

Prescription Document for IN485DAI001R000

Product type: The IN485DAI001R000 is a BACnet MS/TP and Modbus RTU gateway compatible with Daikin Sky and VRV air conditioning systems.

Manufacturer: HMS Industrial Networks SLU.

Product description: Connect this gateway directly to an AC indoor unit to control main functions, such as operating mode, fan speed, temperature setpoint..., and to monitor errors, alarms, and some internal variables. The gateway configuration is very easy: just set the DIP switches according to your needs. No configuration software or power supply is required.

Installation: DIN rail, wall, or inside the indoor unit (in some AC models only).

Main features:

- BTL mark ensures full interoperability with BACnet devices.
- Supports BACnet MS/TP and Modbus RTU.
- Configuration with onboard DIP switches.
- Quick and easy installation: Set the DIP switches, plug, and play.
- External power supply not required.
- Simultaneous control of the AC unit by the remote controller and by BACnet MS/TP or Modbus RTU.
- Reduced dimensions: 93 x 53 x 58 mm.
- Mountable on DIN rail, wall, or even inside the indoor unit in some models of AC.
- Significant reduction of the HVAC system energy consumption.
- Total control and monitoring of the AC unit from the BACnet or Modbus system, including the AC unit's internal variables, running hours counter (for filter maintenance control), eco mode, room freeze protection, and error indication, among many other functions.
- Three-year warranty.

Equipment and accessories: Intesis gateway and installation sheet.

Standards, guidelines, and certificates:

- BACnet certificate.
- CE conformity to EMC directive (2014/30/EC) and low-voltage directive (2014/35/EC).
- EN 61000-6-3, EN 61000-6-2, EN 62368-1.
- Compliant with RoHS 2 directive (2011/65/EU).

Technical specifications:

Housing	Plastic, type PC (UL 94 V-0) Net dimensions (DxWxH): 93 x 53 x 58 mm / 3.7 x 2.1 x 2.3" Color: Light grey. RAL 7035
Weight	85 g / 3 oz
Terminal wiring	Per terminal: One core: 0.2 .. 2.5 mm ² (24 to 11 AWG) Two cores: 0.2 .. 1.5mm ² (24 to 15 AWG) Three cores: Not permitted Use solid wires or stranded wires (twisted or with ferrule)
Mounting	DIN rail, wall, or even inside the indoor unit in some models of AC.
BACnet MS/TP - Modbus RTU port	1 x EIA-485 pluggable terminal block (3 poles: B, A, and SG) with 120 Ω resistor termination and polarization configurable by DIP switch
AC unit port	1 x RC bus pluggable terminal block (2 poles: A, B)
LED indicators	2 x Communication status
DIP switches	SW1: Gateway, AC unit, and baudrate configuration SW2: MAC address and temperature unit SW3: Bus polarization and termination
Operational and storage temperature	Celsius: Op: 0 .. 70°C; St: -20 .. 85°C Fahrenheit: 32 .. 158°F; St: -4 .. 185°F
Operational and storage humidity	5 .. 95% RH, non-condensing
Isolation Voltage	1500 VDC
Isolation resistance	1000 MΩ