

INMBSMIDxxxI000 Modbus RTU Gateway

Compatible with Commercial and VRF lines Commercialized by Midea

USER MANUAL

Issue date: 01/2024 v1.6 ENGLISH



Modbus RTU (EIA-485) Interface for Midea air conditioners

Compatible with VRF and Commercial lines

| ORDER CODE | LEGACY ORDER CODE |
|-------------------|--------------------------|
| INMBSMID004I000 | MD-AC-MBS-4 |
| INMBSMID008I000 | MD-AC-MBS-8 |
| INMBSMID032I000 | MD-AC-MBS-32 |

Important User Information

Disclaimer

The information in this document is for informational purposes only. Please inform HMS Industrial Networks of any inaccuracies or omissions found in this document. HMS Industrial Networks disclaims any responsibility or liability for any errors that may appear in this document.

HMS Industrial Networks reserves the right to modify its products in line with its policy of continuous product development. The information in this document shall therefore not be construed as a commitment on the part of HMS Industrial Networks and is subject to change without notice. HMS Industrial Networks makes no commitment to update or keep current the information in this document.

The data, examples and illustrations found in this document are included for illustrative purposes and are only intended to help improve understanding of the functionality and handling of the product. In view of the wide range of possible applications of the product, and because of the many variables and requirements associated with any particular implementation, HMS Industrial Networks cannot assume responsibility or liability for actual use based on the data, examples or illustrations included in this document nor for any damages incurred during installation of the product. Those responsible for the use of the product must acquire sufficient knowledge in order to ensure that the product is used correctly in their specific application and that the application meets all performance and safety requirements including any applicable laws, regulations, codes and standards. Further, HMS Industrial Networks will under no circumstances assume liability or responsibility for any problems that may arise as a result from the use of undocumented features or functional side effects found outside the documented scope of the product. The effects caused by any direct or indirect use of such aspects of the product are undefined and may include e.g. compatibility issues and stability issues.

INDEX

| | | |
|-------|--|----|
| 1 | Presentation | 5 |
| 2 | Connection | 6 |
| 2.1 | Connect to the AC indoor unit | 6 |
| 2.2 | Connection to the EIA-485 bus..... | 6 |
| 2.3 | Connection to the power supply | 6 |
| 2.4 | Connection diagrams | 7 |
| 3 | Quick Start Guide | 8 |
| 4 | Modbus Interface Specification | 9 |
| 4.1 | Modbus physical layer | 9 |
| 4.2 | Modbus Registers for INMBSMID004I000 / INMBSMID008I000 /INMBSMID032I000. 9 | |
| 4.2.1 | Global Control and status registers..... | 9 |
| 4.2.2 | Individual Control and status registers..... | 10 |
| | Configuration Registers..... | 11 |
| 4.3 | DIP-switch Configuration Interface | 12 |
| 4.4 | Implemented Functions..... | 15 |
| 4.5 | Device LED indicator | 15 |
| 4.6 | EIA-485 bus. Termination resistors and Fail-Safe Biasing mechanism..... | 16 |
| 5 | Electrical and Mechanical features | 17 |
| 6 | List of supported AC Unit Types..... | 18 |
| 7 | Error Codes | 19 |

1 Presentation

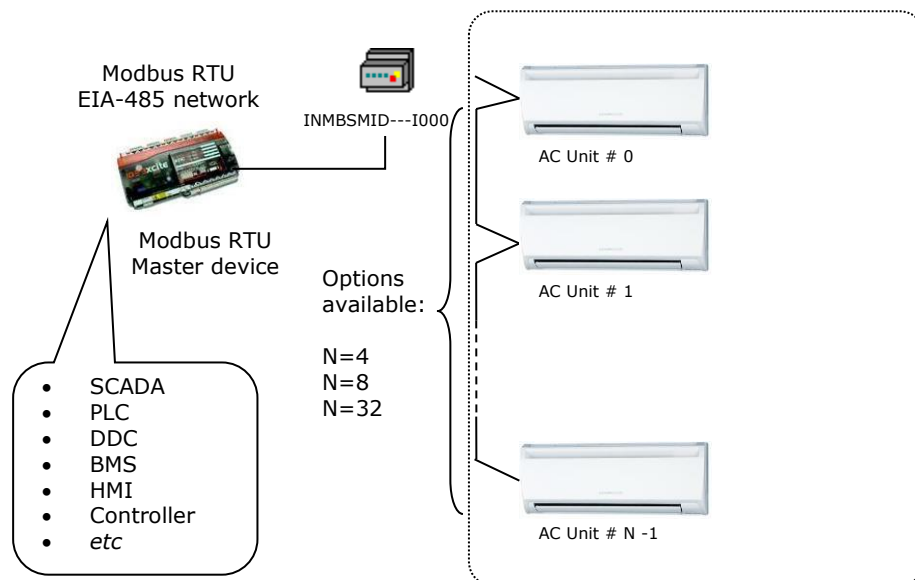


The INBMSMID---I000 interface allows a complete and natural integration of **Midea** air conditioners into Modbus RTU (EIA-485) networks.

