

OPTIFLEX™ OF022-E2

ADVANCED APPLICATION CONTROLLER



Automated Logic

CONTROLLER FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The OptiFlex Advanced Application Controller (OF022-E2) delivers exceptional control for your HVAC equipment, providing advanced temperature and air quality management for most zone-level applications. The OF022-E2 features dual Ethernet ports with built-in fail-safe that supports direct connection or daisy chain topologies using BACnet/IP and has 2 universal inputs and 2 analog outputs. The OF022-E2 operates reliably in a wide range of environments making it ideal for mechanical rooms, equipment boxes, or virtually any weather-tight location.

KEY FEATURES AND BENEFITS

Application Features

- Versatile controller suitable for a variety of applications, including: pump control, unit heaters, and exhaust fans
- Standard library of control programs available for most unitary equipment and zone applications
- Supports EIKON® graphical programming, a tool for creating custom control sequences
- Works with Automated Logic communicating ZS sensors, which are available in a variety of zone and equipment sensing combinations
- Supports OptiPoint™ touchscreen interfaces for managing and troubleshooting the connected equipment easily
- Supports live, visual displays of control logic to aid in troubleshooting equipment operation

Hardware Features

- Equipped with dual ethernet ports for BACnet/IP, allowing for daisy chain connections, and Spanning Tree Protocol (STP)
- Supports home run, daisy chain and ring IP network topologies
- Capacitor-backed real-time clock keeps time in the event of power failure or network interruption for at least three days
- USB service port for local access: connect PC via a hard-wired connection or wirelessly using a USB-W adapter
- DIN rail or screw mounting

System Benefits

- Connects seamlessly to the WebCTRL building automation system

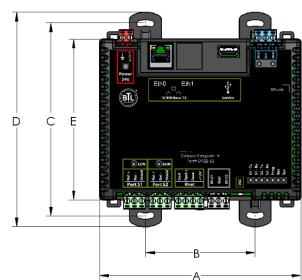


The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve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

SPECIFICATIONS

Part #	OF022-E2 OptiFlex™ Advanced Application Controller
BACnet Conformance	Conforms to the BACnet Building Controller (B-BC) and BACnet Broadcast Management Device (B-BBMD) profiles. The device supports BACnet/IP (Annex J) and is certified to the BACnet standard ISO 16484-5 protocol revision 1.15 and protocol revision 15. It also supports MS/TP, Ethernet, and ARCNET (see BTL listing page https://www.bacnetinternational.net/btl/index.php?m=11 for details).
Power	24 Vac +/- 10%, 50 - 60Hz, 50VA 24 Vdc +/- 10%, 18W
Communication	
BAS Port Eth01 / Eth1	Dual, 10/100 Base T, full duplex, Ethernet ports with built-in fail safe
Rnet Port	12 VDC @ 260 mA supporting: -Up to 5 ZS sensors - freely mix ZS zone, ZS duct, ZS immersion and ZS outdoor sensors -OptiPoint™ IAQ touchscreens and OptiPoint equipment interfaces
Service Port	USB 2.0 host port for setting up the controller and troubleshooting through a local connection to a computer, connecting to the OptiPoint interface, or a wireless service adapter
Inputs	
Universal	2 inputs electronically configurable to any of the following types for 0-5 Vdc, 0-10 Vdc: Dry Pulse Counting Thermistor
Resolution	12 bit A/D
Pulse Frequency	10 pulses per second. Minimum pulse width (on or off time) required for each pulse is 50 msec.
Outputs	
Analog Output	2 outputs 0-10 Vdc (10 mA max) PWM @80Hz
Resolution	12 bit D/A
Microprocessor	32-bit ARM Cortex-A8, 600MHz, processor with multi-level cache memory
Memory	8 GBs eMMC Flash memory and 256 MB DDR3 DRAM (2 MB available). User data is archived to non-volatile Flash memory when parameters are changed, every 90 seconds, and when the firmware is deliberately restarted. NOTE: When you change a parameter, you must wait 30 seconds before turning the power off, in order for the change to be saved.
Status Indicators	LED's indicate status of communications, running, errors, power, and outputs
Environmental Range	-40°F to 158°F (-40 to 70°C), 10-95% relative humidity, non-condensing. The controller can be installed both inside and 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.
Mounting	35mm DIN rail mounting or screw mounting
Real Time Clock	Real-time clock keeps track of time in the event of a power failure for at least 3 days
Protection	Device is protected by a replaceable, fast acting, 250 Vac, 3A, 5mm x 20mm glass fuse
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, PAZX7, Energy Management Equipment; Europe: RoHS Compliant: 2015/863/EU; AS/NZS: RCM Mark, IEC 61000-6-3; Canada: Industry Canada Compliant, ICES-003, Class A; cUL Listed UL 916, PAZX, Energy Management Equipment; REACH
Enclosure	Fire-retardant plastic ABS, UL94-5VA

Figure 1: Physical Dimensions



Overall	in.	cm
A:	5.51	14.00
D:	5.88	14.93
E:	4.41	11.20
Depth: 2.01 5.11		
Mounting		
B:	3.00	7.62
C:	5.29	13.44
Weight: .75 lbs 0.3402 kg		

Assembled in the United States

