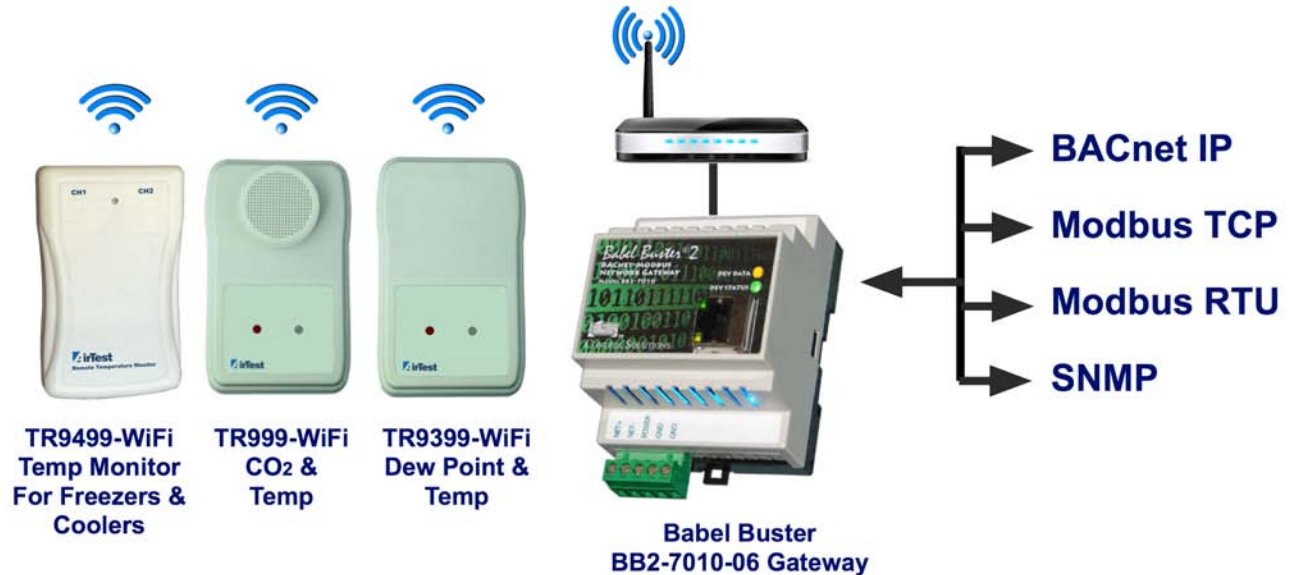


WiFi-to-Wire Gateway for AirTest WiFi Transmitters (Babble Buster BB2-7010-06)



Overview

Designed to work with the transmission data packets sent from AirTest WiFi transmitters the BB2-7010-06, when connected to a generic off-the-shelf WiFi access point, will parse the data packet and places the sensor data in one or more BACnet objects. The sensor data objects may be accessed via BACnet IP, Modbus TCP, Modbus RTU, or SNMP using the BB2-7010-06. No additional software is necessary.

Key Features

- Read/Write any standard Modbus register via BACnet objects
 - Pool of 500 objects
 - Analog, Binary, Multi-State object types
 - Input, Output, Value objects
- 10/100BaseT Ethernet for BACnet IP and Modbus TCP
- BACnet slave is Modbus RTU master or vice versa
- Commandable BACnet objects implement priority array
- Bidirectional communication between BACnet and Modbus
- Modbus Features
 - Can be Modbus TCP client/server
 - Supports “coils”, input registers, holding registers
 - Single or double registers, signed, unsigned, IEEE 754
 - Modbus register mapping configured via web interface
 - Registers may be scaled (x10, x100, x0.1, x0.01, etc.)
 - Modbus (master) polling interval configurable per point
 - Hardened EIA-485 transceiver for Modbus RTU
- SNMP client and server capability

Babel Buster BB2-7010-06 Object Summary

Read/Write any standard Modbus Register as a BACnet Property Value, or vice versa!