Compatible with VRF and Commercial lines.

Reduced dimensions. 93 x 53 x 58 mm
3.7" x 2.1" x 2.3"

- Quick and easy installation.
Mountable on DIN rail, wall, or even inside the indoor unit on some models of AC.
- External power required.
- Direct connection to Modbus RTU (EIA-485) networks. Up to 63 INBMSMID004I000 / INBMSMID008I000 /INBMSMID032I000 devices can be connected on the same network.
INBMSMID---I000 is a Modbus slave device.
- Direct connection to the Midea XYE bus.
- Configuration from both on-board DIP-switches and Modbus RTU.
- Total Control and Supervision.
- Real states of the AC unit's internal variables.
- Allows simultaneous use of the AC's remote controls and Modbus RTU.
- Individual control from 1 to 32 AC units with a single interface.



Integration of multiple AC units in the same XYE bus using INBMSMID004I000 / INBMSMID008I000 /INBMSMID032I000 interface

2 Connection

The interface comes with 3 plug-in terminal blocks of 2 poles.

The first (XY) is used to establish direct connection with the AC indoor unit. The second one (V1V2) is used to provide power.

The third one (AB) is used to establish connection with the Modbus RTU EIA-485 network.

2.1 Connect to the AC indoor unit

The INMBSMID---I000 connects directly to the Midea XYE bus. The cable for proper connection is not provided with the interface. Maximum XYE bus length is 1,200 meters (3,937 ft.).

Connector E, from the XYE bus, is not used to connect to the indoor unit or indoor units. The XYE bus has specific polarity.

Depending on the number of AC units to control, the recommended connection' methods can be seen in Figure 2.1.

NOTE: If a CCM Central Controller is present in the XYE bus, then the INMBSMID---I000 cannot be connected. Please, disconnect the CCM Central Controller for use of the gateway.

2.2 Connection to the EIA-485 bus

Connect the EIA-485 bus wires to the plug-in terminal block of the INMBSMID---I000 interface and respect the polarity on this connection (A+ and B-).

Make sure that the maximum distance of the bus is 1,200 meters (3,937 ft.) in daisy chain set up. Loop or star topologies are not allowed in the EIA-485 bus. A terminator resistor of 120Ω must be present at each end of the bus to avoid signal reflections. The bus might need a fail-safe biasing mechanism (see section 4.6 for more details).

2.3 Connection to the power supply

The INMBSMID---I000 interface must be powered from an external power supply.

Use an external 12V DC power supply connected to V1/V2 connector. The V1/V2 connection has specific polarity (V1- y V2+).

