OptiFlex™ BACnet Integrator

AUTOMATEDLOGIC United Technologies

High-Speed BACnet Routing & Integration

G5CE



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

The OptiFlex Integrator supports routing between multiple BACnet networks. It also supports custom control programs to easily integrate with third party BACnet or Modbus equipment such as variable speed drives, boilers, and lighting.

Key Features and Benefits

BACnet Features

- Supports routing between BACnet/IP, BACnet/Ethernet, BACnet ARCnet, and BACnet MS/TP networks
- Supports up to 1,500 third party BACnet points
- Supports up to two BACnet/IP networks on the Gig-E port
- Includes two additional BACnet ports for supporting either two simultaneous BACnet MS/TP networks (with up to 127 controllers each), or one ARCnet network (with up to 254 ARCnet controllers) and one BACnet MS/TP network (with up to 127 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)

Modbus Features

- Can act as a master or slave on a Modbus serial network
- Can act as a server or client on a Modbus TCP/IP network

Hardware Features

- Supports and executes control programs
- Supports Gig-E, 1,000Mbps BACnet IP and DHCP IP addressing
- 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 or network interruption for up to three days
- Connects seamlessly to the <u>WebCTRL</u> building automation system



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.







OptiFlex™ BACnet Integrator

Specifications



BACnet Test Laboratories (BTL) Tested to BACnet Protocol Revision 12 (135-2010)

Part #	G5CE
Control Program Execution	Maximum number of control programs: 999 depending upon available memory.
BACnet Objects	Maximum number of BACnet objects: 12,000 for programming purposes.
Third-party integration	Supports up to 1,500 third-party BACnet integration points, and 25 modbus integration points.
Power	24 Vac ±10%, 50–60 Hz, 50 VA 26 Vdc ±10%, 15 W
Gig-E port	10/100/1000 BaseT Ethernet port for BACnet/IP and/or BACnet/Ethernet and/or Modbus full duplex
S1 port	For communication with either of the following:
	A BACnet ARCNET network at 156,000 bpsA BACnet MS/TP network at 9,600 to 115,200 bpsA Modbus at 1200 to 115200 bps
S2 port Local Access port	For communication with a BACnet MS/TP network at 9,600 to 115,200 bps, or Modbus at 1200 to 115200 bps 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, 250 Vac, 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:	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 Compliant: 2011/65/EU

Australia and New Zealand:



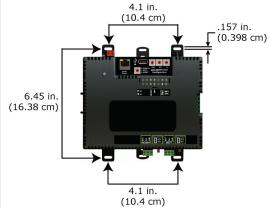
C-Tick Mark AS/NZS 61000-6-3

Physical Fire-retardant plastic ABS, UL94-5VA

Mounting DIN rail mounting or screw mounting

Weight 1 lb. 1 oz. (0.482kg)





All trademarks used herein are the property of their respective owners.

1150 Roberts Boulevard, Kennesaw, Georgia 30144 770-429-3000 Fax 770-429-3001 | www.automatedlogic.com

