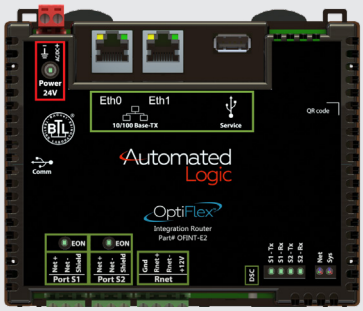
OPTIFLEX™ INTEGRATION ROUTER

INTEGRATOR WITH DUAL IP & SERIAL PORTS

Part # OFINT-E2



INTEGRATOR FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The OptiFlex Integration Router is a high-performance BACnet router that routes BACnet traffic between data links such as BACnet/IPv4/IPv6, BACnet/Ethernet, BACnet MS/TP, BACnet Secure Connect, and ARCNET. As a fully programmable, multi-protocol integrator, this scalable solution streamlines network setup and management for complex IP deployments, simplifying infrastructure and reducing upfront investment.

KEY FEATURES AND BENEFITS

- **Multi-Protocol Support:** Integrates diverse industry-standard protocols (BACnet, Modbus, SNMP, N2 Open, KNX, M-Bus, etc.) with support for future protocols.
- **Flexible Integration:** Provides versatile integration across various network types, including BACnet (IP, Ethernet, MS/TP, SC, and ARCNET), for seamless communication.
- **Scalability:** Includes 100 integration points out-of-the-box, expandable to 5,000 total integration points to grow with your building's needs.
- **Robust Routing Capability:** Seamlessly integrate your system by routing BACnet across all common network types, including IP, Ethernet, BACnet Secure Connect (SC), MS/TP, and ARCNET, ensuring compatibility with both existing and future infrastructure.
- **Simplified Deployment:** Features dual IP ports, a USB port for easy configuration and maintenance, and daisy-chain Ethernet capabilities, reducing IT complexity and deployment time.
- **Advanced Diagnostics:** Proactively identify and resolve system issues with built-in fault detection and diagnostics (FDD) for connected controllers, minimizing downtime and maximizing efficiency.
- **Programmable Control Strategies:** Supports custom control programs to maximize building performance, optimize energy efficiency, and enhance occupant comfort.
- **Compact Footprint:** Designed for easy installation, optimizing control panel space.

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 # OFINT-E2	
BACnet Conformance	BACnet Building Controller (B-BC), BACnet Router (B-RTR), BACnet Broadcast Management Device (B-BBMD), and BACnet Gateway (B-GW) profiles as defined in Annex L of the BACnet standard. The device is certified to the BACnet standard ISO 16484-5 protocol revision 1.19 and protocol revision 19 (135-2016). The product supports multiple data link layers including BACnet/IP (Annex J), BACnet/IPv6 (Annex U), BACnet/SC, MS/TP, Ethernet, and ARCNET (see BTL listing page https://www.bacnetinternational.net/btl/index.php?m=11 for details).
Driver Compatibility	drv_gen5_<version> (only)
WebCTRL version	Compatible with WebCTRL v9.0 or later.
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, depending upon available memory.
Integration	Ships with 100 “any protocol” points, expandable up to 5,000 total integration points to grow with your building’s needs.
Power	24 Vac ±10%, 50–60 Hz, 50 VA | 24 Vdc ±10%, 18 W
Communication	
Eth0/Eth1	10/100 BaseT, full duplex, Ethernet ports with built-in fail safe. Supports direct connection or daisy chain topology natively using BACnet/IP and/or BACnet Ethernet. Under normal operation, network traffic not destined for this controller is repeated to the other Ethernet port.
Port S1	High-speed EIA-485 for communication with a BACnet ARCNET (156 kbps) or BACnet MS/TP network at 9600 to 115200 bps or with a Modbus serial network at 9600 to 115200 bps.
Port S2	Electrically isolated EIA-485 for communication with a BACnet MS/TP network at 9600 to 115200 bps or with a Modbus serial network at 9600 to 115200 bps.
Service Port	USB 2.0 host port for setting up the router and troubleshooting through a local connection to a computer, connecting to the Equipment Touch, or the Automated Logic® wireless service adapter.
Rnet Port	For future use.
Microprocessor	32-bit ARM Cortex-A8, 600 MHz, processor with multi-level cache memory.
Environmental Range	40° to 158°F (-40° to 70°C), 10-95% relative humidity, non-condensing The ALC-OFINT-E2 is suitable for installation inside or outside the building envelope. It should be placed in a UL Listed enclosure. If installed outside, the enclosure must be suitable for the environmental conditions.
Memory	8 GBs eMMC Flash memory (120 MB available for use) and 512 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 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 of America: FCC compliant to Title CFR47, Part 15, Subpart B, Class A UL Listed, File E143900; CCN PAZX, UL916, Energy Management Equipment; Canada: UL Listed File E143900, CCN PAZX7, CAN/CSA C22.2 No. 205 Signal Equip., Industry Canada Compliant, ICES-003, Class A; Europe: EN50491-5-2; Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light industry environment RoHS Compliant: 2015/863/EU REACH Compliant; Australia and New Zealand: C-Tick Mark, AS/NZS 61000-6-3
Protection	Device is protected by a replaceable, fast acting, 250 Vac, 3A, 5mm x 20mm glass fuse. The power and network ports comply with the EMC requirements EN50491-5-2.
Enclosure	Fire-retardant plastic ABS, UL94-5VA
Mounting	35mm DIN rail mounting or screw mounting

Figure 1: Physical Dimensions

Overall	in.	cm
A:	5.51	14
D:	5.88	14.93
E:	4.41	11.20
Depth:	2.01	5.11
Screw Mounting Dimensions:		
B:	3	7.62
C:	5.29	13.44
Weight:	.75 lbs	0.34 kg