2.4 Connection diagrams

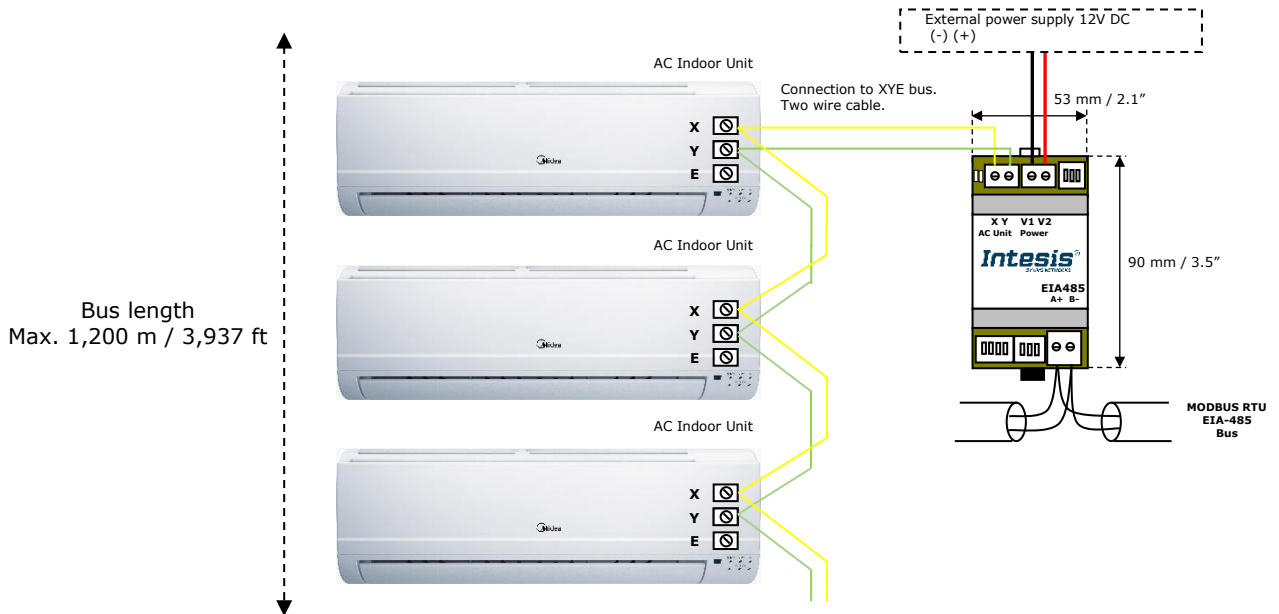


Figure 2.1 INMBSMID004I000 / INMBSMID008I000 /INMBSMID032I000 connection diagram

NOTE: If a CCM Central Controller is present in the XYE bus, the INMBSMID---I000 cannot be connected. Please, disconnect the CCM Central Controller for use of the gateway.

3 Quick Start Guide


1. Disconnect the air conditioning from the Mains Power.
2. Attach the interface close to the AC indoor unit (wall mounting) following the instructions of the diagram above. Install it inside the AC indoor unit or an electrical enclosure (respect the safety instructions provided by the AC manufacturer).
3. Connect the XYE bus between the interface and the AC indoor unit following the instructions of the installation diagram respecting the polarity.
4. Connect the Modbus RTU (EIA-485) bus to the *EIA485* A/B connector of the interface.
5. Connect the power cable between the interface and the Mains Power following the instructions of the diagram. Screw each bare cable end in the corresponding V1/V2 terminals.
6. Check the DIP-Switch configuration of the Intesis interface and make sure it matches the current installation's parameters:

By default, the interface is set to:

- Modbus Slave Address → 1
- Modbus baud rate → 9600 bps



These parameters can be modified from SW3 and SW4 DIP-Switches.

All other switch positions are set at low level (Off position ) by default.

NOTE: All changes on the DIP-Switch configuration require a system power cycle to be applied.

7. Connect the AC system to Mains Power.

IMPORTANT: The Intesis interface requires to be connected to the AC unit (powered) to start the communication.

4 Modbus Interface Specification

4.1 Modbus physical layer

INMBSMID---I000 implements a Modbus RTU (Slave) interface, to be connected to an EIA-485 line. It performs an 8N2 communication (8 data bits, no parity and 2 stop bit) with several available baud rates (2400 bps, 4800 bps, 9600 bps -default-, 19200 bps, 38400 bps, 57600 bps, 76800 bps and 115200 bps). It also supports 8N1 communication (8 data bits, no parity and 1 stop bit).

NOTE: The gateway will automatically detect the communication type (8N1 or 8N2) and set itself accordingly. No user action or manual settings are required.

4.2 Modbus Registers for INMBSMID004I000 / INMBSMID008I000 / INMBSMID032I000

All registers are type "16-bit unsigned Holding Register", and they use the Modbus big endian standard notation.

Important note: match Midea addressing before controlling from Modbus

All indoor units must be addressed in the range 0...63 in the Midea system. The register "Indoor Unit Address assignation" R/W, sets the indoor unit address to control with the gateway. Assigned address in this register must match the address set for every unit in the Midea system.

