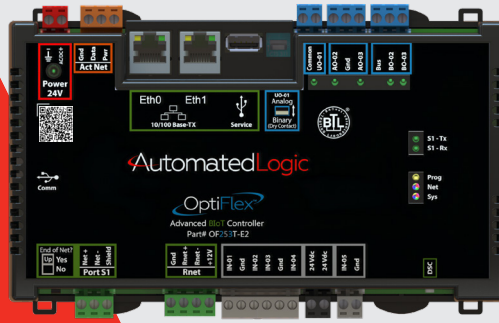


# OPTIFLEX™ OF253T-E2

ADVANCED EQUIPMENT CONTROLLER



Automated  
Logic

## CONTROLLER FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The OptiFlex Advanced Equipment Controller, model OF253T-E2, is ideal for small equipment control applications such as chilled beams, exhaust fans, unit vents, air curtains, and advanced zone control applications requiring direct connection or daisy chain topology over BACnet/IP and integration of devices such as VFDs, electric meters, lighting systems and Modbus occupancy sensors.



## KEY FEATURES AND BENEFITS

### Application Features

- Versatile controller suitable for a variety of applications, including chilled beams, exhaust fans, unit vents, air curtains, and advanced zone control
- 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 50 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



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.

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# SPECIFICATIONS



| Part #              | <b>OF253T-E2</b><br><b>OptiFlex Advanced Equipment Controller</b>  |
|---------------------|--|
| 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   |
| 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  |
| Serial Port 1       | One EIA-485 port for communication with third party devices at 9,600 to 115,200 bps. Supports up to modbus 50 points.  |
| Rnet Port           | 12VDC @ 260mA supporting:<br>-Up to 5 ZS sensors - freely mix ZS zone, ZS duct, ZS immersion and ZS outdoor sensors<br>-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  firm-ware updates and controller recovery via USB drive   |
| USB Comm Port       | Supports communicating expansion modules   |
| Inputs              |  |
| Universal           | 5 Universal Inputs electronically configurable to any of the following types: Dry   Pulse Counting   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  |
| Analog Output       | 2 Analog Outputs 10Vdc (D/A Resolution 12 bits)  |
| Digital Output      | 2 Digital Outputs Normally Open Dry Contact rated 30Vac/Vdc @ 3.75 Amps, Max of 100VA / 4.2A per relay bank  |
| 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          | <b>United States:</b> FCC compliant to Title CFR47, Part 15, Subpart B, Class A. UL Listed, File E143900; CCN PAZX, UL916, Energy Management Equipment; <b>AS/NZS:</b> RCM Mark 61000-6-3; <b>Canada:</b> 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; <b>UKCA</b> 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             |
|----------------|----------------|----------------|
| <b>Width:</b>  | <b>7.785</b>   | <b>197.739</b> |
| <b>Height:</b> | <b>4.894</b>   | <b>124.308</b> |
| <b>Depth:</b>  | <b>2.006</b>   | <b>50.952</b>  |
| <b>Weight:</b> | <b>1.6 lbs</b> | <b>0.82 kg</b> |