

# BACnet Protocol Implementation Conformance Statement

From Anex A of BACnet Standard

**Date:** 2013-11-12

**Vendor Name:** EUROICC

**Product Name:** WBR

**Product Model Number:** C4.WBR.02

**Application Software Version:** 1.0

**Firmware Revision:** 1.0

**BACnet Protocol Revision:** 10

**Product Description:** BACnet MS/TP to B/IP router, with Modbus-to-BACnet bridge capabilities. Web interface for device discovery and simple Read/Write included.

## **BACnet Standardized Device Profile:**

- WBR: B-RTR, B-GW, B-BBMD
- Modbus-to-BACnet bridge: B-SA

## **List all BACnet Interoperability Building Blocks Supported:**

- WBR:

DS-RP-A

DS-RPM-A

DS-WP-A

DS-WPM-A

DM-DDB-A

DM-DOB-A

NM-RC-B

- Modbus-to-BACnet bridge:

DS-RP-B

DS-RPM-B

DS-WP-B

DS-WPM-B

DM-DDB-B

DM-DOB-B

**Segmentation Capability:** None

**Standard Object Types Supported (Modbus-to-BACnet bridge):**

- Device
  1. Dynamically creatable by using the CreateObject service: No
  2. Dynamically deletable by using the DeleteObject service: No
  3. Optional properties supported: None
  4. No properties are writable in any circumstances.
  5. No proprietary properties.
  6. There are no property range restrictions.
- Analog Input
  1. Dynamically creatable by using the CreateObject service: No
  2. Dynamically deletable by using the DeleteObject service: No
  3. Optional properties supported: None
  4. No writing exceptions.
  5. No proprietary properties.
  6. Present Value [0 - 65535] ([0x0000 - 0xFFFF]).
- Analog Value
  1. Dynamically creatable by using the CreateObject service: No
  2. Dynamically deletable by using the DeleteObject service: No
  3. Optional properties supported: None
  4. No writing exceptions.
  5. No proprietary properties.
  6. Present Value [0 - 65535] ([0x0000 - 0xFFFF]).

- Binary Input
  1. Dynamically creatable by using the CreateObject service: No
  2. Dynamically deletable by using the DeleteObject service: No
  3. Optional properties supported: None
  4. No writing exceptions.
  5. No proprietary properties.
  
- Binary Value
  1. Dynamically creatable by using the CreateObject service: No
  2. Dynamically deletable by using the DeleteObject service: No
  3. Optional properties supported: None
  4. No writing exceptions.
  5. No proprietary properties.
  
- File
  1. Dynamically creatable by using the CreateObject service: No
  2. Dynamically deletable by using the DeleteObject service: No
  3. Optional properties supported: Record Count
  4. No writing exceptions.
  5. No proprietary properties.
  6. Only Record Access is supported. File size can't be changed by writing past the End-Of-File, nor is writing past the End-Of-File supported. Each record is exactly 244 octets long, but writing shorter octet streams is allowed.

**Data Link Layer Options:**

- BACnet IP
- BACnet IP, Foreign Device
- MS/TP master, baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 76800, 115200, 230400
- Modbus master, baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 76800, 115200, 230400

**Device Address Binding:** No

**Networking Options:**

- Router: MS/TP-B/IP, MS/TP-Modbus, B/IP-Modbus, MS/TP-MS/TP, B/IP-B/IP
- BACnet/IP Broadcast Management Device (BBMD)  
Does the BBMD support registration by Foreign Devices? Yes

**Character Sets Supported:**

- ANSI X3.4

**If this product is a communication gateway, describe the types of non/BACnet equipment/network(s) that the gateway supports:**

WBR can be used as Modbus-to-BACnet bridge. It maps the following Modbus data points:

- Coils to Binary Values.
- Discrete Inputs to Binary Inputs.
- Holding Registers to Analog Values.
- Input Registers to Analog Inputs.
- Modbus Files to BACnet File Objects. Each record is represented as a single record in File Object.

All data point Modbus addresses are mapped to Object Instances (e.g. Coil 3 is mapped to Analog Value 3, etc.).