4.2.1 Global Control and status registers

These registers apply to each Indoor Unit connected to the interface.

| Register Address (protocol address) | Register Address (PLC address) | R/W | Description |
|-------------------------------------|--------------------------------|-----|---|
| 0 | 1 | W | AC unit On/Off Global <ul style="list-style-type: none"> ▪ 0: Off ▪ 1: On |
| 1 | 2 | W | AC unit Mode Global ¹ <ul style="list-style-type: none"> ▪ 0: Auto ▪ 1: Heat ▪ 2: Dry ▪ 3: Fan ▪ 4: Cool |
| 2 | 3 | W | AC unit Fan Speed Global ¹ <ul style="list-style-type: none"> ▪ 0: Auto ▪ 1: SP1 ▪ 2: SP2 ▪ 3: SP3 |
| 3 | 4 | W | AC unit Vane Position Global ¹ <ul style="list-style-type: none"> ▪ 0: Auto/Stop (Default value) ▪ 10: Swing |
| 4 | 5 | W | AC unit Temperature setpoint Global ^{1,2} <ul style="list-style-type: none"> ▪ -32678 (Initialization value) ▪ 17..30 °C (°C/x10°C) ▪ 63..86 °F |

¹ Available values will depend on the AC unit mode. Check the AC unit model functions in its user manual to know the possible values for this register.

² Magnitude for this register can be adjusted to Celsius x 1°C, Celsius x 10°C (default) or Fahrenheit.

| | | | |
|---|---|---|--|
| 8 | 9 | W | Remote lock ^{3,4} <ul style="list-style-type: none"> ▪ 0: Off (Default value) ▪ 1: On |
|---|---|---|--|

4.2.2 Individual Control and status registers

These registers apply to each indoor unit connected to the interface. Notice that "n" stands for the Indoor Unit's index number (0...31) in the interface. You can change the address assigned to the index "n" by writing in register '1000 + 20*n + 9' the value of the desired IU's address (0...63).

Example: given a INMBSMID004I000 (the interface can control up to 4 indoor units), "n" stands for 0, 1, 2 and 3 and this index number is not related to the address inside the Midea system, which is managed in the register '1000 + 20*n + 9'.

| Register Address (protocol address) | Register Address (PLC address) | R/W | Description |
|-------------------------------------|--------------------------------|-----|---|
| (1000 + 20*n + 0) | (1000 + 20*n + 1) | R/W | AC unit On/Off <ul style="list-style-type: none"> ▪ 0: Off ▪ 1: On |
| (1000 + 20*n + 1) | (1000 + 20*n + 2) | R/W | AC unit Mode ⁵ <ul style="list-style-type: none"> ▪ 0: Auto (Default value) ▪ 1: Heat ▪ 2: Dry ▪ 3: Fan ▪ 4: Cool |
| (1000 + 20*n + 2) | (1000 + 20*n + 3) | R/W | AC unit Fan Speed ⁵ <ul style="list-style-type: none"> ▪ 0: Auto (Default value) ▪ 1: SP1 ▪ 2: SP2 ▪ 3: SP3 |
| (1000 + 20*n + 3) | (1000 + 20*n + 4) | R/W | AC unit Up/Down Vane Position ⁵ <ul style="list-style-type: none"> ▪ 0: Off (Default value) ▪ 10: Swing |
| (1000 + 20*n + 4) | (1000 + 20*n + 5) | R/W | AC unit Temperature setpoint ^{5,6,7} <ul style="list-style-type: none"> ▪ -32678 (Initialization value) ▪ 17..30 °C (°C/x10°C) ▪ 63..86 °F |
| (1000 + 20*n + 5) | (1000 + 20*n + 6) | R | AC unit Temperature reference ^{5,6,7} <ul style="list-style-type: none"> ▪ -32678 (Initialization value) ▪ Ranges determined by the Manufacturer of the AC indoor unit. (°C/x10°C/°F) |
| (1000 + 20*n + 6) | (1000 + 20*n + 7) | R | AC Alarm status <ul style="list-style-type: none"> ▪ 0: No Alarm ▪ 1: Alarm |
| (1000 + 20*n + 7) | (1000 + 20*n + 8) | R | AC Error Code ⁸ <ul style="list-style-type: none"> ▪ 0: No error active ▪ 65535 (-1 if it is read as signed value). Error in the communication of INMBSMID004I000 / INMBSMID008I000 / INMBSMID032I000 with the AC unit |

³ This value is stored in a non-volatile memory

⁴ This register blocks the Remote Controller's communication installed in the MD-RC bus (if this one has been installed).

⁵ Available values will depend on the AC unit mode. Check the AC unit model functions in its user manual to know the possible values for this register.

⁶ Magnitude for this register can be adjusted to Celsius x 1°C, Celsius x 10°C (default) or Fahrenheit.

⁷ It is not possible turn to x10 the value shown in Fahrenheit.

