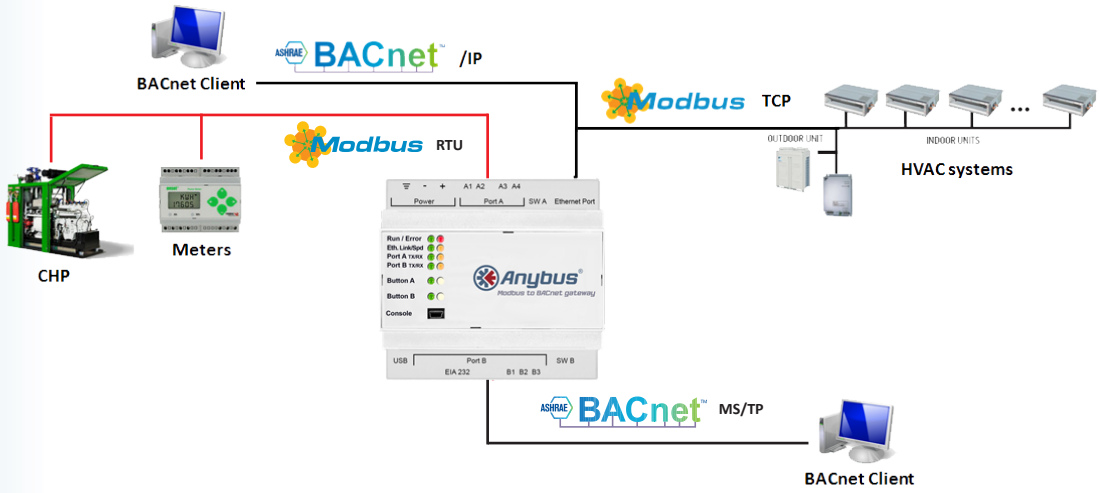
Modbus to BACnet gateway

The Anybus Modbus to BACnet gateway allows Modbus slave devices to communicate on a BACnet network. The gateway works as a translator between the two networks allowing both Modbus RTU and Modbus TCP signals show up as individual BACnet objects on any BACnet/IP or BACnet MS/TP network. This enables central control and supervision of Modbus devices from a BACnet BMS in a building.



Datapoints

Thanks to the variable number of supported datapoints ranging from 100 to 3,000 signals, this gateway covers all applications from small installations up to very large networks.

Order codes:

AB9900-100 (100 datapoints)
AB9900-250 (250 datapoints)
AB9900-600 (600 datapoints)
AB9900-1200 (1200 datapoints)
AB9900-3000 (3000 datapoints)

What's included?

Gateway
USB Cable
Installation sheet

3 YEAR GUARANTEE

HMS provides a full 3 year product guarantee

How it works

Modbus RTU and BACnet MS/TP networks are connected to their corresponding serial ports of the gateway, while Modbus TCP and BACnet/IP networks are connected to the Ethernet port. You will need to create a configuration project using the easy and powerful Anybus Configuration Manager (MAPS). You can then do commissioning and troubleshooting also using this tool.

Features and benefits

- Handles conversion between Modbus (RTU & TCP) and BACnet (IP & MS/TP).
- Supports BACnet version 12.
- Manages Modbus TCP and Modbus RTU simultaneously.
- Connects up to 254 Modbus devices to BACnet (processing up to 3000 Modbus registers).
- A simple yet powerful config tool allows commissioning, debugging and troubleshooting.
- Import and export to Excel for further signal processing.
- Comes in a plastic housing that mounts on 35-mm DIN-rail.
- Configuration could be done through IP or USB port

LED indicators provide communication status on both the Ethernet and serial ports.

