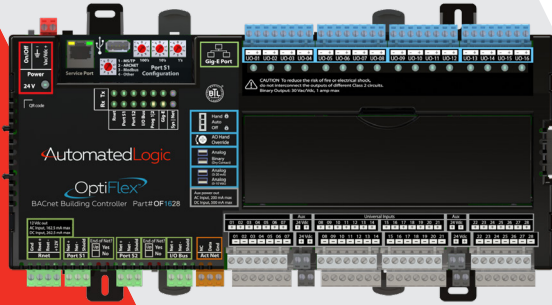


OPTIFLEX™ OF1628

BACNET BUILDING CONTROLLER AND ROUTER



CONTROLLER FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The OptiFlex BACnet Building Controller model OF1628 is a high-performance, BACnet native direct digital controller and router. As a component of the WebCTRL® building automation system, this controller provides comprehensive control of connected equipment.

The OF1628 provides the speed, power, memory, and I/O flexibility needed for the most demanding control applications in the industry. Capable of controlling multiple pieces of HVAC equipment simultaneously, this robust BACnet controller can support complex control strategies.



KEY FEATURES AND BENEFITS

Application Features

- Designed to address HVAC applications including complex central plants
- 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

- 1000 Mbps Ethernet BACnet/IP, BACnet/Ethernet, and/or Modbus TCP/IP
- Supports 200 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

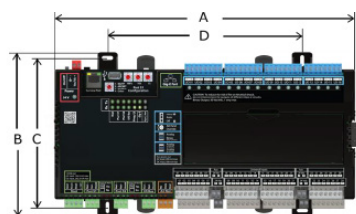


The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve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

SPECIFICATIONS



Part #	OF1628 OptiFlex BACnet Building Controller and Router
BACnet Conformance	Conforms to the BACnet Building Controller (B-BC), BACnet Router (B-RTR) Standard Device and BACnet Broadcast Management Device (B-BBMD) as defined in BACnet 135. Tested to and listed to Protocol Revision 14 (135-2012).
BACnet Objects	Maximum number of BACnet objects: 12,000 depending upon available memory.
Power	24Vac +/- 15%, 50 - 60Hz, 100VA 24Vdc +/- 10%, 48W
Control Programs	Maximum number of control programs: 999 depending upon available memory.
Third-Party Integration	Supports up to 1,500 third-party BACnet points and 200 Modbus points depending upon available memory.
Communication	
Gig-E Port	10/100/1000 BaseT, full duplex, Ethernet port for BACnet/IP and/or BACnet/Ethernet, or Modbus TCP/IP communication
Serial Port 1	Communication with either of the following: BACnet MS/TP network at 9,600 to 115,200 bps; Modbus serial network at 9,600 to 115,200 bps
Serial Port 2	Communication with either of the following: BACnet MS/TP network at 9,600 to 115,200 bps; Modbus serial network at 9,600 to 115,200 bps
Rnet Port	Supports: Up to 15 ZS wireless and/or ZS sensors and 1 Equipment Touch or OptiPoint interface; Supports local connection for a laptop running WebCTRL; Supplies 12 Vdc power less than or equal to 162.5 mA when the OF1628 is powered from an AC source or less than or equal to 262.5 mA when powered by a DC source
Act Net Port	Supports up to 16 OptiPoint smart valves and Automated Logic actuators
USB Port	USB 2.0 host port for device recovery
I/O Bus Port	Communication for up to 9 wired FIO expanders
I/O Bus Edge Connector	6-pin connector that provides communication and power to a directly connected FIO expander (DC only)
Service Port	Ethernet port at 10 or 100 Mbps for setting up the controller and troubleshooting through a local connection to a computer or connecting to the OptiPoint interface. Supports local connection for a laptop running the WebCTRL application.
Aux 24V+ DC	8 terminals: supplies 24Vdc to external I/O devices, max 200 mA total (when controller is powered by AC) or max 500 mA total (when controller is powered by DC)
Universal Inputs	28 inputs are configurable in the control program for 0-5 Vdc, 0-10 Vdc, 0-20 mA, RTD, thermistor, dry contact, or pulse counter
Input Resolution	16 bit A/D
Input Pulse Frequency	60 pulses per second. Minimum pulse width (on or off time) required for each pulse is 8.33 msec
Universal Outputs	16 outputs can be set as analog or binary outputs; Analog outputs can be used for 0-10 Vdc or 0-20 mA devices. Binary outputs have a built-in relay and can be used to switch external devices or relays up to 1A, 30 Vac/Vdc.
Output Resolution	12 bit D/A
Controller Microprocessor	32-bit ARM, Cortex-A8, 600 MHz processor with multi-level cache memory
I/O Microprocessor	Two 32-bit microprocessors with 256 kB flash memory and 64 kB SRAM
Memory	16 GBs eMMC Flash memory and 512 MB DDR3 DRAM (22 MB available)
Real Time Clock	Real-time clock keeps track of time in the event of a power failure for up to 3 days
Environmental Range	-40°F to 158°F (-40 to 70°C), 10-95% relative humidity, non-condensing
Protection	Protected by 2 fast acting 5 mm x 20 mm glass fuses: 2.5A fuse; 4A fuse for the I/O bus edge connector
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 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
Plastic Rating	Fire-retardant plastic ABS, UL94-5VA
Mounting	35mm DIN rail mounting or screw mounting



	in.	cm
Width:	12.75	32.38
Height:	6.95	17.68
Depth:	2.09	5.31
Weight:	2.7 lbs	1.22 kg

Assembled in the United States