⁸ See section 7 for possible error codes and their explanation.

| | | | |
|-------------------|--------------------|-----|---|
| | | | <ul style="list-style-type: none"> Any other error present, see the table at the end of this document. |
| (1000 + 20*n + 8) | (1000 + 20*n + 9) | R/W | Remote lock ^{9,10} <ul style="list-style-type: none"> 0: Off (Default value) 1: On |
| (1000 + 20*n + 9) | (1000 + 20*n + 10) | R/W | Indoor Unit Address assignation in n <ul style="list-style-type: none"> Address range: 0..63 |

Configuration Registers

| Register Address (protocol address) | Register Address (PLC address) | R/W | Description |
|-------------------------------------|--------------------------------|-----|---|
| 2000 | 2001 | R | Device ID: 0x2200 |
| 2031 | 2032 | R | Capacity ¹¹ <ul style="list-style-type: none"> 4: INMBSMID004I000 (4 Indoor Units) 8: INMBSMID008I000 (8 Indoor Units) 32: INMBSMID0032I000 (32 Indoor Units) |
| 2040 | 2041 | R | Modbus RTU Baud rate <ul style="list-style-type: none"> 2400bps 4800bps 9600bps (Default) 19200bps 38400bps 57600bps 76800bps 115200bps |
| 2041 | 2042 | R | Device's Modbus Slave address <ul style="list-style-type: none"> 1..63 |
| 2050 | 2051 | R | Software version |
| 2099 | 2100 | W | Reset/Reboot device <ul style="list-style-type: none"> 1: Reset |

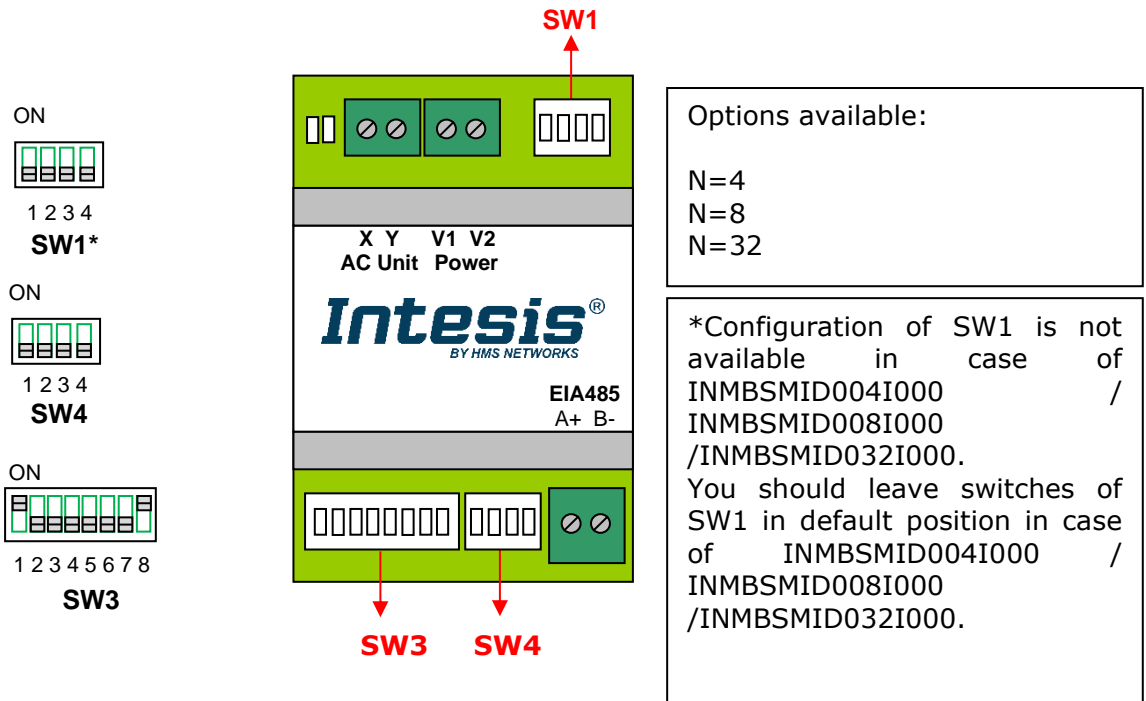
⁹ This value is stored in a non-volatile memory

¹⁰ This register blocks the Remote Controller's communication installed in the MD-RC bus (if this one has been installed).

