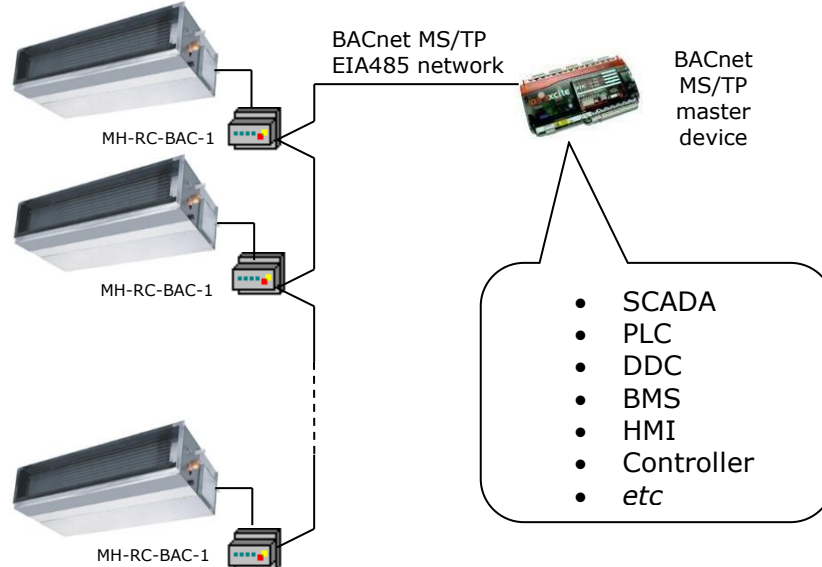




# IntesisBox®

## MH-RC-BAC-1

### BACnet MS/TP & IP Interface for MITSUBISHI HEAVY INDUSTRIES Air Conditioners



The MH-RC-BAC-1 interface allows a complete and natural integration of **Mitsubishi Heavy Industries** air conditioners into either BACnet IP or MS/TP networks. Compatible with commercial and VRF air conditioner lines commercialized by Mitsubishi Heavy Industries.

- Reduced dimensions. 93 x 53 x 58 mm.
- Quick and easy installation. *Mountable on DIN rail, wall, or even inside the indoor unit in some models of AC.*
- External power not required.
- Direct connection to BACnet networks. MH-RC-BAC-1 is a BACnet MS/TP master device or a BACnet IP server (depending on configuration).
- Direct connection to the AC indoor unit.
- Total Control and Supervision. Real states of the AC unit's internal variables.
- Allows using simultaneously the IR and wired remote controls and BACnet.

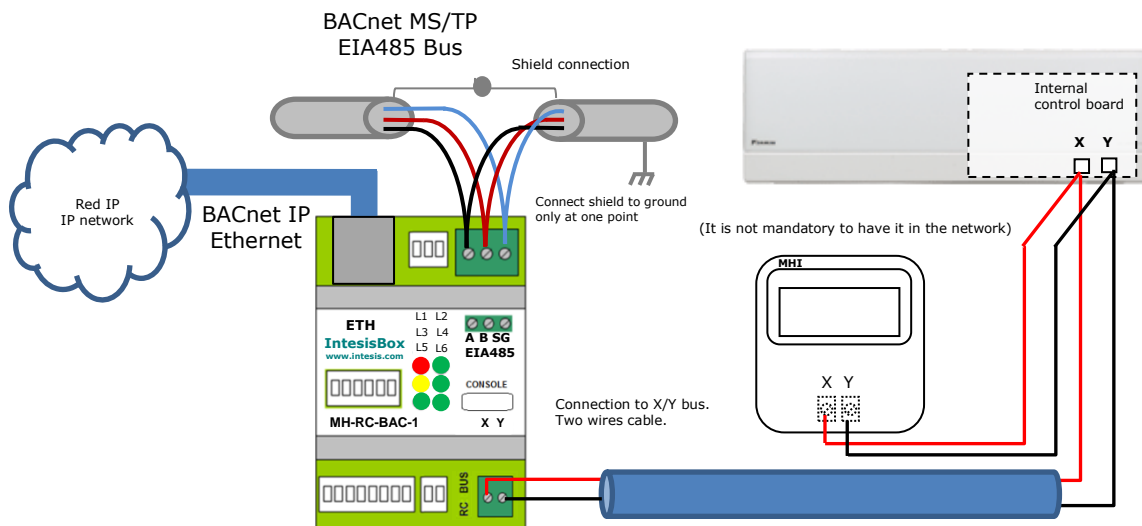
### 1. List of compatible Mitsubishi Heavy Industries AC indoor units.

A list of Mitsubishi Heavy Industries indoor unit model references compatible with MH-RC-BAC-1 and their available features can be found at:

[https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox\\_MH-RC-xxx-1\\_AC\\_Compatibility.pdf](https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_MH-RC-xxx-1_AC_Compatibility.pdf)

### 2. Connections

MH-RC-BAC-1 connects directly to the indoor unit connector using the **X/Y** connector and to the BACnet side using BACnet IP or BACnet MS/TP (See picture below).



### 3. Technical Specifications

<b>Enclosure</b>	Plastic, type PC (UL 94 V-0). Dimensions: 93mm x 53mm x 58mm. Weight: 85 g
<b>Color</b>	Light Grey. RAL 7035.
<b>Terminal wiring (for power supply and low-voltage signals)</b>	Per terminal: solid wires or stranded wires (twisted or with ferrule) 1 core: 0.5 ... 2.5mm <sup>2</sup> 2 cores: 0.5 ... 1.5mm <sup>2</sup> 3 cores: not permitted
<b>Console Port</b>	Mini USB port for console usage
<b>Mounting</b>	Wall. DIN rail EN60715 TH35.
<b>BACnet MS/TP port</b>	1 x EIA485 Plug-in screw terminal block (2 poles + GND)
<b>LED indicators</b>	6 x Gateway/Communication status
<b>Operational temperature</b>	0°C to +40°C
<b>Operational humidity</b>	5% to 95%, non-condensing
<b>Isolation Voltage</b>	4000 VDC (between AC unit and EIA-485) 1000 VDC (between AC unit and console)
<b>Protection</b>	IP20 (IEC60529).

## 4. BACnet Interface (Member Objets)

Object-name	Object-type
MH-RC-BAC-1	Device
OnOff_status	BI
OnOff_command	BO
Mode_status	MI
Mode_command	MO
SetPoint_status	AI
SetPoint_command	AO
FanSpeed_status	MI
FanSpeed_command	MO
AirDirectionUD_status	MI
AirDirectionUD_command	MO
RoomTemperature_status	AI
RoomTemperature_command	AO
ErrorCode	AI
ErrorCodeM	MI
ErrorActive	BI
ErrorAddress	AO
ErrorReset	BO
OnTimeCounter	AV
FilterSign	BI
FilterReset	BO
Occupancy	MV
OccupiedCoolSetPoint	AV
OccupiedHeatSetPoint	AV
UnoccupiedCoolSetPoint	AV
UnoccupiedHeatSetPoint	AV
OccupancyContinuousCheck	BV
UnoccupiedDeadbandAction	BV
LockRemoteControl	BV
OutdoorTemp_status	AI
CenterRemote	MI