

RUT956 BACnet

[Main Page](#) > [RUT Routers](#) > [RUT956](#) > [RUT956 Manual](#) > [RUT956 WebUI](#) > [RUT956 Services section](#) > **RUT956 BACnet**

The information in this page is updated in accordance with firmware version [RUT9M_R_00.07.07](#).

□

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 RUT956 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: off | Enables BACnet router function. |
| Enable BBMD | off on; default: off | Enables BACnet broadcast management function. |
| BBMD interface | network interface; default: eth0 | Specifies interface for BBMD function. IP address of this interface should be reachable from WAN. |
| Port forward | off on; default: off | Creates port forward firewall rule to make application port in LAN reachable from selected BBMD interface. |
| Force gateway | off on; default: off | Adds configured gateway IP address and port to BBMD packages sent. |
| Gateway address | ip4; default: none | Gateway IP address. |
| Gateway port | integer [1..65535]; default: none | 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: 47808 | 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: 13 | Router MSTP MAC address. |
| MSTP MAC max | integer [1..127]; default: 127 | Maximum client address in the MSTP network. |
| Baud rate | 300 600 1200 2400 4800 9600 19200 38400 57600 115200 230400; default: 38400 | Serial data transmission rate (in bits per second). |
| Parity | Even Odd Mark Space None; default: None | <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">• None (N) - no parity method is used.• Odd (O) - the parity bit is set so that the number of "logical ones (1s)" has to be odd.• Even (E) - the parity bit is set so that the number of "logical ones (1s)" has to be even.• Space (S) - the parity bit will always be a binary 0.• Mark (M) - the parity bit will always be a binary 1. |
| Data bits | 5 6 7 8; default: 8 | Number of data bits for each character. |
| Stop bits | 1 2; default: 1 | 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.. |