



# BACnet IP to MS/TP Router and/or Gateway to Remap MS/TP objects on a BACnet IP network and Vice Versa!



Control Solutions' Babel Buster BB2-7030 is a BACnet router, slave proxy, and client/server gateway that allows remapping objects from multiple slaves into one master. You can use the BB2-7030 as just a router, just a slave proxy, just a client/server, or all three at the same time. The BB2-7030 also includes BBMD support.

The BB2-7030 as a BACnet Router will route IP to MS/TP and vice versa via its local ports, and supports full router capability for multi-hop internetworks including via NAT WAN routers.

The BB2-7030 as a BACnet Slave Proxy will provide I-Am responses on behalf of devices that do not have I-Am support, or are slave-only devices. The slave proxy capability will allow systems to utilize dynamic address binding with devices that do not support dynamic binding.

The BB2-7030 as a BACnet Client/Server Gateway will poll BACnet IP and/or BACnet MS/TP slaves or servers, and retain copies of selected object Present Value properties. Upstream masters may then query the BB2-7030 to receive Present Value data originating from multiple devices.

The BB2-7030 product models also include either a Modbus TCP Client/Server or SNMP Client/Server. This allows interconnecting BACnet devices with Modbus TCP or SNMP devices and systems. SNMP v2c Traps may be generated based on BACnet MS/TP or BACnet IP data.

## BACnet IP ↔ MS/TP BACnet ↔ WAN ↔ BACnet BACnet ↔ Modbus TCP BACnet ↔ SNMP

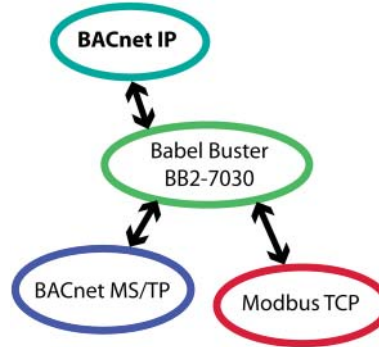
### FEATURES

- Read/Write any standard BACnet objects
  - Pool of 1000 objects
  - Analog, Binary, Multi-State object types
  - Input, Output, Value objects
- BACnet router IP to MS/TP
- Slave proxy for static address binding support
- Client/Server gateway for remapping device objects
- Commandable BACnet objects implement priority array
- Hardened EIA-485 transceiver for BACnet MS/TP
- 10/100BaseT Ethernet for BACnet IP
- Powered by 12-24V DC/AC 50/60 Hz
- Power Consumption: 0.15A @ 24VDC
- DIN rail mounting, 100mm H x 70mm W x 60mm D
- Pluggable screw terminal block for power & MS/TP network
- Operating temperature -40°C to +85°C
- Humidity 5% to 90% non-condensing
- FCC Class A, CE Mark
- Listed to UL 916 and (Canadian) C22.2 No. 205-M1983

[www.csimn.com](http://www.csimn.com)  
651-426-4410 · 800-872-8613



## Built-In Web Server for Configuration and Diagnostics



Interconnect multiple  
BACnet networks, plus...

- Connect MS/TP or BACnet IP devices to Modbus TCP
- Connect Modbus TCP devices to MS/TP or BACnet IP

Provides Connectivity  
Between BACnet IP and MS/TP  
and Modbus TCP or SNMP

### BACnet Protocol Implementation Conformance Statement (Abbreviated)

Date: 14 October 2014

Vendor Name: Control Solutions, Inc.

Product Name: Babel Buster BB2-7030

Product Model Number: BB2-7030

Applications Software Version: 3.20

Firmware Revision: 3.20

BACnet Protocol Revision: 7

Product Description: BACnet router, slave proxy, and network gateway allowing data exchange between BACnet IP and BACnet MS/TP devices.

### 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-A, DS-RP-B, DS-RPM-B, DS-WP-A, DS-WP-B, DS-WPM-B, DS-COV-B, DS-COVP-B, DM-DDB-A, DM-DDB-B, DM-DOB-B, DM-DCC-B, DM-RD-B, DM-R-B, NM-RC-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)
- ▶ BACnet MS/TP master & slave (9600, 19200, 38400, 76800 baud)

### Device Address Binding:

Is static device binding supported? Yes

### Networking Options: ▶ Router, Clause 6, BACnet IP-MS/TP

▶ Annex H.1, Mapping Non-BACnet Networks onto BACnet Routers

▶ BACnet IP Broadcast Management Device (BBMD)

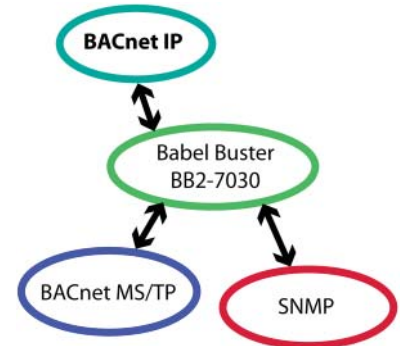
(Support registrations by Foreign Device: Yes)

Character Sets Supported: ANSI X3.4

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

Modbus TCP and SNMP v1, v2, v2c Traps

- Connect MS/TP or BACnet IP devices to SNMP
- Connect SNMP devices to MS/TP or BACnet IP



Visit our web site for

- Full details
- User Guides & Software Downloads
- Pricing
- On-Line Ordering

[www.csimmn.com](http://www.csimmn.com)



**CONTROL SOLUTIONS MINNESOTA**

PO BOX 10789

ST. PAUL, MN 55110-0789

VOICE (651) 426-4410 • FAX (651) 426-4418

TOLL FREE 1-800-872-8613

© 2019 Control Solutions, Inc. Babel Buster® is a registered trademark of Control Solutions, Inc. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.