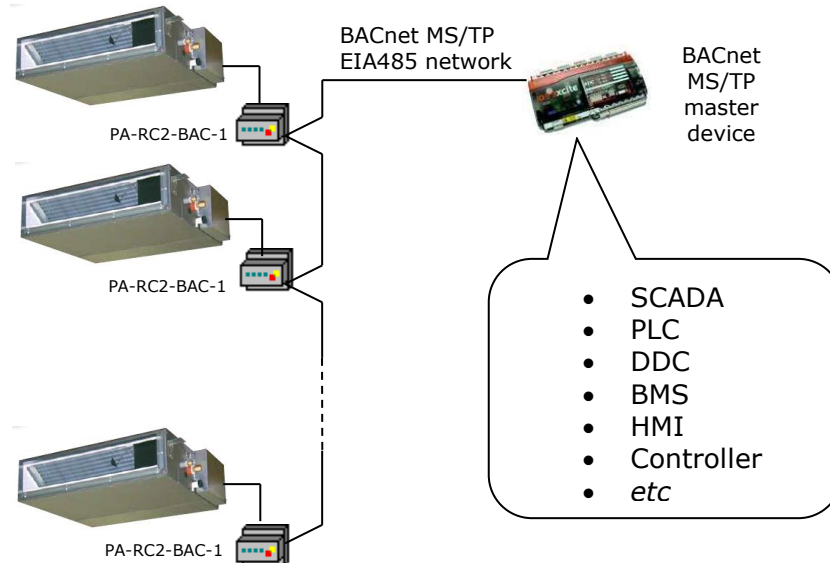# IntesisBox®
PA-RC2-BAC-1

BACnet MS/TP & IP Interface for PANASONIC Air Conditioners

The PA-RC2-BAC-1 interface allows a complete and natural integration of **Panasonic** air conditioners into either BACnet IP or MS/TP networks. Compatible with the ECOi and PACi line models commercialized by PANASONIC

- 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. PA-RC2-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.

URL	http://www.intesis.com
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1. BACnet Interface (Member Objets)

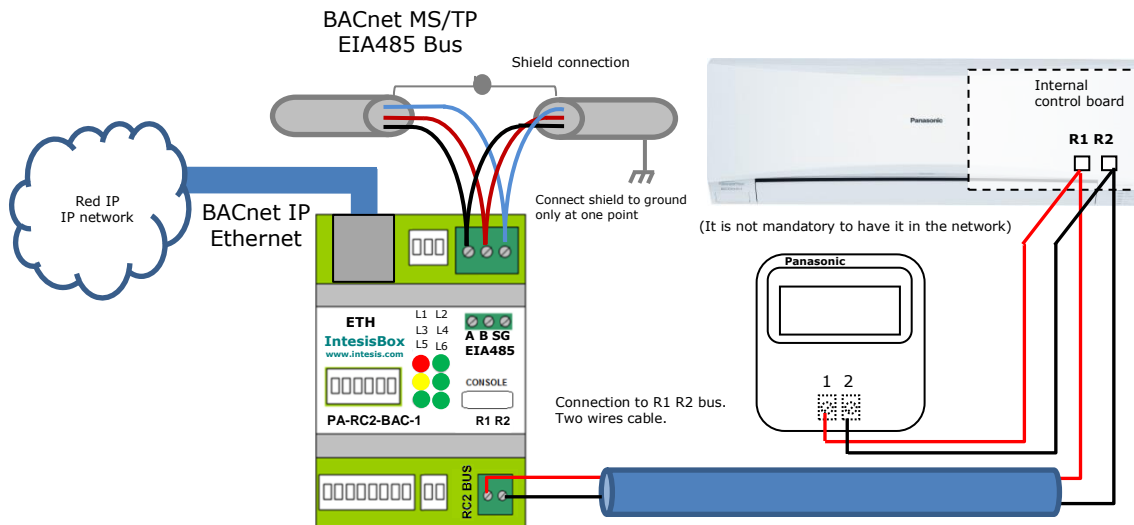| Object-name	Description	Object-type
PA-RC2-BAC-1	Panasonic RC Interface	Device
OnOff_status		BI
OnOff_command		BO
Mode_status		MI
Mode_command		MO
SetPoint_status		AI
SetPoint_command		AO
FanSpeed_status		MI
FanSpeed_command		MO
AirDirectionUD_status		MI
AirDirctionUD_command		MO
Room_Temperature		AI
ErrorCode		AI
ErrorCodeM		MI
ErrorActive		BI
ErrorCodeAdress		AI
OnTimeCounter		AV
FilterSign		BI
FilterReset		BO
Occupancy		MV
OccupiedCoolSetPoint		AV
OccupiedHeatSetPoint		AV
UnoccupiedCoolSetPoint		AV
UnoccupiedHeatSetPoint		AV
OccupancyContinuousCheck		BV
UnoccupiedDeadbandAction		BV
RemoteControllerProhibit_statuss		MI
RemoteControllerProhibit_command		MO
RuntimeModeRestriction		MI

2. List of compatible Panasonic AC indoor units.

A list of Panasonic indoor unit model references compatible with PA-RC2-BAC-1 and their available features can be found at:

http://intesis.com/pdf/IntesisBox_PA-RC2-xxx-1_Panasonic_Compatibility.pdf

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3. Connections

PA-RC2-BAC-1 connects directly to the indoor unit connector using the **R1R2** connector and to the BACnet side using BACnet IP or BACnet MS/TP (See picture below).

4. Technical Specifications

Enclosure	Plastic, type PC (UL 94 V-0). Dimensions: 93mm x 53mm x 58mm. Weight: 85 g
Color	Light Grey. RAL 7035.
Terminal wiring (for power supply and low-voltage signals)	Per terminal: solid wires or stranded wires (twisted or with ferrule) 1 core: 0.5 … 2.5mm^2 2 cores: 0.5 … 1.5mm^2 3 cores: not permitted
Console Port	Mini USB port for console usage
Mounting	Wall. DIN rail EN60715 TH35.
BACnet MS/TP port	1 x EIA485 Plug-in screw terminal block (2 poles + GND)
LED indicators	6 x Gateway/Communication status
Operational temperature	0°C to +40°C
Operational humidity	5% to 95%, non-condensing
Isolation Voltage	*4000 VDC (between AC unit and EIA-485)* *1000 VDC (between AC unit and console)*
Protection	IP20 (IEC60529).
RoHS conformity	Compliant with RoHS directive (2002/95/CE).
Certifications	CE conformity to EMC directive (2004/108/EC) and Low-voltage directive (2006/95/EC) EN 61000-6-1 ;EN 61000-6-3; EN 60950-1; EN 50491-3 This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference 2) This device must accept any interference received, including interference that may cause undesired operation.

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