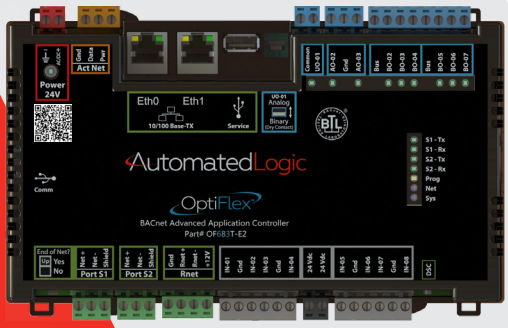
OPTIFLEX™ OF683T-E2

ADVANCED EQUIPMENT CONTROLLER

(UL 864, 10TH ED. COMPLIANT)



Automated Logic

CONTROLLER FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The OptiFlex advanced equipment controller, model OF683T-E2, is ideal for small equipment control applications such as fan coil units, heat pumps, and advanced zone control applications requiring direct connection or daisy chain topology over BACnet/IP or BACnet/MSTP and integration of devices such as VFDs, electric meters, lighting systems and Modbus occupancy sensors.

OptiFlex™

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 support daisy chain BACnet over IP; Spanning Tree Protocol (STP) enabled
- Supports 80 Modbus points for system integration
- 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

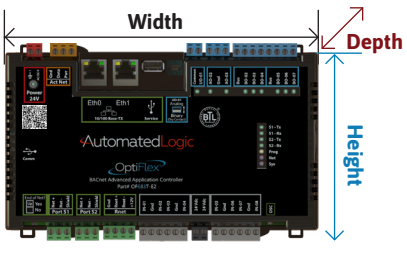
WebCTRL®

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 #	OF683T-E2 OptiFlex Advanced Equipment Controller (UL 864, 10th Ed. Compliant)
BACnet Conformance	Conforms to the BACnet Advanced Application Controller (B-AAC) and BACnet Broadcast Management Device (B-BBMD) profiles as defined in Annex L of the BACnet standard. The device is certified to the BACnet standard ISO 16484-5 protocol revision 1.14 and protocol revision 14 (135-2012). The product supports multiple data link layers including BACnet/IP (Annex J), MS/TP, Ethernet, and ARCNET (see BTL listing page https://www.bacnetinternational.net/btl/index.php?m=11 for details).
Power	24 Vac Nom (-15 to +10%), 50 - 60Hz, 55VA | 24 Vdc Nom (-15 to 10%), 20W
Third Party Integration	Supports up to 300 third-part BACnet points and 80 Modbus points depending on available memory.
Communication	
BAS Primary Port	10/100 Base T, full duplex, Ethernet ports supporting native BACnet/IP and/or BACnet/Ethernet or Modbus TCP/IP communication
Serial Port 1	Communication with either of the following: BACnet MSTP network at 9,600 to 115,200 bps; Modbus serial network at 9,600 to 115,200 bps.
Serial Port 2	Modbus serial network at 9,600 to 115,200 bps.
Rnet Port	12VDC @ 260mA supporting: Up to 10 wireless and/or ZS sensors; One Equipment Touch or OptiPoint interface *Not to be used within a Smoke Control application
Act Net Port	Supports up to 5 Act Net communicating devices such as actuators and OptiPoint smart valves *Restricted to same room use, connected within conduit
USB 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 the Automated Logic wireless service adapter
Inputs	
Universal	8 Universal inputs configurable in the control program for 0-5Vdc, 0-10 Vdc, thermistor, dry contact, pulse counter
Auxiliary Power	8 terminals supply 24 Vdc to external I/O devices @ 200mA total (powered by AC) or 500mA total (powered by DC)
Outputs	
Universal Output	1 Output configurable to 0-10 Vdc | PWM 12Vdc @ 80 Hz | Normally Open Dry Contact rated 30 Vac/Vdc @ 3.75A
Binary Outputs	2 banks of bussed outputs, 3 N.O. binary outputs per bank. Each relay contact rated at 3.75mA @ 30 Vac/Vdc. Each bank is limited to 100VA / 4.2A
Analog Outputs	2 analog outputs, 0–10 Vdc (10mA max)
Microprocessor	32-bit ARM Cortex A-8, 600 MHz, processor with multi-level cache memory
Protection	A single, fast-acting 5mm x 20mm glass fuse for power
Environmental Range	32 to 120°F (0 to 49°C), 93% relative humidity, non-condensing
Memory	8 GBs eMMC Flash memory and 256 MB DDR3 DRAM (2 MB available)
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, UUKL certified (UL864 10th edition compliant); **AS/NZS:** RCM Mark IEC 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
Enclosure	Fire-retardant plastic ABS, UL94-5VA
Mounting	35mm DIN rail mounting or screw mounting

Figure 1: Physical Dimensions



	in.	cm
Width:	**7.78**	**19.77**
Height:	**5.88**	**14.94**
Depth:	**2.00**	**5.09**
Weight:	**1.2 lbs**	**0.54 kg**

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