


Installation Sheet for IN485DAI001I000

Version 1.0

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 with indoor wiring. All communication ports are considered for indoor use and must only be connected to SELV circuits.

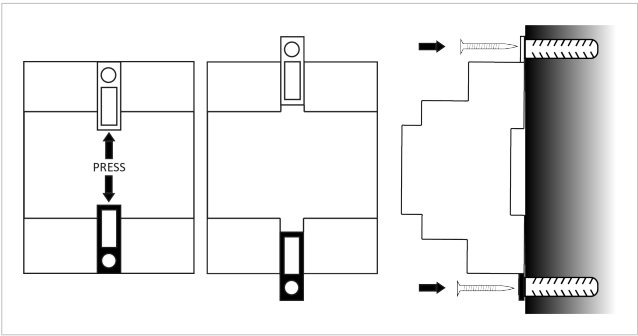
Disconnect power wires before manipulating and connecting them to the gateway.

Respect the expected polarity of power (if needed) and communication cables when connecting them to the gateway.

Installation Instructions

Wall mounting

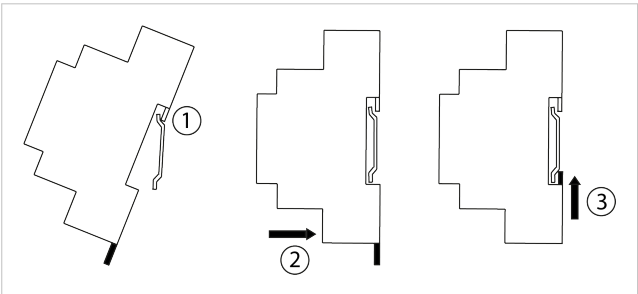
1. Press the rear panel clips until you hear a *click*.
2. Use the clip holes to screw the gateway to the wall.
3. Make sure the gateway is firmly fixed.




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.





DIN rail mounting inside a grounded metallic cabinet is recommended.

Connection Instructions

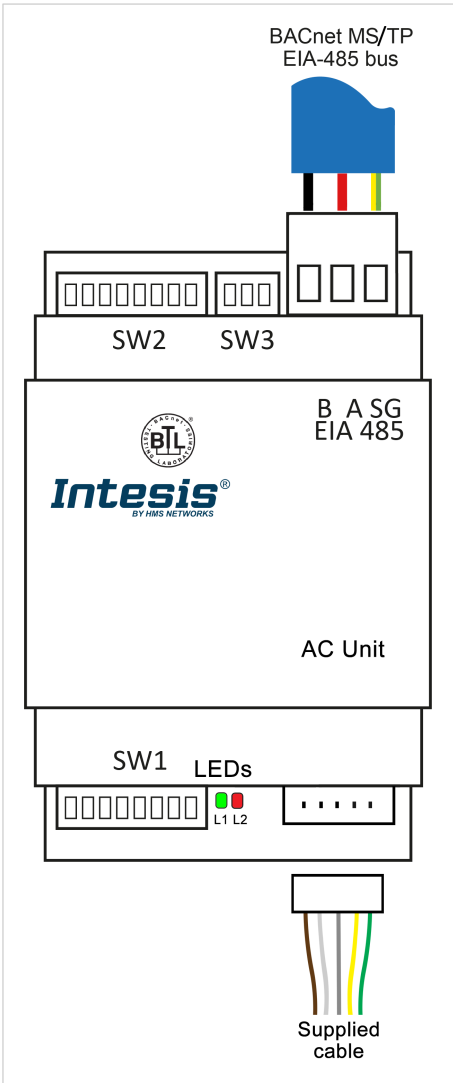




Figure 1. Wiring diagram (wire colors are indicative only)

1. Disconnect the AC system from the power.
2. Mount the gateway in the desired place.
3. Use the supplied cable to connect the AC unit and the gateway:




This cable is 1.00 m (3.2 feet) long. Its modification in length may affect the correct operation of the gateway.

- a. **AC unit connection:** Plug the largest unsheathed cable part connector into the socket S21 of the AC unit control board.
 - b. **Gateway connection:** Plug the other end connector, the one on the shortest unsheathed part of the cable, into the socket labeled as **AC Unit**.
4. Connect the BACnet MS/TP bus to the EIA-485 port of the gateway.



Observe polarity: B-, A+, and SG for ground connection.



Keep communication cables away from power and ground wires.