¹¹ The value of this register depends on the N value (being N the number of max. indoor units that admits INMBSMID004I000 / INMBSMID008I000 / INMBSMID0032I000)

4.3 DIP-switch Configuration Interface

All the configuration values on INMBSMID---I000 can be written and read from Modbus interface. Otherwise, some of them can also be setup from its on-board DIP-switch interface. The device has DIP-switches SW1, SW3 and SW4 on the following locations:



The following tables apply to the interface's configuration through DIP-switches:

SW1 – AC indoor unit's features

| SW1-P1..4 | Description |
|-----------|---|
| | AC Unit does not have AUTO mode (Default value) |
| | AC Unit has AUTO mode |
| | AC Unit does not have DRY mode (Default value) |
| | AC Unit has DRY mode |
| | AC Unit does not have fan AUTO mode (Default value) |
| | AC Unit has fan AUTO mode |
| | AC Unit has 2 fan speeds (Default value) |
| | AC Unit has 3 fan speeds |

Table 4.1 SW1: AC indoor unit's features

SW3/SW4 – Baud rate configuration

| SW3-P7..8 | SW4-P3 | Description |
|-----------|--------|-------------------------|
| | | 2400bps |
| | | 4800bps |
| | | 9600bps (Default value) |
| | | 19200bps |
| | | 38400bps |
| | | 57600bps |
| | | 76800bps |
| | | 115200bps |

Table 4.2 SW3-SW4: Modbus baud rate

SW4 – Degrees/Decidegrees (x10), temperature magnitude (°C/°F) and EIA-485 termination resistor.

| SW4-P1..2-4 | Description |
|-------------|--|
| | Temperature values in Modbus register are represented in degrees (x1) (Default value) |
| | Temperature values in Modbus register are represented in decidegrees (x10) |
| | Temperature values in Modbus register are represented in Celsius degrees (Default value) |
| | Temperature values in Modbus register are represented in Fahrenheit degrees |
| | EIA-485 bus without termination resistor (Default value) |
| | Internal termination resistor of 120Ω connected to EIA-485 bus |

Table 4.3 SW4: Temperature and termination resistor configuration

SW3 – Modbus Slave address

| Add | SW3-P1..6 | Add | SW3-P1..6 | Add | SW3-P1..6 | Add | SW3-P1..6 | Add | SW3-P1..6 |
|--------------|-----------------------------|-----|-----------------|-----|-----------------|-----|-----------------|-----|-----------------|
| 0 | ON [Diagram] | 13 | ON [Diagram] | 26 | ON [Diagram] | 39 | ON [Diagram] | 52 | ON [Diagram] |
| 1 | ON [Diagram] | 14 | ON [Diagram] | 27 | ON [Diagram] | 40 | ON [Diagram] | 53 | ON [Diagram] |
| 2 | ON [Diagram] | 15 | ON [Diagram] | 28 | ON [Diagram] | 41 | ON [Diagram] | 54 | ON [Diagram] |
| 3 | ON [Diagram] | 16 | ON [Diagram] | 29 | ON [Diagram] | 42 | ON [Diagram] | 55 | ON [Diagram] |
| 4 | ON [Diagram] | 17 | ON [Diagram] | 30 | ON [Diagram] | 43 | ON [Diagram] | 56 | ON [Diagram] |
| 5 | ON [Diagram] | 18 | ON [Diagram] | 31 | ON [Diagram] | 44 | ON [Diagram] | 57 | ON [Diagram] |
| 6 | ON [Diagram] | 19 | ON [Diagram] | 32 | ON [Diagram] | 45 | ON [Diagram] | 58 | ON [Diagram] |
| 7 | ON [Diagram] | 20 | ON [Diagram] | 33 | ON [Diagram] | 46 | ON [Diagram] | 59 | ON [Diagram] |
| 8 | ON [Diagram] | 21 | ON [Diagram] | 34 | ON [Diagram] | 47 | ON [Diagram] | 60 | ON [Diagram] |
| 9 | ON [Diagram] | 22 | ON [Diagram] | 35 | ON [Diagram] | 48 | ON [Diagram] | 61 | ON [Diagram] |
| 10 | ON [Diagram] | 23 | ON [Diagram] | 36 | ON [Diagram] | 49 | ON [Diagram] | 62 | ON [Diagram] |
| 11 | ON [Diagram] | 24 | ON [Diagram] | 37 | ON [Diagram] | 50 | ON [Diagram] | 63 | ON [Diagram] |
| 12 | ON [Diagram] | 25 | ON [Diagram] | 38 | ON [Diagram] | 51 | ON [Diagram] | | |

Table 4.4 SW3: Modbus Slave address

4.4 Implemented Functions

INMBSMID---I000 implements the following standard Modbus functions:

- 3: Read Holding Registers
- 4: Read Input Registers
- 6: Write Single Register
- 16: Write Multiple Registers (Despite this function is allowed, the interface does not allow to write operations on more than 1 register with the same request, this means that length field should always be 1 when this function is being used for writing)

4.5 Device LED indicator

The device includes LED indicators to show all the possible operational states. In the following table you will find the possible indication combinations and its meaning.

