BASrouter — BACnet® Multi-Network Router

Contemporary Controls provides several BACnet routing solutions for your integration requirements. The compact and durable BASrouter provides stand-alone routing between BACnet networks such as BACnet/IP, BACnet Ethernet, and BACnet MS/TP — thereby allowing the system integrator to mix BACnet network technologies within a single BACnet internetwork. Router configuration is accomplished via web page. Diagnostic web page displays statistics about the MS/TP bus which allows the system integrator to analyze and ensure the stability of the MS/TP network segment as well as resolve existing network issues if necessary. A routing table web page contains information about the network topology of the surrounding network, destination network, network status, network type, etc. — making network troubleshooting faster and easier.

Versatile Routing Between ...
- BACnet/IP and BACnet MS/TP
- BACnet Ethernet and BACnet MS/TP
- BACnet/IP and BACnet Ethernet
- BACnet/IP and BACnet Ethernet and BACnet MS/TP
- Two BACnet/IP Networks (between two UDP ports)

IP Network Support
- Web Server for Commissioning and Troubleshooting
- New MS/TP Communication Diagnostic Web Page
- New DHCP option
- New Routing Table Web Page
- BACnet/IP Broadcast Management Device (BBMD)
- Foreign Device Registration (FDR)

Flexible Communications
- 10/100 Mbps Ethernet with Auto-Negotiation and

CONTEMPORARY CONTROLS®

BACnet Routers

BACnet/IP, BACnet Ethernet, BACnet MS/TP

BASrouter
BACnet Router
BASrouter 3.0
New Firmware Features
- MS/TP Diagnostics
- Routing Table
- DHCP

BASrouterLX
BASrouterLX High-performance Router
New 2.0 Firmware Features
- Whitelist
- MS/TP Backbone
- Backward Routing
- BACnet diagnostic up-link to Optigo Visual BACnet

Portable BASrouter
Portable BACnet commissioning and diagnostic device

CUBE I/O

Modbus to BACnet Gateway

Fast & Easy Modbus Commissioning

Simplify Modbus to BACnet/IP Integration
Step 1: Select your Modbus baud rate and parity.
Step 2: Select your Modbus device profile from our library of 100 profiles.
Step 3: Click-off the registers to be scanned in each device or accept our defaults.
Step 4: Done.

- 24 VAC/VDC powered and DIN-rail mountable
- Modbus Serial (RTU or ASCII) to BACnet/IP
- Modbus TCP to BACnet/IP
- Modbus Serial (RTU or ASCII) to Modbus TCP

BASgatewayLX
BACnet Gateway

Modbus

ASHRAE BACnet™

- Auto-MDIX
- Optically Isolated MS/TP port
- MS/TP Baud Rates Range from 9.6–76.8 kbps
- Jumper-selectable MS/TP bias and termination

Convenient Installation
- 24 VAC/VDC (± 10%), 47–63 Hz input voltage
- Din-rail mounted

BASrouterLX — High-Performance BACnet® Router with Diagnostic Capabilities

In addition to the standard BASrouter, the BASrouterLX accommodates more features and provides higher network performance.
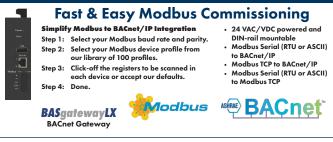- MS/TP capture using Wireshark® with direct up-link to Optigo Visual BACnet - allowing you to instantly diagnose your BACnet System
- New MS/TP Backbone
- New Whitelist option
- New Backward Routing
- MS/TP baud rates range from 9.6–115.2 kbps

- Auto-discovery of MS/TP slaves
- 50 BBMD entries, 147 FDR entries

The BASrouterLX is a high-performance BACnet router with diagnostic capabilities, providing stand-alone routing between BACnet networks such as BACnet/IP, BACnet Ethernet, and BACnet MS/TP. Besides its high- speed processor, it has advanced features such as MS/TP slave proxy support (allowing auto-discovery of MS/TP slaves) and MS/TP frame capture. As a BBMD, up to 50 BDT and 147 FDR entries are supported.

CONTEMPORARY CONTROLS®

Portable BASrouter — BACnet® Multi-Network Router

The Portable BASrouter provides the same stand-alone routing and network diagnostics as the standard BASrouter in an even more compact case. Powered through a USB port, it could be connected to a laptop PC for fast and easy commissioning or quick network analytics. Configuration and commissioning accomplished via web page.

Convenient Commissioning
- Powered via a USB port in a laptop
- Compact plastic case can be easily stored

BASgatewayLX — Modbus to BACnet® Gateway

Modbus remains a popular network interface. It is commonly found on jobs such as boiler control, variable speed drives, and metering applications, but these devices lack BACnet compliance. To make Modbus devices appear as individual BACnet devices, a BASgatewayLX is used. This device has one 10/100 Mbps Modbus TCP or BACnet/IP Ethernet port and an opto-isolated Modbus EIA-485 serial port for Modbus RTU or Modbus ASCII devices.

Up to 100 Modbus serial devices (represented by up to 1000 polled points) can share the single Modbus port on the BASgatewayLX. The virtual routing feature in the BASgatewayLX allows each connected Modbus device to appear as an individual BACnet-compliant device. What is needed is a device profile for each Modbus type device. Contemporary Controls maintains a library of common device profiles. If one is not available, Contemporary Controls will provide it upon request. Custom device profiles can be uploaded to the BASgateway.

Using web pages and a database of common Modbus device profiles, Modbus data points from Modbus Serial or Modbus TCP devices can be mapped to BACnet objects.

Gateway Functionality Between ...
- Modbus Serial (RTU or ASCII) and BACnet/IP
- Modbus TCP and BACnet/IP

Routing Functionality Between...
- Modbus Serial (RTU and ASCII) and Modbus TCP

Flexible Communication Ports
- 10/100 Mbps Ethernet with auto-negotiation and Auto-MDIX
- Opto-isolated serial port supports either 2-wire or 3-wire EIA-485
- Jumper-selectable EIA-485 bias and termination
- Baud rates from 2.4–115.2 kbps

Convenient Installation
- 24 VAC/VDC powered
- DIN-rail mounting

Ordering Information

Model	RoHS	Description
BASRT-B	✔	BAS Router BACnet multi-network router DIN-rail mount
BASRTLX-B	✔	High-performance BACnet router with diagnostic capabilities
BASRTP-B	✔	Portable BASrouter BACnet multi-network router
BASGLX-M1	✔	Modbus to BACnet Gateway with virtual routing

https://www.ccontrols.com/controlscon

Worldwide Locations

United States
Contemporary Control Systems, Inc.
2431 Curtiss Street
Downers Grove, IL 60515 USA
+1 630 963 7070
info@ccontrols.com
www.ccontrols.com

Germany
Contemporary Controls GmbH
Fuggerstraße 1 B
04158 Leipzig
Germany
+49 341 520359 0
info@ccontrols.de
www.ccontrols.eu

United Kingdom
Contemporary Controls Ltd
14 Bow Court
Fletchworth Gate
Coventry CV5 6SP
United Kingdom
 +44 (0)24 7641 3786
info@ccontrols.co.uk
www.ccontrols.com

China
Contemporary Controls (Suzhou) Co. Ltd
11 Huoju Road
Science & Technology
 Industrial Park
New District, Suzhou
PR China 215009
+86 512 68095866
info@ccontrols.com.cn
www.ccontrols.asia

CONTEMPORARY CONTROLS