

# Installation Sheet for the IN770MIT00xO040 Gateway for Mitsubishi Electric AC Systems

The order code may vary depending on the product seller and the buyer's location.

xO stands for the gateway capacity and varies depending on the specific gateway purchased. Version 1.0.0

# Owner's record

Find the serial number on the silver label on the right side of the gateway. For sales or technical assistance, we recommend writing it in the space below: **SN:** 

# **Safety Instructions**



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

Only accredited technical personnel, following all these safety instructions and in accordance with the country's legislation for the installation of electric equipment, are authorized to install this intesis gateway.

Install this Intesis gateway indoors, in a restricted access location, and sheltered from direct solar radiation, water, high relative humidity, or dust.

Mount this Intesis gateway, preferably, on a DIN rail inside a grounded metallic cabinet following the instructions below.

In the case of wall mounting, firmly fix this Intesis gateway on a non-vibrating surface following the instructions below.

Disconnect any wires from its power source before manipulating and connecting them to this Intesis gateway.

Use a SELV-rated NEC Class 2 or Limited Power Source (LPS) power supply.

Use a circuit breaker before the power supply. Rating: 250 V, 6 A.

Respect the expected polarity of power and communication cables when wiring this gateway. Supply the correct voltage to power this Intesis gateway. The admitted range voltage is detailed in the technical specifications table.



Connect this Intesis gateway only to networks without routing to the outside plant. All communication ports are considered indoor only.

This Intesis gateway is designed for installation in an enclosure. To avoid electrostatic discharges 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 at: https://intesis.com/docs/manuals/v6-safety

## Configuration

Connect the gateway to a computer using the USB Mini-B type to USB Type A cable (included).

Configure the gateway using Intesis MAPS. Download the latest version of the configuration tool at www.intesis.com/products/intesis-maps.

For further information on the configuration, refer to the User manual.

### Mounting



Mount the gateway on a wall or over a DIN rail. We recommend the DIN rail mounting option, preferably inside a grounded metallic industrial cabinet.

Wall mounting

1. Press the top-side mobile clips in the rear panel until you hear a click.



2. Use the clip holes to fix the gateway on the wall using screws.

Use M3 screws, 25 mm (1") length.

3. Make sure the gateway is firmly fixed.

#### DIN rail mounting

2.

3.

Keep the clips in their original position.

- 1. Fit the gateway's top-side clips in the upper edge of the DIN rail.
  - Press the low side of the gateway gently to lock it in the DIN rail.
  - Make sure the gateway is firmly fixed.



For some DIN rails, to complete step 2, you may need a small screwdriver or similar to pull the bottom clip down.



### Connections



Power supply: Use a SELV-rated NEC class 2 or Limited Power Source (LPS) power supply. Connect the gateway's ground terminal ( -) to the installation grounding.

Power rating

- For DC: 12 .. 36 VDC ±10%, Max: 250 mA
- For AC: 24 VAC ±10 %, 50-60 Hz, Max: 127 mA Recommended voltage: 24 VDC, Max: 127 mA



#### Communication ports:

PORT	USAGE	WIRING			
EIA-485 <sup>1</sup>	Modbus RTU	<b>SG</b> : Signal ground	B-		A+
KNX	KNX bus	+		-	
Ethernet	Connection to the Centralized Controller <sup>2</sup>	Ethernet cable (CAT5 or higher) When using the building LAN, contact the network administrator and make sure traffic is allowed. When starting up the gateway for the first time, DHCP will be enabled for 30 seconds. After that time, the default IP 192.168.100.246 will be set.			
AC-Port A	Not used				
AC-Port B	Not used				
AC-Port C	Not used				
USB	Connection to a PC for configuration purposes	USB Mini-B type			
Digital Inputs	Dry contact for input devices	C: Common	<b>11</b> : Input 1	<b>12</b> : Input 2	I3:Input3



 $^1$  Standard EIA-485 bus requirements: maximum distance of 1200 meters (0.75 miles); up to 32 devices connected; a 120  $\Omega$  resistor at each end of the bus is needed (configure the bus biasing and termination resistor for Port EIA-485 with the DIP switch SWA. See the Technical Specifications table).

<sup>2</sup> List of Mitsubishi Electric compatible centralized controllers: G-50, GB-50ADA, AB-150, AE-200, AE-50, AG-150A, EW-50, EB-50GU.



Scan here for further configuration details

### Dimensions



	1			
	Plastic, type PC (UL 94 V-0). Color: Light Grey. RAL 7035			
Housing	Net dimensions (dxwxh): Millimeters: 90 x 106 x 58 mm / Inches: 3.5 x 4.2 x 2.3"			
	Recommended space for installation (dxwxh): Millimeters: 130 x 115 x 100 mm / Inches: 5.1 x 4.5 x3.9"			
Mounting	Wall: M3 25 mm (1") length screws. Secure mounting: below 2 meters (6 feet)			
DIN rail (recommended mounting) EN60715 TH35				
	Per terminal: solid wires or stranded wires (twisted or with ferrule)			
	Wire cross-section/gauge:			
Wires (for power	One core: 0.2 2.5 mm <sup>2</sup> (24 14 AWG)			
voltage signals)	Two cores: 0.2 to 1.5 mm <sup>2</sup> (24 16 AWG)			
	Inree cores: Not permitted			
	For distances longer than 3.05 meters (1	10 feet), use class 2 cables		
	1 x Green pluggable terminal block (3 poles)			
Power	12 to 36 VDC +/-10%, Max.: 250 mA			
Tower	24 VAC +/-10% 50-60 Hz, Max.: 127 mA			
	Recommended: 24 VDC			
Ethernet	Use this connector to connect the AC central control network to the gateway			
	1 x Ethernet 10/100 Mbps RJ45			
	1 x Green pluggable terminal block (3 poles)			
Port EIA 485	SGND (Reference ground or shield)			
	1500VDC isolation from other ports			
Port KNX	1 x Orange pluggable terminal block (2 poles): +, -			
	AC-Port A (serial, 2 poles): Not used			
AC Ports	AC-Port B (serial, 3 poles): Not used			
	AC-Port C: (serial, 3 poles): Not used			
	2 x Run (Power/Error)	2 x Ethernet Link/Speed		
LEDs	2 x Port EIA-485 TX/RX	2 x AC-Port A TX/RX		
	2 x Port KNX TX/TR	2 x AC-Port B TX/RX		
	1 x Button indicator	2 x AC-Port C TX/RX		
	1 x Green pluggable terminal block (4 poles)			
Binary inputs	11, 12, 13, and Common 1500 VDC isolation from other ports			
	LISE Mini B ture 2.0 compliant			
Console port	USB Mini-B type 2.0 compliant			
	2 x Dir Switch Diocks for EIA-485 Serial port configuration:			
DIP switches	On: 120 $\Omega$ termination active			
SW A	SW A Off: 120 Ω termination active   SW B Position 2 and 3:			
SW B				
	On: Polarization active			
	Off: Polarization inactive			
	1 x Push button			
Push button	Factory reset			
	Normai mode/programming mode switch (for KNX only)			
Operational	Celsius: 0 60°C			
temperature	Fanrenneit: 32 140ºF			
Operational humidity	5 to 95%. No condensation			
Protection	IP20 (IEC60529)			

# **Disposal and Recycling**

**Technical Specifications** 



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.