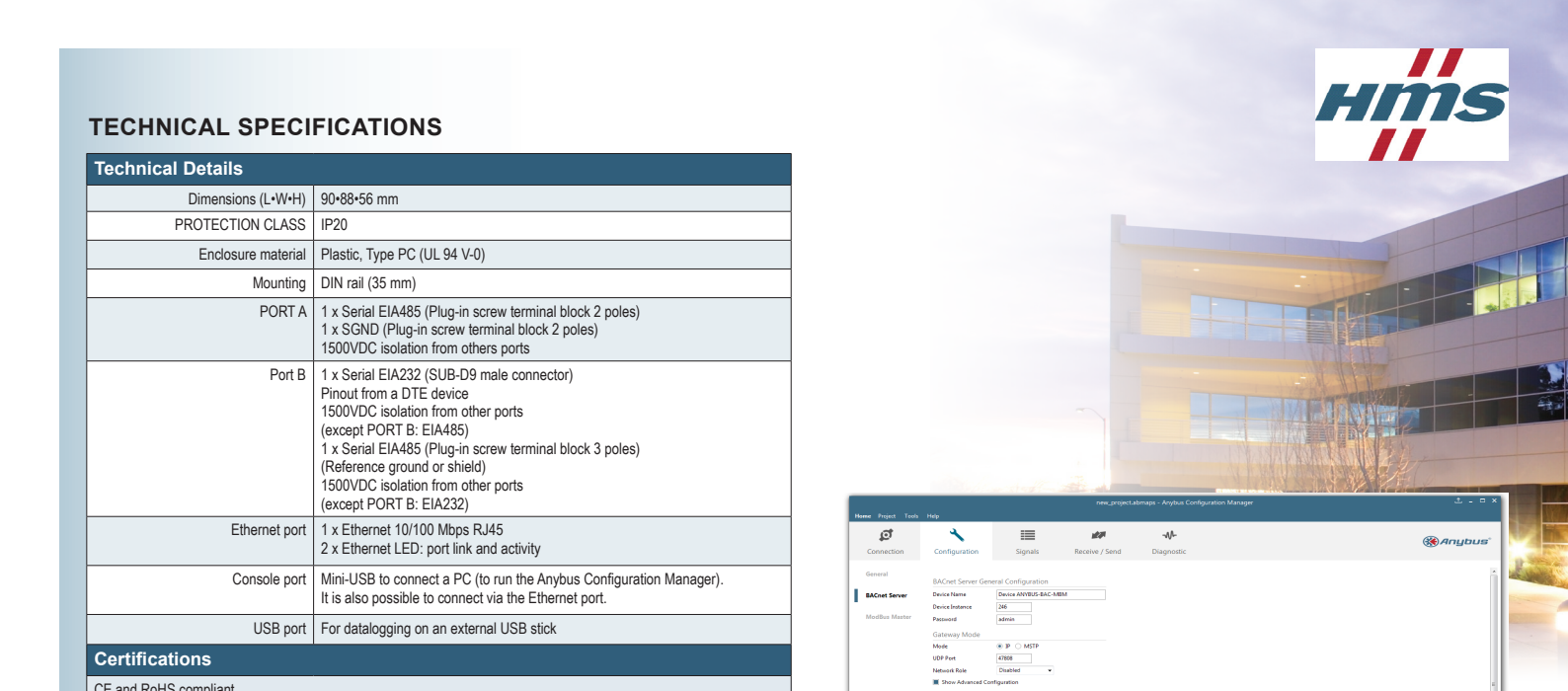
What is BACnet?

BACnet is a data communication protocol mainly used in the building automation and HVAC industry (Heating Ventilation and Air-Conditioning). The most common serial version is called BACnet MS/TP while the dominant Ethernet version is BACnet/IP.

TECHNICAL SPECIFICATIONS

Technical Details	
Dimensions (L•W•H)	90•88•56 mm
PROTECTION CLASS	IP20
Enclosure material	Plastic, Type PC (UL 94 V-0)
Mounting	DIN rail (35 mm)
PORT A	1 x Serial EIA485 (Plug-in screw terminal block 2 poles) 1 x SGND (Plug-in screw terminal block 2 poles) 1500VDC isolation from others ports
Port B	1 x Serial EIA232 (SUB-D9 male connector) Pinout from a DTE device 1500VDC isolation from other ports (except PORT B: EIA485) 1 x Serial EIA485 (Plug-in screw terminal block 3 poles) (Reference ground or shield) 1500VDC isolation from other ports (except PORT B: EIA232)
Ethernet port	1 x Ethernet 10/100 Mbps RJ45 2 x Ethernet LED: port link and activity
Console port	Mini-USB to connect a PC (to run the Anybus Configuration Manager). It is also possible to connect via the Ethernet port.
USB port	For datalogging on an external USB stick
Certifications	
CE and RoHS compliant	
Electrical Characteristics	
Power	1 x Plug-in screw terminal block (3 poles) 9 to 36VDC +/-10%, Max.: 140mA. 24VAC +/-10% 50-60Hz, Max.: 127mA. Recommended: 24VDC
Environmental Characteristics	
Operating temp	0 to 60 °C, 32 to 140 °F
Storage temp	-40 to 85 °C, -40 to 185 °F
Relative Humidity	5-95 % non-condensing

Communication	Ethernet	EIA-485 Port A	EIA-485 Port B
Compliance	IEEE 802.3	Modbus V1.02	Bacnet Rev 12
Protocols supported	Modbus TCP BACnet/IP	Modbus RTU	BACnet MS/TP
Data rate	10 Mbps, 100 Mbps	2.4, 4.8, 9.6, 19.2,38.4, 57.6, 115.2kbps	Auto, 9.6, 19.2, 38.4, 57.6, 76.8, 115.2kbps
Physical layer	10BASE-T, 100BASE-TX	EIA-485, 3-wire isolated	EIA-485, 3-wire isolated
Cable length (max)	100 m	1200 m (1000 at 115.2kbps)	1200 m (1000 at 115.2kbps)
Port connector	Shielded RJ-45	2-pin + 2-pin removable terminal	3-pin removable terminal
LEDs	L(Link) D(Duplex) Green = 100 Mbps Green = Full-duplex Yellow = 10 Mbps Off = Half-duplex Flash = Activity Flash = Collision	Tx Rx	Tx Rx



Configuration is made in the accompanying Anybus Configuration Manager (MAPS).

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