

OPTIFLEX™ BACNET/SC ROUTER



BACNET SECURE CONNECT ROUTER FOR THE WEBCTRL® SYSTEM

The OptiFlex BACnet/SC router, model G5RE, is a high-performance BACnet router that securely routes BACnet messages between a BACnet Secure Connect hub, the WebCTRL building automation system, and other BACnet subnetworks.



KEY FEATURES AND BENEFITS

BACnet Features

- Features end-to-end encrypted BACnet Secure Connect (BACnet/SC) routing between BACnet/SC hubs and the WebCTRL system via BACnet/SC, an encrypted datalink layer specifically designed to meet the requirements, policies, and constraints of minimally managed to professionally managed IP infrastructures
- Allows concurrent BACnet networks (BACnet/SC and non-BACnet/SC), allowing facilities to migrate to the BACnet/SC environment over time
- Includes two additional BACnet ports to support either two simultaneous BACnet MS/TP networks (up to 127 controllers each) to simultaneously route and share data across a wide range of building subsystems
- 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

- IPv6 and IPv4 networks are supported
- Stateless auto-configuration of addresses (SLAAC), static IPv6 addressing, and DHCP IP addressing are supported
- 1000 BaseT Ethernet port for high-speed communication
- Password protected Ethernet service port at 100 Mbps for system start-up and troubleshooting
- Web sever local access for properties such as network and alarm configuration, notification classes, etc.
- Capacitor-backed real-time clock keeps time in the event of power failure or network interruption for up to three days

System Benefits

- Connects seamlessly to the [WebCTRL building automation system](#)
- Multiple serial communication ports to simultaneously route and share data across a wide range of building subsystems



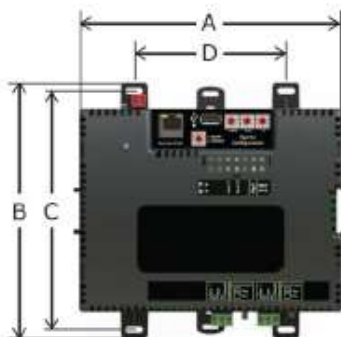
The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve sustainable building operations.

SPECIFICATIONS



Part #	OFBBC-NR OptiFlex BACnet Building Controller
Communication	
BACnet Conformance	Conforms to the BACnet Router (B-RTR) Standard Device and BACnet BBMD (B-BBMD) Device as defined in BACnet 135. Tested to and listed to Protocol Revision 19 (135-2016). - BTL Listing PICS WPCert Conformance Certificate
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
IPv4	Gig-E, 1000Mbps BACnet IP and DHCP IP addressing
IPv6	Gig-E, 1000Mbps BACnet IP for static IPv6 addressing and stateless auto-configuration of addresses (SLAAC)
Port S1	For communication BACnet MS/TP network at 9,600 to 115,200 bps
Port S2	For communication BACnet MS/TP network at 9,600 to 115,200 bps
Local Access Port	Password protected Ethernet service port at 10 or 100 Mbps for system start-up and troubleshooting
Power	24 Vac ±10%, 50–60 Hz, 50 VA 26 Vdc ±10%, 15 W
Microprocessor	32-bit ARM Cortex-A8, 600 MHz, processor with multi-level cache memory, two Ethernet controllers, and USB 2.0 host port
Environmental Range	32 to 140° F (0 to 60° C); 10 - 90% relative humidity, non-condensing
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
Compliance	United States: FCC compliant to Title CFR47, Part 15, Subpart B, Class A. UL Listed, File E143900; CCN PAZX, UL916, Energy Management Equipment; AS/NZS: RCM Mark 61000-6-3; Canada: UL Listed File E143900, CCN PAZX7, CAN/CSA C22.2 No. 205 Signal Equip., Industry Canada Compliant, ICES-003, Class A; CE Mark Compliant with 2014/30/EU, and RoHS Compliant: 2015/863/EU; UKCA Mark compliant with Electromagnetic Compatibility Regulations 2016 – Gov.UK and RoHS for Electrical and Electronic Equipment 2012.
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
Plastic Rating	Fire-retardant plastic ABS, UL94-5VA
Mounting	DIN rail mounting or screw mounting

● **Figure 1: Physical Dimensions**



	in.	cm
Width:	7.1	18.03
Height:	6.95	17.65
Depth:	2.09	5.31
Weight:	1.1 lbs	.482 kg



Assembled in the United States