

# TRB256 BACnet

[Main Page](#) > [TRB Gateways](#) > [TRB256](#) > [TRB256 Manual](#) > [TRB256 WebUI](#) > [TRB256 Services section](#) > **TRB256 BACnet**

The information in this page is updated in accordance with firmware version [TRB2M\\_R\\_00.07.06.10](#).



## Contents

- [1 Summary](#)
- [2 General Configuration](#)
- [3 BIP Configuration](#)
- [4 MSTP Configuration](#)

## Summary

**BACnet** is a communication protocol for building automation and control (BAC) networks that use the ASHRAE, ANSI, and ISO 16484-5 standards protocol.

This manual page provides an overview of the BACnet functionality in TRB256 devices.

**Note:** BACnet is additional software that can be installed from the **System** → [Package Manager](#) page.

## General Configuration



| Field               | Value                                    | Description  |
|---------------------|--|--|
| Enable              | off   on; default: <b>off</b>            | Enables BACnet router function.  |
| Enable BBMD         | off   on; default: <b>off</b>            | Enables BACnet broadcast management function.  |
| BBMD interface      | network interface; default: <b>eth0</b>  | Specifies interface for BBMD function. IP address of this interface should be reachable from WAN.          |
| Allow Remote Access | off   on; default: <b>off</b>            | Creates port forward firewall rule to make application port in LAN reachable from selected BBMD interface. |
| Force gateway       | off   on; default: <b>off</b>            | Adds configured gateway IP address and port to BBMD packages sent.   |
| Gateway address     | ip4; default: <b>none</b>                | Gateway IP address.  |
| Gateway port        | integer [1..65535]; default: <b>none</b> | Gateway port number.   |

## BIP Configuration

Communications in BACnet over IP (**BIP**) rely upon the protocol rules of IP and Ethernet.



| Field            | Value                             | Description   |
|------------------|-----------------------------------|---------------|
| BIP port integer | [1..65535]; default: <b>47808</b> | BIP UDP port. |

## MSTP Configuration

**MSTP** is most commonly used to connect field devices to controllers / routers / control applications. The physical layer uses RS485 which allows up to 31 devices to be installed on a single network.



| Field        | Value  | Description  |
|--------------|--|--|
| MSTP MAC     | integer [0..127]; default: <b>13</b>   | Router MSTP MAC address.   |
| MSTP MAC max | integer [1..127]; default: <b>127</b>  | Maximum client address in the MSTP network.  |
| Baud rate    | 300   600   1200   2400   4800   9600   19200   38400   57600   115200   230400   460800   921600   1000000   3000000; default: <b>38400</b> | Serial data transmission rate (in bits per second).  |
| Parity       | Even   Odd   Mark   Space   None; default: <b>None</b>   | <p>In serial transmission, parity is a method of detecting errors. An extra data bit is sent with each data character, arranged so that the number of 1 bits in each character, including the parity bit, is always odd or always even. If a byte is received with the wrong number of 1s, then it must have been corrupted. However, an even number of errors can pass the parity check.</p> <ul style="list-style-type: none"><li>• <b>None (N)</b> - no parity method is used.</li><li>• <b>Odd (O)</b> - the parity bit is set so that the number of "logical ones (1s)" has to be odd.</li><li>• <b>Even (E)</b> - the parity bit is set so that the number of "logical ones (1s)" has to be even.</li><li>• <b>Space (S)</b> - the parity bit will always be a binary 0.</li><li>• <b>Mark (M)</b> - the parity bit will always be a binary 1.</li></ul> |
| Data bits    | 7   8; default: <b>8</b>   | Number of data bits for each character.  |
| Stop bits    | 1   2; default: <b>1</b>   | Stop bits sent at the end of every character allow the receiving signal hardware to detect the end of a character and to resynchronise with the character stream. Electronic devices usually use one stop bit. Two stop bits are required if slow electromechanical devices are used..   |