

# OPTIFLEX™ INTEGRATOR

## HIGH SPEED ROUTING AND INTEGRATION



## INTEGRATOR FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The OptiFlex Integrator, model OFHI-A, supports routing between multiple BACnet networks. It also supports custom control programs to easily integrate with third party equipment such as variable speed drives, boilers, and lighting. The OFHI-A is also a Google® UDMI compliant gateway and device.

## KEY FEATURES AND BENEFITS

### Integration Features

- Supports routing between BACnet/IPv6, BACnet/Ethernet, BACnet ARCNET, BACnet MS/TP and BACnet/SC networks
- Ships with 1,000 “any protocol” points, 1,500 BACnet points and is expandable up to 5,000 total integration points
- Supports KNX, Modbus TCP/IP, N2 Open, SNMP on the gigabit Ethernet port
- 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
- 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](#)



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 #	OFHI-A
BACnet Conformance	Conforms to the 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 <a href="https://www.bacnetinternational.net/btl/index.php?m=11">https://www.bacnetinternational.net/btl/index.php?m=11</a> for details).
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.
Third-Party Integration	Ships with 1,000 “any protocol” points, 1,500 BACnet points and is expandable up to 5,000 total integration points.
Power	24 Vac $\pm 10\%$ , 50–60 Hz, 50 VA   26 Vdc $\pm 10\%$ , 15 W
Communication	
Gig-E Port	10/100/1000 BaseT Ethernet port for BACnet/IP, BACnet/IPv6, BACnet/Ethernet and/or BACnet/SC, full duplex
Serial Port 1	For communication with either of the following BACnet protocols or with third-party protocols: • A BACnet ARCNET network at 156 kbps • A BACnet MS/TP network at 9,600 to 115,200 bps
Serial Port 2	For communication with a BACnet MS/TP network at 9,600 to 115,200 bps or with third-party protocols
Service Port	Ethernet port at 10 or 100 Mbps for system start-up and troubleshooting
Rnet Port	For future use
Microprocessor	32-bit ARM Cortex-A8, 600 MHz, processor with multi-level cache memory and USB 2.0 host port
Environmental Range	-40 to 158° F (-40 to 70° C); 10 - 95% relative humidity, non-condensing
Memory	8 GBs eMMC Flash memory and 512 MB DDR3 DRAM for OFHI-As manufactured after October, 2022 and 256 MB DDR3 DRAM for OFHI-As manufactured before October, 2022.
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, REACH compliant
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
Enclosure	Fire-retardant plastic ABS, UL94-5VA
Mounting	35mm DIN rail mounting or screw mounting

Figure 1: Physical Dimensions

