

Bosch Commercial & VRF systems to MQTT

Item number: IN770AIR00MO000

Connect Bosch multi-indoor unit systems to cloud and IoT platforms using MQTT, for real-time control, monitoring, and energy optimization. This solution allows the integration of up to 64 indoor units.



Bosch to MQTT - Up to 64 Indoor Units

Features and benefits

- ✓ **Secure and Bidirectional Cloud Connectivity for Multi-Indoor HVAC Systems**

Secure MQTT communication with TLS encryption and remote certificate management via MAPS for safe HVAC data exchange with cloud-hosted MQTT brokers. The gateway operates as both publisher and subscriber.
- ✓ **Continuous HVAC Monitoring Even After Network Interruptions**

The Clean Session option can be disabled to enable persistent MQTT sessions. This allows the gateway to retain subscriptions and queued messages.
- ✓ **Avoid compatibility issues**

The gateway's support of multiple HVAC brands and models on the same hardware through brand-specific firmware helps reduce project complexity and streamline inventory.
- ✓ **Reduce commissioning time with a unified variable mapping**

Scan the bus and find all the units connected to the HVAC system with their control signals, including outdoor unit indicators. The integration is brand-agnostic through a common variable map.
- ✓ **Reliable HVAC Data Delivery for Energy Management Platforms**

MQTT data delivery allows QoS 0 and QoS 1 levels, balancing between performance and guaranteeing HVAC data transmission to cloud applications.
- ✓ **Comprehensive Topic Structure for Scalable HVAC IoT Integration**

The gateway sends status data and receives commands by publishing and subscribing to predefined MQTT topics respectively. These topics include the key HVAC signals of each unit, including unit status, operating mode, fan speed, and vane position.
- ✓ **Connectivity with the main MQTT brokers**

Includes cloud platforms such as AWS, Azure, or generic MQTT brokers like Mosquitto.
- ✓ **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.



General	
Net Width (mm)	106
Net Height (mm)	58
Net Depth (mm)	90
Net Weight (g)	240
Packed Width (mm)	130
Packed Height (mm)	85
Packed Depth (mm)	140
Packed Weight (g)	550
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.
Content of Delivery	Intesis Gateway and Installation Manual.



General

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_MQT_BOS
Country of Origin	Spain
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN)	EAR99

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

CE	Yes
CB	Yes
UKPSTI	Yes
UL	Yes

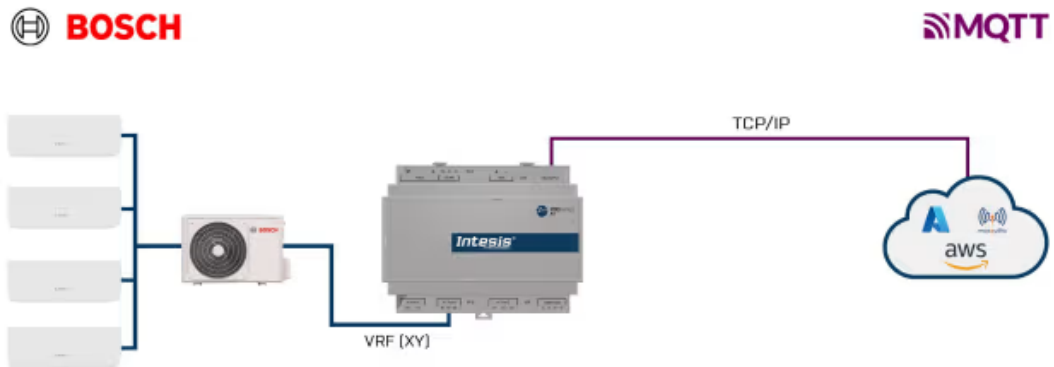


Certifications and Standards

BTL	No
WEEE Category	IT and telecommunications equipment



Use Case



Integration example.



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