L1 (green LED)

| Device status | LED indication | ON / OFF Period | Description |
|-------------------------|----------------|-----------------------|--|
| During faulty operation | LED blinking | 500ms ON / 500ms OFF | Communication error |
| During normal operation | LED flashing | 100ms ON / 1900ms OFF | Normal operation (configured and working properly) |

L2 (red LED)

| Device status | LED indication | ON / OFF Period | Description |
|-------------------------|----------------|-------------------|-----------------------|
| During faulty operation | LED Pulse | 3sec ON / --- OFF | Under voltage occurs. |

L1 (green LED) & L2 (red LED)

| Device status | LED indication | ON / OFF Period | Description |
|-------------------------|----------------------------|----------------------|-----------------------|
| During normal operation | LED Pulse | 5sec ON / --- OFF | Device Start-up |
| During faulty operation | LED alternatively blinking | 500ms ON / 500ms OFF | Flash checksum not OK |

4.6 EIA-485 bus. Termination resistors and Fail-Safe Biasing mechanism

EIA-485 bus requires a 120Ω terminator resistor at each end of the bus to avoid signal reflections.

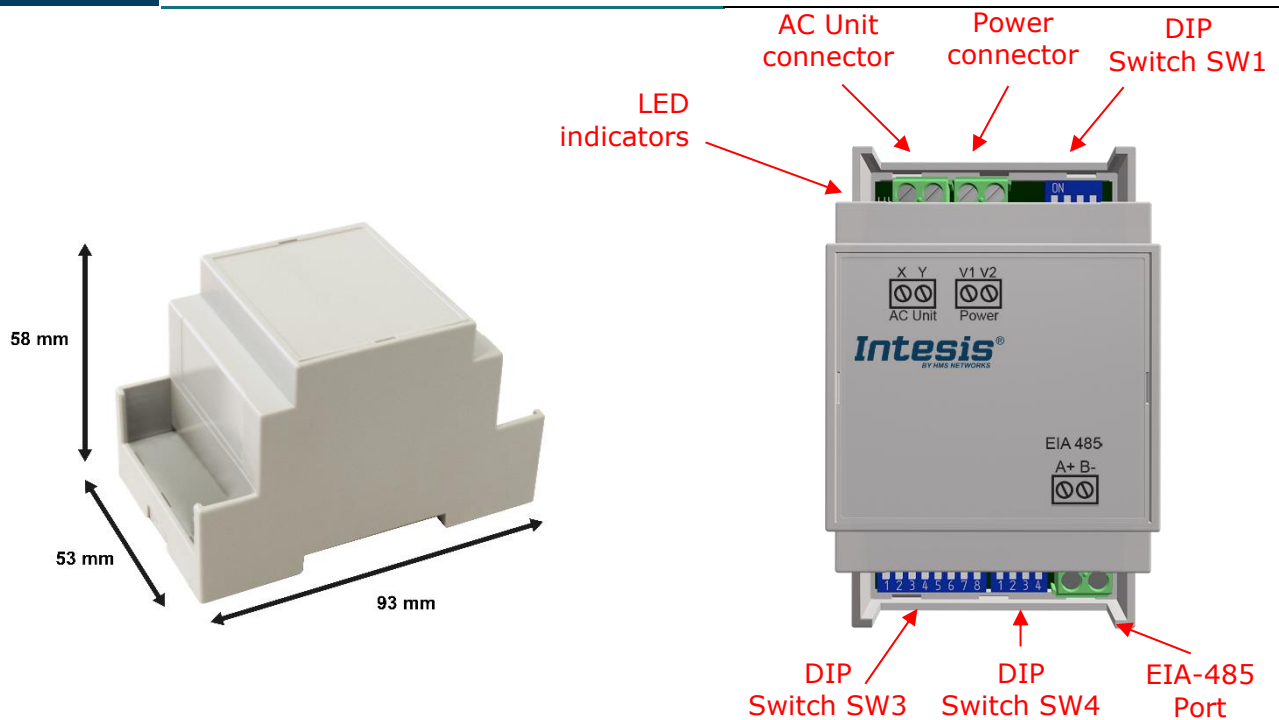
In order to prevent fail status detections by the receivers, which are "listening" the bus, when all the transmitters' outputs are in three-state (high impedance), a fail-safe biasing mechanism is required. This mechanism provides a safe status (a correct voltage level) in the bus when all the transmitters' outputs are in three-state.

