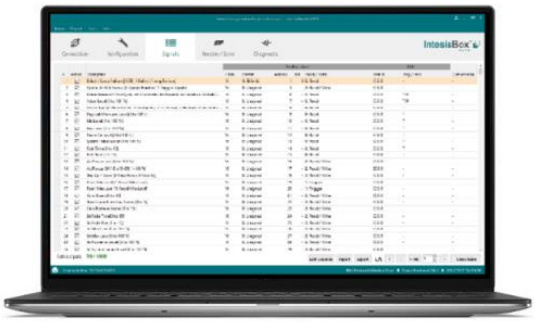
HOW IT WORKS

The Intesis ***INMBSKNX***0000*** Gateway has been specially designed to work as a translator between a KNX installation and Modbus TCP and/or Modbus RTU based control and monitoring systems.

Intesis acts as any other KNX device in a KNX system, allowing both Modbus TCP and Modbus RTU client/master devices to read and write on all configured KNX communication objects.

Modbus RTU masters are connected to the serial port of the gateway, while Modbus TCP devices are connected to the Ethernet port. On the KNX side, the gateway simulates a KNX device and acts as if it was another device in the KNX system.

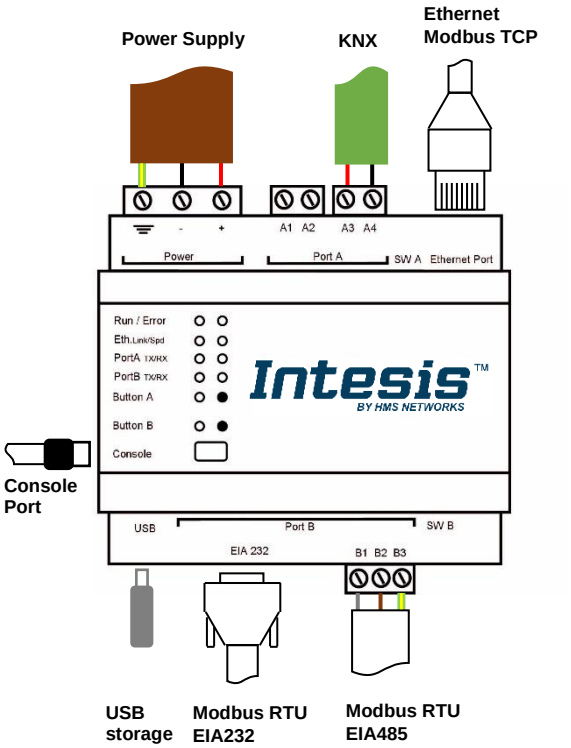
Configuration project is done through Intesis MAPS.



FEATURES

- Handles conversion between Modbus (RTU & TCP) and KNX TP-1
- Manages Modbus TCP and Modbus RTU simultaneously
- Connects with up to 5 simultaneous Modbus TCP clients to KNX (processing up to 3000 Modbus registers)
- Configuration through IP or USB (Console) port
- Datalogging though external USB port
- Plastic housing that mounts on 35-mm DIN-rail
- Front cover LED indicators to provide easy to check communication status on both the Ethernet and serial ports
- Includes Intesis MAPS with automatic updates for both Intesis MAPS and Gateway's firmware

CONNECTIONS



PROTOCOLS

KNX is the world´s only open Standard for the control in both commercial and residential buildings. This standard is based upon more than 20 years of experience in the market, amongst others with predecessor systems to KNX: EIB, EHS and BatiBUS. Bus devices can either be sensors or actuators needed for the control of building management equipment such as: lighting, blinds/shutters, security systems, energy management, heating, ventilation and air-conditioning systems, signaling and monitoring systems, interfaces to service and building control systems, remote control, metering, audio/video control, white goods, etc.

For further information visit www.knx.org

Modbus Protocol is a de facto standard, truly open and the most widely used network protocol in the industrial manufacturing environment. Modbus is used in multiple applications to monitor and program devices; to communicate between intelligent devices and sensors and instruments; to monitor field devices using PCs and HMIs.

But Modbus is not only an industrial protocol. Building, infrastructure, transportation and energy applications also make use of its benefits.

For further information visit

COMMUNICATION

	Modbus		KNX
	RTU	TCP	
Connection	EIA485 (3 wire isolated) EIA232 (DB9 connector)	10BASE-T 100BASE-TX	KNX TP-1
Date rate	2.4, 4.8, 9.6, 19.2, 38.4, 57.6, 115.2kbps	10 Mbps 100 Mbps	9.6 kbps
Data Types & Functions supported	1-Read Digital Outputs 2-Read Digital Inputs 3-Read Holding Registers 4-Read Analog Registers 5-Write Single Digital Output 6-Write Single Analog Register 15-Write Multiple Digital Output 16-Write Multiple Holding Registers		DPT 1.X / DPT 5.X DPT 6.x / DPT 7.x DPT 8.x / DPT 9.X DPT 12.x / DPT 13.x DPT 14.x / DPT 20.x

ELECTRICAL & MECHANICAL FEATURES

Enclosure	Plastic, type PC (UL 94 V-0) Net dimensions (dxwxh): 90x88x56 mm Recommended space for installation (dxwxh): 130x100x100mm 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) 1 core: 0.5mm²… 2.5mm² 2 cores: 0.5mm²… 1.5mm² 3 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) 9 to 36VDC +/-10%, Max.: 140mA. 24VAC +/-10% 50-60Hz, Max.: 127mA Recommended: 24VDC
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) 2500VDC isolation from other ports KNX power consumption: 5mA Voltage rating: 29VDC 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) Pinout from a DTE device 1500VDC isolation from other ports (except PORT B: EIA485) 1 x Serial EIA485 Plug-in screw terminal block (3 poles) A, B, SGND (Reference ground or shield) 1500VDC isolation from other ports *(except PORT B: EIA232)*
Switch B (SWB)	1 x DIP-Switch for serial EIA485 configuration: Position 1: **ON:** 120 Ω termination active **Off:** 120 Ω termination inactive Position 2-3: **ON:** Polarization active **Off:** Polarization inactive

Battery	Size: Coin 20mm x 3.2mm Capacity: 3V / 225mAh Type: Manganese Dioxide Lithium
Console Port	Mini Type-B USB 2.0 compliant 1500VDC isolation
USB port	Type-A USB 2.0 compliant Only for USB flash storage device *(USB pen drive)* Power consumption limited to 150mA *(HDD connection not allowed)*
Push Button	Button A: Check the user manual Button B: Check the user manual
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