

# Hitachi VRF systems to Modbus TCP/RTU Application

Item number: IN770AIR00MO000

The Hitachi application has been specially designed to allow bidirectional control and monitoring of Hitachi 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.



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

#### Features and benefits

- Simultaneous Modbus TCP and RTU management

  The gateway is a Modbus server and is able to manage both

  Modbus TCP and Modbus RTU simultaneously.
- Automatic identification
  A scan function is available for automatic identification of the units present in the VRF system.
- Individual indoor unit energy consumption signals

  Energy consumption signals from each indoor unit are available, so they can be checked individually.
- Commissioning-friendly approach with Intesis MAPS Templates can be imported and reused as often as needed, significantly reducing commissioning time.

Direct access to the outdoor unit

Connection is simple, as the interface connects directly to the outdoor unit's communication bus.

- Outdoor unit signals
  Signals assigned to the outdoor unit are available to be used in the integration.
- Multiple TCP client support
  The interface supports up to 6 TCP clients (incoming sockets).
- Configuration tool and interface automatic updates

  Both the Intesis MAPS configuration tool and the interface's firmware can receive automatic updates.



## Hitachi VRF systems to Modbus TCP/RTU Application



General	
Net Width (mm)	106
Net Height (mm)	58
Net Depth (mm)	90
Net Weight (g)	240
Packed Width (mm)	13
Packed Height (mm)	8.5
Packed Depth (mm)	14
Packed Weight (g)	310
Operating Temperature °C Min	0
Operating Temperature °C Max	60
Capacity	Up to 64 indoor units and up to 64 outdoor units.
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.
Content of Delivery	Intesis Gateway, Installation Manual, USB Configuration cable.
Not Included (in delivery)	Power supply not included.
Mounting	DIN rail mount (bracket included), Wall mount
Housing Materials	Plastic
Warranty (years)	3 years
Packaging Material	Cardboard
Identification and Status	

Product ID IN770AIR00MO000\_MBS\_HIT



## Hitachi VRF systems to Modbus TCP/RTU Application



Identification and Status	
Country of Origin	Spain
HS Code	8517620000
Export Control Classification Number (ECCN)	EAR99
Physical Features	
LED Indicators	Gateway and communication status.
Push Buttons	Factory reset. I-Am message (for BACnet only). Normal mode/programming mode switch (for KNX only).
Certifications and Standards	
ETIM Classification	EC001604
WEEE Category	IT and telecommunications equipment



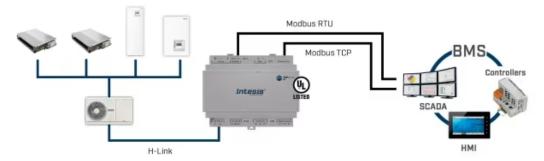


#### Use Case



#### **HITACHI**





Integration example: when using the gateway to integrate mixed unit types like VRF and Ait-to-water systems.

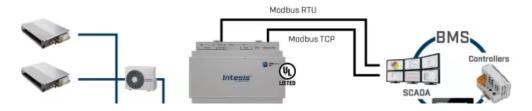
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#### Use Case

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Integration example.



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

