

OPTIFLEX™ OF683-E2

ADVANCED APPLICATION CONTROLLER



Automated
Logic

CONTROLLER FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The OptiFlex advanced application controller, model OF683-E2, is ideal for advanced zone control applications requiring direct connection or daisy chain topology over BACnet/IP. Factory, pre-engineered ASHRAE Guideline 36 compliant control algorithms reduce energy consumption and increase occupant comfort.



KEY FEATURES AND BENEFITS

Application Features

- Versatile controller suitable for a variety of applications, including zone level temperature, air quality, and energy management
- Standard library of control programs available for most unitary equipment and zone applications
- Supports EIKON® graphical programming software, an object oriented tool that provides complete flexibility for any custom control sequence that you need
- Supports 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 and for occupant engagement
- Supports OptiPoint smart valves and accessories
- Supports live, visual displays of control logic, helping operators troubleshoot and optimize system operation

Hardware Features

- Dual ethernet ports supporting native BACnet over IP; daisy chain, Spanning Tree Protocol (STP) enabled
- Uses non-volatile memory to store control programs and historical data, eliminating the need for batteries
- Capacitor-backed real-time clock keeps time in the event of power failure for at least three days
- USB port for local device updates; hard-wired and wireless service connections
- Large termination strips for easy installation
- Firmware upgrades can be performed remotely
- DIN rail or screw mounting
- Can be installed in mechanical rooms, equipment boxes, or almost any other weather-tight location

System Benefits

- Connects seamlessly to the WebCTRL® building automation system

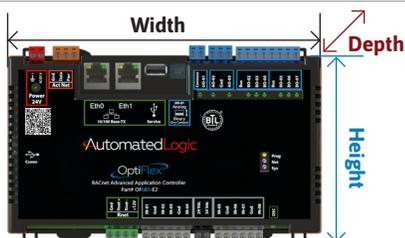


The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve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

SPECIFICATIONS

Part #	OF683-E2 OptiFlex Advanced Application Controller
BACnet Conformance	BTL Tested and conforms to the BACnet Advanced Application Controller (B-AAC) and BACnet Broadcast Management Device (B-BBMD) standard device profiles, as defined in BACnet 135-2001 2012 Annex L, Protocol Revision 14. Please see BTL listing page for details.
Power	24Vac +/- 15% , 50 - 60Hz, 55VA 24Vdc +/- 10%, 20W. (80VA / 35W if additional Act Net devices are connected)
Communication	
BAS Primary Port	Dual, 10/100 Base T Ethernet ports supporting native BACnet over IP; daisy-chained Spanning Tree Protocol (STP) enabled
Rnet Port	12VDC @ 260mA supporting: -Up to 5 ZS sensors - freely mix ZS zone, ZS duct, ZS immersion and ZS outdoor sensors -OptiPoint IAQ displays and OptiPoint equipment interfaces
Act Net Port	Supports Act Net communicating devices such as actuators and OptiPoint smart valves
USB Service Port	Supports OptiPoint IAQ display and OptiPoint equipment interface support configuration wireless service access firmware updates and controller recovery via USB drive
USB Comm Port	Supports communicating expansion modules
Inputs	
Universal	8 Universal Inputs. Jumperless (Dry Thermistor 0-10 Vdc)
Auxiliary Power	24Vdc @ 100mA total current capacity
Outputs	
Universal Output	1 Output configurable to 0-10 Vdc PWM 12Vdc @ 80 Hz Normally Open Dry Contact rated 30Vac/Vdc @ 3.75A
Digital Outputs	6 Digital Outputs Normally Open Dry Contact rated 30Vac/Vdc @ 3.75 Amps, Max of 100VA / 4.2A per relay bank
Analog Outputs	2 Analog output, 0-10 Vdc
Output Resolution	12 bit D/A
Status Indicators	LED's indicate status of communications, running, errors, power, and outputs
Environmental Range	-40°F to 158°F (-40 to 70°C), 10-90% relative humidity, non-condensing
Memory	4 GBs eMMC Flash memory and 256 MB DDR3 DRAM. User data is archived to non-volatile flash memory when parameters are changed, every 90 seconds
Real Time Clock	Real-time clock keeps track of time in the event of a power failure for at least 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.
Plastic Rating	Fire-retardant plastic ABS, UL94-5VA

● **Figure 1: Physical Dimensions**



	in.	mm
Width:	7.785	197.739
Height:	4.894	124.308
Depth:	2.006	50.952
Weight:	1.6 lbs	0.82 kg

