

Bosch Commercial & VRF systems to Modbus TCP/RTU Application

Item number: IN770AIR00MO000

The Bosch application has been specially designed to allow bidirectional control and monitoring of Bosch Air Flux and Mini-VRF systems from a BMS, SCADA, PLC, or any other device working as a Modbus client. The solution allows the integration of up to 64 indoor units from a single interface.



Bosch to Modbus TCP/RTU - Up to 64 Indoor Units

Features and benefits

- ✓ **Reduce hardware costs and improve system scalability**
The gateway is a Modbus server and is able to manage both Modbus TCP and Modbus RTU simultaneously.
- ✓ **Reduce commissioning time**
Scan the bus and find all the units connected to the VRF system with their control signals, including outdoor unit indicators.
- ✓ **A gateway for any project's size**
Choose the license that best fits your needs (XXS - 4 indoor units, 00S - 16 indoor units, 00M - 64 indoor units), or upgrade your current license. Your project's dimensions and budget are covered.
- ✓ **Fast and intuitive project configuration**
Intesis MAPS is the user-friendly, in-house-developed configuration tool that enables you to maximize the potential of Intesis gateways. Simply select your template and eliminate the need for tedious manual signal mapping.
- ✓ **Minimize the use of installation materials, reduce the installation work**
The gateway is connected directly to the outdoor units' communication bus. One single gateway enables centralized access to the entire HVAC system.
- ✓ **Enable energy efficiency by controlling the building's main consuming asset**
The gateway's Power Estimation Algorithm allows you to estimate the energy consumption of each indoor unit connected to the VRF system.
- ✓ **Avoid compatibility issues**
This gateway is compatible with Bosch Air Flux and Mini-VRF systems.
- ✓ **Automatic updates will keep your product high performing**
Both the Intesis MAPS configuration tool and the interface's firmware can receive automatic updates to improve the product's functionality.

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General

Capacity	M: Up to 64 indoor units
Net Width (mm)	106
Net Height (mm)	90
Net Depth (mm)	58
Net Weight (g)	194
Packed Width (mm)	125
Packed Height (mm)	85
Packed Depth (mm)	140
Packed Weight (g)	356
Operating Temperature °C Min	0°
Operating Temperature °C Max	60°
Storage Temperature °C Min	-30
Storage Temperature °C Max	60
Power Consumption (W)	3
Input Voltage (V)	For DC: 12 .. 36 VDC $\pm 10\%$, Max: 250 mA For AC: 24 VAC $\pm 10\%$, 50-60 Hz, Max: 127 mA Recommended voltage: 24 VDC, Max: 127 mA
Power Connector	3-pole
Configuration	Intesis MAPS
Installation Conditions	This gateway is designed to be mounted inside an enclosure. If the unit is mounted outside an enclosure, precautions should always be taken to prevent electrostatic discharge to the unit. When working inside an enclosure (e.g., making adjustments, setting switches, etc.), typical anti-static precautions should always be followed before touching the unit.
AC Model Compatibility	This gateway is compatible with Bosch Air Flux and Mini-VRF systems.

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General

Content of Delivery	Intesis gateway and installation manual.
Not Included (in delivery)	Power supply not included.
Mounting	DIN rail mount (bracket included), Wall mount
Housing Materials	Plastic
Packaging Material	Cardboard
Warranty (years)	3 years

Identification and Status

Product ID	IN770AIR00MO000_MBS_BOS
Country of Origin	Spain
HS Code	8517620000
Dual Usage	No

Physical Features

Connectors / Input / Output	Power supply, EIA-485, KNX, Ethernet, HVAC port, Binary inputs (dry contact), Console port USB.
LED Indicators	Gateway and communication status.
Push Buttons	Factory reset.
DIP & Rotary Switches	EIA-485 serial port configuration.
Contains Battery	No

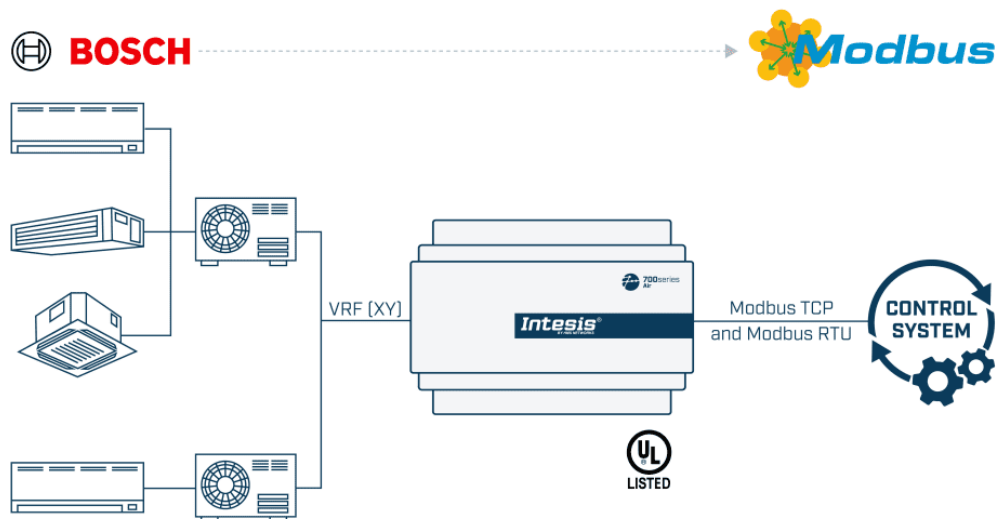
Certifications and Standards

Product Certifications	CE, CB, UKPSTI, UL
WEEE Category	IT and telecommunications equipment

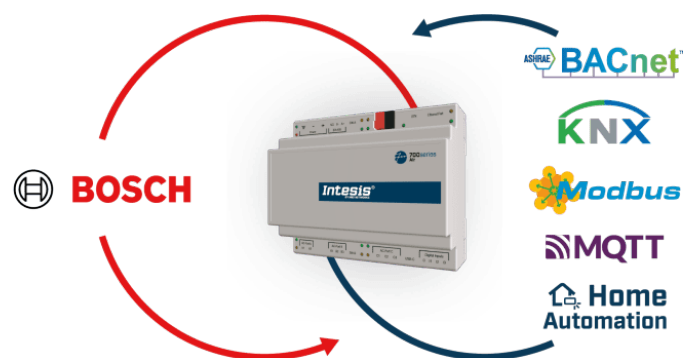
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Use Case



Integration example.



Use Intesis MAPS to change the protocol: BACnet, Modbus, KNX, MQTT, or Home Automation