

# OptiFlex™ BACnet Integrator

PART NUMBER: G5CE



## High-Speed BACnet Secure Connect Routing and Integration

The OptiFlex™ BACnet Integrator (G5CE) delivers powerful integration, routing, and control for the WebCTRL building automation system. It supports BACnet Secure Connect and advanced third-party system integration to unify building data. The G5CE also serves as a Google® UDML-compliant gateway and device.

## Key Features and Benefits

### Integration Features

- Securely routes communication between controllers and the WebCTRL system via BACnet Secure Connect, an end-to-end encrypted communication protocol specifically designed to meet the requirements, policies, and constraints of minimally managed to professionally managed IP infrastructures
- Ships with 25 “any protocol” points, 1,500 BACnet points and is expandable up to 3,025 total integration points
- Allows concurrent BACnet networks (BACnet/SC and non-BACnet/SC), allowing facilities to migrate to the BACnet/SC environment over time
- Includes two serial ports BACnet/ARCNET networks (up to 254 ARCNET controllers), BACnet MS/TP networks (up to 127 controllers) or Modbus 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)
- Can act as a Modbus server or client on a Modbus TCP/IP serial network

### Hardware Features

- Supports DHCP addressing on IPv4 networks and DHCPv6 and SLAAC addressing on IPv6 networks
- Supports KNX, Modbus TCP, N2 Open, SNMP on the gigabit Ethernet port
- Ethernet port provides local access for system start-up and troubleshooting
- Supports network captures for advanced diagnostics
- Provides network statistics numerically or as trend graphs inside the WebCTRL building automation system
- Supports DIN rail and screw mounting
- Capacitor-backed real-time clock keeps time in the event of power failure for up to three days with no battery

### System Benefits

- Connects seamlessly to the [WebCTRL building automation system](#)

## WebCTRL®

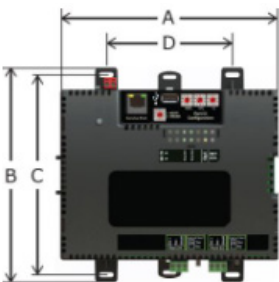
The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve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



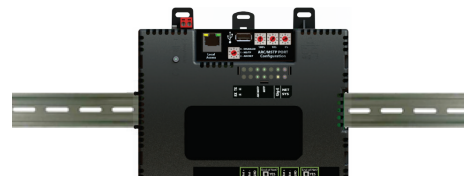
# Specifications

Part # G5CE OptiFlex BACnet Integrator	
<b>BACnet Conformance</b>	Conforms to the BACnet Building Controller (B-BC), BACnet Router (B-RTR) and BACnet Broadcast Management Device (B-BBMD), Standard Profile as defined in ANSI/ASHRAE Standard 135-2012 (BACnet) Annex L, Protocol revision 14. This product is BTL listed with driver version 107-04-2084 and Automated Logic internally verifies the BACnet conformance of subsequent 107 driver versions.
<b>Control Program Execution</b>	Maximum number of control programs: 999 depending upon available memory.
<b>BACnet Objects</b>	Maximum number of BACnet objects: 12,000 for programming purposes.
<b>Third-Party Integration</b>	Ships with 25 “any protocol” points, 1,500 BACnet points and is expandable up to 3,025 total integration points.
<b>Power</b>	24 Vac ±10%, 50–60 Hz, 50 VA 26 Vdc ±10%, 15 W
Communication	
<b>Gig-E Port</b>	10/100/1000 BaseT Ethernet port for BACnet/IP, BACnet/IPv6, BACnet/Ethernet and/or BACnet/SC, full duplex
<b>Serial Port 1</b>	For communication with either of the following BACnet protocols or with third-party protocols: · A BACnet ARCNET network at 156,000 bps · A BACnet MS/TP network at 9,600 to 115,200 bps
<b>Serial Port 2</b>	For communication with a BACnet MS/TP network at 9,600 to 115,200 bps or with third-party protocols
<b>Service Port</b>	Ethernet port at 10 or 100 Mbps for system start-up and troubleshooting
<b>Rnet Port</b>	For future use
<b>Microprocessor</b>	32-bit ARM Cortex-A8, 600 MHz, processor with multi-level cache memory, and USB 2.0 host port
<b>Environmental Range</b>	-40 to 158° F (-40 to 70° C); 10 - 95% relative humidity, non-condensing
<b>Memory</b>	8 GBs eMMC Flash memory and 512 MB DDR3 DRAM
<b>Real Time Clock</b>	Real-time clock keeps track of time in the event of a power failure for up to 3 days
<b>Compliance</b>	<b>United States:</b> FCC compliant to Title CFR47, Chapter 1, Subchapter A, Part 15, Subpart B, Class A. UL Listed, File E143900; CCN PAZX, UL916, Energy Management Equipment; <b>AS/NZS:</b> RCM Mark 61000-6-3; <b>Canada:</b> 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; <b>UKCA</b> Mark compliant with Electromagnetic Compatibility Regulations 2016 – Gov.UK and RoHS for Electrical and Electronic Equipment 2012, REACH Compliant
<b>Protection</b>	Device is protected by a replaceable, fast acting, 250 Vac, 2A, 5mm x 20mm glass fuse. The power and network ports comply with the EMC requirements EN50491-5-2
<b>Plastic Rating</b>	Fire-retardant plastic ABS, UL94-5VA
<b>Mounting</b>	35mm DIN rail mounting or screw mounting

Figure 1: Physical Dimensions



Overall	in.	cm
A:	7.1	18.03
B:	6.95	17.65
Depth:	2.09	5.31
Mounting		
C:	6.45	16.38
D:	4.1	10.40
Weight:	1.1 lbs	0.482 kg



## Specifications — continued

<b>Compliance</b>	<b>United States:</b> FCC compliant to Title CFR47, Part 15, Subpart B, Class A. UL Listed, File E143900; CCN PAZX, UL916, Energy Management Equipment; <b>AS/NZS:</b> RCM Mark 61000-6-3; <b>Canada:</b> 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; <b>UKCA</b> Mark compliant with Electromagnetic Compatibility Regulations 2016 – Gov.UK and RoHS for Electrical and Electronic Equipment 2012.
<b>Enclosure</b>	Fire-retardant plastic ABS, UL94-5VA
<b>Mounting</b>	35mm DIN rail mounting or screw mounting