- Analog Input, Analog Output, Analog Value
- Binary Input, Binary Output, Binary Value
- Multi-State Input, Output, Value
- Pool of 500 objects for BB2-7010-06
- Objects from pool can be assigned to any of above types
- Maximum of 250 Binary objects, includes state text
- Maximum of 1024 states for multi-state, includes state text (actual value supported varies by resource usage per object)
- Maximum of 200 dual-channel WiFi sensors supported
- Utilizes generic off-the-shelf WiFi access point router with fixed channel.

BACnet® Protocol Implementation Conformance Statement (Abbreviated)

Date: 30 December 2013

Vendor Name: Control Solutions, Inc.

Product Name: Babel Buster BB2-7010-01/02/06

Product Model Number: BB2-7010

Applications Software Version: 2.35

Firmware Revision: 2.35

BACnet Protocol Revision: 7

Product Description: Network gateway allowing Modbus RTU and TCP devices, SNMP devices, and WiFi sensors to be accessed via BACnet IP.

BACnet Standardized Device Profile (Annex L):

- ▶ BACnet Smart Sensor (B-SS)
- ▶ BACnet Smart Actuator (B-SA)

List all BACnet Interoperability Building Blocks Supported (Annex K): DS-RP-B, DS-RPM-B, DS-WP-B, DS-COV-B, DS-COVP-B, DM-DDB-B, DM-DOB-B, DM-RD-B

Segmentation Capability: Request & response, window size 8

Standard Object Types Supported: Object types: AI, AO, AV, BI, BO, BV, MSI, MSO, MSV, DEV (all static) See additional documentation for optional & proprietary properties.

Data Link Layer Options:

- ▶ BACnet IP (Annex J)

Device Address Binding:

Is static device binding supported?: No

Networking Options: BBMD, supports registration by foreign devices

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: Modbus RTU and/or Modbus TCP slaves/servers (BACnet slave device functions as Modbus RTU or TCP master), SNMP (-02), WiFi sensor data via UDP (-06)



Specifications

BB2-7010-06 WiFi-to-Wire Gateway

Description:

Designed to take WiFi data communication packets from AirTest WiFi transmitters and translate and convert into BACnet Objects. No additional software required.

Connections:

- Hardened EIA-485 transceiver for Modbus RTU
- 10/100BaseT Ethernet for BACnet IP and Modbus TCP
- Powered by 12-24V DC/AC 50/60 Hz
- Pluggable screw terminal block for power & RTU network

Power Consumption:

- 0.1A @m24VDC

Mounting:

- DIN rail mounting, 100mm H x 70mm W x 60mm D

Operating Temperature

- -40°C to +85°C; Humidity 5% to 90%

Certifications:

- CSA/UL Listed, 3MPX, Open Energy Management Equipment
- CE
- FCC Part 15
- Made In The USA

Configuration/On-Line Manual:

Configuration of the gateway is performed using embedded web pages in the device eliminating the need for special configuration properties for each object.

A demo copy of the embedded web site contained within the Babel Buster BB2-7010 is found at the link below. Visit this link for object property summary and hardware guide, in addition to the demo copy of device configuration pages.

Link:

<http://www.csimn.com/Demo-BB2-7010-06/index.html>

WiFi Products available from AirTest:

- B2-7010-06:** WiFi-to-Wire Gateway
- TR9299-WiFi:** CO₂ and Temperature
- TR9399-WiFi:** Temperature And Dew Point
- TR94990WiFi-1C:** Single Channel, Remote Freezer/Cooler Temp Monitoring
- TR9499-WiFi-2C:** Dual Channel, Remote Freezer/Cooler Temp Monitoring
- Zigbee** Versions also available soon (Xbee Pro)

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specializes in the application of cost effective, state-of-the-art air monitoring technology to ensure the comfort, security, health and energy efficiency of buildings.