DIP Switches

The gateway includes three built-in DIP switches: SW1 (8 switches) at the bottom side; SW2 (8 switches) and SW3 (3 switches) at the top side.

Table 1. SW1 (P6 to P8): BACnet MS/TP baudrate

Binary value	Switches								Description
b0 .. b7	1	2	3	4	5	6	7	8	
X X X X X 0 0 0	X	X	X	X	X	↓	↓	↓	Autobaudrate (default value)
X X X X X 1 0 0	X	X	X	X	X	↑	↓	↓	9600 bps
X X X X X 0 1 0	X	X	X	X	X	↓	↑	↓	19200 bps
X X X X X 1 1 0	X	X	X	X	X	↑	↑	↓	38400 bps
X X X X X 0 0 1	X	X	X	X	X	↓	↓	↑	57600 bps
X X X X X 1 0 1	X	X	X	X	X	↑	↓	↑	76800 bps
X X X X X 0 1 1	X	X	X	X	X	↓	↑	↑	115200 bps
X X X X X 1 1 1	X	X	X	X	X	↑	↑	↑	Autobaudrate

Table 2. SW2 (P1 to P7): BACnet MS/TP MAC address; (P8): Temperature unit (°C/°F)

Binary value	Switches								MAC address	Description
b0 .. b7	1	2	3	4	5	6	7	8		
0 0 0 0 0 0 0 X	↓	↓	↓	↓	↓	↓	↓	X	0	-
1 0 0 0 0 0 0 X	↑	↓	↓	↓	↓	↓	↓	X	1	-
0 1 0 0 0 0 0 X	↓	↑	↓	↓	↓	↓	↓	X	2	-
1 1 0 0 0 0 0 X	↑	↑	↓	↓	↓	↓	↓	X	3	-
...	-
1 0 1 1 1 1 1 X	↑	↓	↑	↑	↑	↑	↑	X	125	-
0 1 1 1 1 1 1 X	↓	↑	↑	↑	↑	↑	↑	X	126	-
1 1 1 1 1 1 1 X	↑	↑	↑	↑	↑	↑	↑	X	127	-
X X X X X X 0	X	X	X	X	X	X	X	↓	-	Temperature in Celsius (default)
X X X X X X 1	X	X	X	X	X	X	X	↑	-	Temperature in Fahrenheit

Table 3. SW3 (P1 to P3): BACnet polarization and termination resistor

Binary value	Switches			Description
b0 .. b2	1	2	3	
0 X X	↓	X	X	EIA-485 bus without termination resistor. The gateway is not at one end of the EIA-485 bus (default value)
1 X X	↑	X	X	120 Ω termination resistor active. The gateway is at one end of the EIA-485 bus
X 0 0	X	↓	↓	No bus polarization (default value)
X 1 1	X	↑	↑	Bus polarization active



The DIP switches configuration will only take effect after rebooting the gateway.

LEDs Information

Two LEDs are placed between SW1 and the AC Unit socket at the gateway's bottom.

LED	Status	Description
BACnet		
L1 Green	ON	BACnet MS/TP link performed
	Flickering	Activity on the BACnet MS/TP bus
	OFF	BACnet MS/TP link not performed
AC unit		
L2 Red	ON	AC communication error
	Blinking	AC unit error
	Flashing	AC communication OK



LED PATTERNS

- **ON:** 100% on
- **Flickering:** irregular cycle (90% on - 10% off approx)
- **Blinking:** 50% on - 50% off
- **Flashing:** 10% on - 90% off
- **OFF:** 100% off

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” Color: Light grey. RAL 7035
Weight	85 g (3 oz)
Terminal wiring for low-voltage signals	Per terminal: solid wires or stranded wires (twisted or with ferrule)
	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
Mounting	Wall or DIN rail
BACnet MS/TP port	1 x EIA-485 pluggable terminal block (3 poles: B, A, and SG) with 120 Ω resistor termination and polarisation configurable by DIP switch
AC unit port	1 x Specific socket
LED indicators	2 x Communication status
DIP switches	SW1: Baudrate configuration
	SW2: MAC address and temperature unit
	SW3: Bus polarization and termination
Operational and storage temperature	Celsius: Op: 0 to +70°C; St: -20 to 85°C
	Fahrenheit: 32 to 158°F; St: -4 to 185°F
Operational and storage humidity	5% to 95%, non-condensing
Isolation Voltage	1500 VDC
Isolation resistance	1000 MΩ

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](#).