OptiFlex™ BACnet Router

Powerful BACnet Router

The Automated Logic® OptiFlex™ BACnet router is an integral component of the WebCTRL® building automation system.

The OptiFlex router routes BACnet messages between the WebCTRL building automation system backbone (BACnet/IP), and a subnetwork of WebCTRL controllers (BACnet MS/TP and/or BACnet ARCnet). It connects directly to the Ethernet LAN and provides the WebCTRL server with access to the entire WebCTRL system.

Key Features and Benefits

BACnet Features

- Provides BACnet routing between supported BACnet communication types

- High-speed, native BACnet over ARC156 communications delivers high-speed response when you need it

- Supports up to 99 ARCnet controllers and 60 BACnet MS/TP controllers to connect together via the WebCTRL building automation system backbone

- Two additional BACnet ports to support either two simultaneous BACnet MS/TP network (up to 60 controllers each), or one ARCnet network (up to 99 ARCnet controllers), and one BACnet MS/TP network (up to 60 controllers)

- Can serve as a BACnet Broadcast Management Device (BBMD) routing any BACnet broadcast messages directly to other BBMD devices on the BACnet network

- Supports BACnet Foreign Device Registration (FDR)

Hardware Features

- Supports Gig-E, 1000Mbps BACnet IP and DHCP IP addressing

- Local Access Ethernet port at 10 or 100 Mbps for system start-up and troubleshooting

- Firmware upgrades can be performed remotely

- Capacitor-backed real-time clock keeps time in the event of power failure or network interruption for up to three days

- Available with DIN rail mounting and screw mounting

System Benefits

- Connects seamlessly to the WebCTRL building automation system
- Multiple IP ports for local access and network connections
- Multiple serial comunication ports to simultaneously route and share data across a wide range of building subsystems
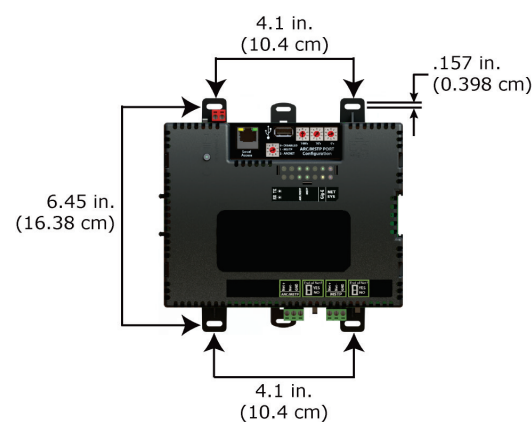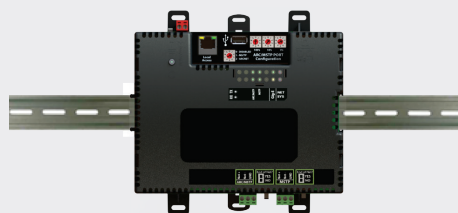

The WebCTRL® building automation system gives you the ability to understand your building operations and analyze the results. The WebCTRL system integrates environmental, energy, security and safety systems into one powerful management tool that allows you to reduce energy consumption, increase occupant comfort, and achieve sustainable building operations. Our web-based platform allows building managers to control and access information about their HVAC, lighting, central plant and critical processes on premises or remotely at any time of day.

We make data **big.**™
Next level building automation engineered to help you make smart decisions.

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Specifications

Part #	G5RE
Gig-E port	10/100/1000 BaseT Ethernet port for BACnet/IP and/or BACnet/Ethernet communication on the Ethernet at 10, 100, or 1000 Mbps, full duplex
ARC/MSTP port	For communication with either of the following: • A BACnet ARCNET network at 156 kbps • A BACnet MS/TP network at 9600 to 115200 bps
MSTP port	For communication with a BACnet MS/TP network at 9600 to 115200 bps
Local Access port	Ethernet port at 10 or 100 Mbps for system start-up and troubleshooting
Microprocessor	32-bit ARM Cortex-A8, 600 MHz, processor with multi-level cache memory, two Ethernet controllers, and USB 2.0 host port
Memory	16 GBs eMMC Flash memory (120 MB available for use) and 256 MB DDR3 DRAM. User data is archived to non-volatile Flash memory when parameters are changed, every 90 seconds, and when the firmware is deliberately shutdown or restarted.
Real-time Clock	Real-time clock keeps track of time in the event of a power failure for up to 3 days
Protection:	Device is protected by a replaceable, fast acting, 250Vac, 2A, 5mm x 20mm glass fuse The power and network ports comply with the EMC requirements EN50491-5-2
Env. Operating Range	32 to 140° F (0 to 60° C); 10 - 90% relative humidity, non-condensing
Compliance	United States of America: FCC compliant to Title CFR47, Chapter 1, Subchapter A, Part 15, Subpart B, Class A; UL Listed to UL 916, PAZX, Energy Management Equipment
Canada:	Industry Canada Compliant, ICES-003, Class A cUL Listed UL 916, PAZX, Energy Management Equipment
Europe:	CE Mark EN50491-5-2:2009; Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light industry environment; EN50491-3:2009, Part 3: Electrical safety requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS); Low Voltage Directive: 2014/35/EU RoHS 2011/65/EU RoHS Compliant: 2011/65/EU
Australia and New Zealand:	C-Tick Mark AS/NZS 61000-6-3
Physical	Fire-retardant plastic ABS, UL94-5VA
Mounting	DIN rail mounting or screw mounting
Weight	1 lb. 1 oz. (0.482kg)

4.1 in. (10.4 cm)

.157 in. (0.398 cm)

6.45 in. (16.38 cm)

4.1 in. (10.4 cm)

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AUTOMATEDLOGIC
United Technologies

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