The INMBSMID---I000 device includes an on-board terminator resistor of 120Ω that can be connected to the EIA-485 bus by using DIP-switch SW4.

Some Modbus RTU EIA-485 Master devices can provide also internal 120Ω terminator resistor and/or fail-safe biasing. Check the technical documentation of the Master device connected to the EIA-485 network in each case.

5 Electrical and Mechanical features

| | | | |
|---|--|-----------------------|--------------------------------------|
| 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 | Operation Temperature | 0°C to +60°C |
| Weight | 85 g. | Stock Temperature | -20°C to +85°C |
| Mounting | Wall DIN rail EN60715 TH35. | Operational Humidity | <95% RH, non-condensing |
| Terminal Wiring (for low-voltage signals) | For terminal: solid wires or stranded wires (twisted or with ferrule) 1 core: 0.5mm ² ... 2.5mm ² 2 cores: 0.5mm ² ... 1.5mm ² 3 cores: not permitted | Stock Humidity | <95% RH, non-condensing |
| Modbus RTU port | 1 x Serial EIA485 Plug-in screw terminal block (2 poles) A, B Compatible with Modbus RTU EIA-485 networks | Isolation voltage | 1500 VDC |
| AC unit port | 1 x XYE bus Plug-in screw terminal block (2 poles): X, Y Compatible with Midea networks | Isolation resistance | 1000 MΩ |
| Power port | 1 x V1 V2 Power screw terminal block (2 poles): V1, V2 | | |
| Switch 1 (SW1) | 1 x DIP-Switch for AC features | Protection | IP20 (IEC60529) |
| Switch 3 (SW3) | 1 x DIP-Switch for Modbus RTU settings | LED indicators | 2 x Onboard LED - Operational status |
| Switch 4 (SW4) | 1 x DIP-Switch for extra functions | | |



6 List of supported AC Unit Types

A list of Midea indoor unit model's references compatible with INMBSMID---I000 and its available features can be found in:

https://www.intesis.com/docs/compatibilities/inxxxmid0xxi000_compatibility

7 Error Codes

| Error Code | Error in Remote Controller | Error description |
|------------|----------------------------|--|
| 0 | N/A | No active error |
| 1 | E0 | Phase error or error in the phase sequence |
| 2 | E1 | Communication error |
| 3 | E2 | T1 sensor error |
| 4 | E3 | T2A sensor error |
| 5 | E4 | T2B sensor error |
| 6 | E5 | T3 temperature and T4 temperature Compressor discharge temperature sensors error |
| 7 | E6 | Zero cross error detection |
| 8 | E7 | EEPROM memory error |
| 9 | E8 | Indoor fan speed out of control |
| 10 | E9 | Communication error between the main panel and the visualization panel |
| 11 | EA | Compressor's current overload error (4 times) |
| 12 | EB | Inverter module protection |
| 13 | EC | Cooling error |
| 14 | ED | Outdoor unit fault protection |
| 15 | EE | Water level fault detection |
| 16 | EF | Other errors |
| 101 | P0 | Vaporizer temperature protection |
| 102 | P1 | Thawing or cold air protection |
| 103 | P2 | Condenser high temperatures protection |
| 104 | P3 | Compressor temperature protection |
| 105 | P4 | Evacuation duct temperature protection |
| 106 | P5 | Discharge high pressure protection |
| 107 | P6 | Discharge low pressure protection |
| 108 | P7 | Current overload or under load protection |
| 109 | P8 | Compressor's current overload protection |
| 110 | P9 | Reserved |
| 111 | PA | Reserved |
| 112 | PB | Reserved |
| 113 | PC | Reserved |
| 114 | PD | Reserved |
| 115 | PE | Reserved |
| 116 | PF | Other protection measures |
| 65535 (-1) | N/A | Error in the communication of INMBSMID---I000 with the AC unit |
| -100 | N/A | License error / Indoor units not supported by current license |
| -200 | N/A | Overconsumption error in EXY bus |

In case you detect an error code not listed, contact your nearest Midea technical support service.