

Intesis IN790NIB100A000 Prescription Document

Document version: 1.0.0

Product type: The IN790NIB100A000 is a BACnet/IP, BACnet MS/TP, and KNX TP gateway compatible with NIBE heat pump systems.

Manufacturer: HMS Industrial Networks SLU.

Product description: Connect this gateway to the NIBE indoor unit via Ethernet to monitor and control its main functions for DHW and climate. The gateway also implements specific signals for the accessories connected to the NIBE system, such as pool heating, 4-pipe cooling, photovoltaic installations, multiple climate systems, and more. The gateway is configured using preconfigured templates via Intesis MAPS.

Installation: DIN rail.

Equipment and accessories: Intesis gateway, installation sheet, and USB Mini-B type to USB Type-A cable.

Standards, guidelines, and certificates:

- BTL and UL certificate.
- EC conformity to EMC directive (2014/30/EC); EN 55032:2015, EN 55035:2017, EN 55035:2017/A11:2020.
- EC conformity to low-voltage directive (2014/35/EC); EN 62368-1: 2014 + A11: 2017 + AC:2017.
- Compliant with RoHS 2 directive (2011/65/EU).

Main features:

- UL certified.
- BTL certified.
- Two applications available: NIBE to KNX TP, NIBE to BACnet/IP or BACnet MS/TP.
- Capacity for up to five NIBE units and 100 communication registers.
- Compatible with ground- and air-source NIBE systems.
- Connection to the NIBE unit through Modbus TCP via Ethernet.
- Specific signals for NIBE accessories, including pool heating, 4-pipe cooling, integration of photovoltaic installations, multiple climate systems, and more.
- Six preconfigured templates ready to be imported into your project.
- Integration of different NIBE models into the same project, even combining ground-source and air-source units.
- Five extra registers for specific customization.
- EIA-485 bus termination and polarization enablement through a dedicated DIP switch block for BACnet MS/TP.
- 10 LEDs indicate the operating status of the gateway and the communication ports.
- Multiple ports for serial and IP communication.
- BACnet advanced features available (trend logs, calendars, etc.).

Technical specifications:

Housing	Material: Plastic (ABS, UL 94 V-0). Color: light grey (RAL 7035). Dimensions: 90 x 88 x 58 mm / Inches: 3.54 x 3.46 x 2.28". Protection: IP20
Mounting	DIN rail (EN 60715 TH35)
Wiring	Wire cross-section/gauge: One core: 0.5 .. 2.5 mm ² . Two cores: 0.5 .. 1.5 mm ² . Three cores: Not allowed. Use solid or stranded wires. For EIA-485: Use a shielded cable.
Power supply	1 x green pluggable terminal block (3 poles). For DC: 9 to 36 VDC, 1.7 W. For AC: 24 VAC ±10%, 50-60 Hz, 1.7 W. Recommended: 24 VDC, 1.7 W
Ethernet	1 x Ethernet RJ45 10/100BASE-T
Port A	1 x orange pluggable terminal block (A3+, A4-): KNX TP
SW A	1 x DIP switch: Not used
Port B	1 x serial EIA-485 green pluggable terminal block (B1+, B2-, B3 SG). Use a shielded cable. Connect the shield to the SG.
SW B	1 x DIP switch (3 positions) for EIA-485 termination resistor and polarization.
Battery	Type: Manganese Dioxide Lithium button battery. Size: 20 x 3.2 mm / 0.79" x 0.13". Capacity: 3 V - 255 mA
Console port	USB Mini-B type 2.0 compliant
USB port	USB A type 2.0 compliant. Only for USB flash storage devices (USB pen drive). HDD connection not allowed
Push buttons	2 x Push buttons
Op. conditions	Temperature: -10... 60°C / 14.. 140°F. Humidity: 5 .. 95% (No condensation)
LED indicators	1 x Power / 1 x Error / 2 x Ethernet / 2 x Protocol A / 2 x Protocol B / 1 x Button A / 1 x Button B

