

Hisense VRF systems to Modbus TCP/RTU Application

Item number: IN770AIR00SO000

The Hisense application allows bidirectional control and monitoring of Hisense VRF systems from a BMS, SCADA, PLC, or any controller working as a Modbus client. The solution allows the integration of up to 16 indoor units.



Hisense to Modbus TCP/RTU - Up to 16 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 HVAC 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, OOS - 16 indoor units, OOM - 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 configuration tool that enables you to maximize the potential of Intesis gateways. Select your template and avoid 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 any Hisense VRF system.
- ✓ **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.

Hisense 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	0
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 $\pm 10\%$, 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
Capacity	Up to 16 indoor units and up to 16 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.

Hisense VRF systems to Modbus TCP/RTU Application



General

Not Included (in delivery)	Power supply and USB cable 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	IN770AIR00SO000_MBS_HIS
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

Hisense VRF systems to Modbus TCP/RTU Application



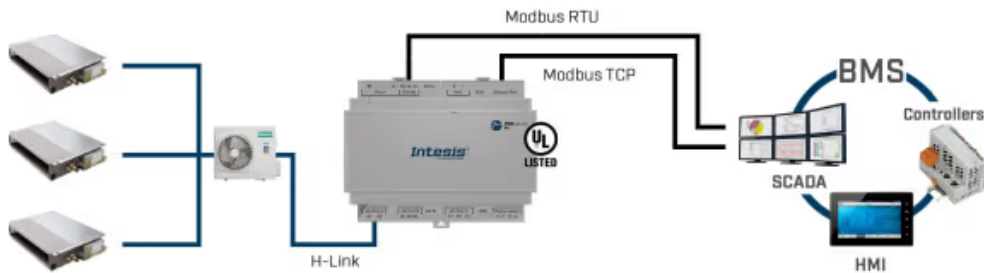
Certifications and Standards	
UKCA	Yes
UKPSTI	Yes
UL	Yes
WEEE Category	IT and telecommunications equipment



Use Case

Hisense

Modbus



Integration example.



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