Mitsubishi Heavy Industries VRF systems to Modbus TCP/RTU Application

Mitsubishi Heavy Industries to Modbus TCP/RTU - Up to 128 Indoor Units

Item number: IN776MHI00LO000

The Mitsubishi Heavy Industries application has been specially designed to allow bidirectional control and monitoring of Mitsubishi Heavy Industries VRF systems from a BMS, SCADA, PLC, or any other device working as a Modbus client. The solution allows the integration of up to 128 indoor units from a single interface.

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.

Mitsubishi Heavy Industries 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)	130
Packed Height (mm)	85
Packed Depth (mm)	140
Packed Weight (g)	550
Operating Temperature °C Min	-10
Operating Temperature °C Max	60
Storage Temperature °C Min	-30
Storage Temperature °C Max	60
Power Consumption (W)	127
Input Voltage (V)	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
Power Connector	3-pole
Configuration	Intesis MAPS
Capacity	This gateway can support up to 128 indoor units when signals from the outdoor units are disabled. It can also support up to 80 indoor and 12 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 and Installation Manual.

Mitsubishi Heavy Industries VRF systems to Modbus TCP/RTU Application

General

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	IN776MHI00LO000_MBS_MHI
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. I-Am message (for BACnet only). Normal mode/programming mode switch (for KNX only).
DIP & Rotary Switches	EIA-485 serial port configuration.
Contains Battery	No
Battery Description	Manganese Dioxide Lithium button battery.

Certifications and Standards

ETIM Classification	EC001604
CE	Yes
CB	Yes

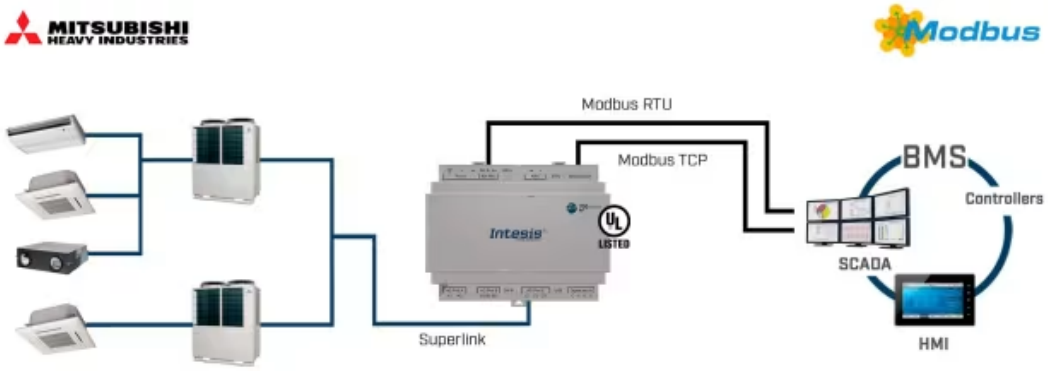
Mitsubishi Heavy Industries VRF systems to Modbus TCP/RTU Application

Certifications and Standards

UKCA	Yes
UKPSTI	Yes
UL	Yes
WEEE Category	IT and telecommunications equipment

Mitsubishi Heavy Industries VRF systems to Modbus TCP/RTU Application

Use Case



Integration example.

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