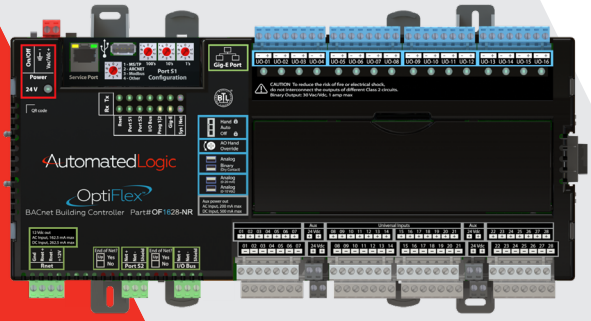
OPTIFLEX™ OF1628-NR

BACNET BUILDING CONTROLLER



BACNET BUILDING CONTROLLER

The OF1628-NR 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
- Graphically programmed through the EIKON® programming software, an object oriented tool that provides complete flexibility for any custom control sequence
- Supports Automated Logic's ZS communicating sensors, available in a variety of zone and equipment sensing options
- Enables live, visual displays of control logic, which uses real time operational data and aids in optimizing and troubleshooting system operations

BACnet Features

- Conforms to the following device profiles:
  - BACnet Building Controller (B-BC)
  - BACnet BBMD (B-BBMD)

System Benefits

- Connects seamlessly to the WebCTRL building automation system
- Multiple serial comunication ports to share data across a wide range of building subsystems

Hardware Features

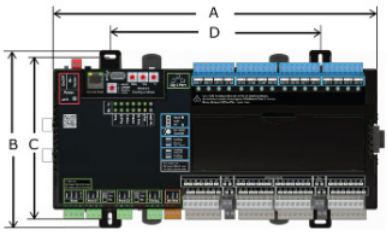
- Supports Gig-E, 1000 Mbps, BACnet IP and DHCP IP addressing
- Local Access Ethernet port at 100 Mbps for system start-up and troubleshooting
- Supports up to 9 FIO expanders in panel configuration or remotely mounted for scalable solutions (224 I/O total)
- Provides direct connect for power and communication for up to 7 FIO expansion modules when using a DC power supply
- All programs and historical data stored in non-volatile memory, eliminating the need for batteries
- Capacitor-backed real-time clock keeps time in the event of power failure or network interruption for up to three days
- Communications expansion port for future communication option cards
- Supports 200 Modbus points for system integrations
- USB port for local device updates
- DIN rail or screw mounting

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-NR OptiFlex BACnet Building Controller
BACnet Conformance	Conforms to the BACnet Building Controller (B-BC) and BACnet Broadcast Management Device (B-BBMD) as defined in BACnet 135. Tested to and listed to Protocol Revision 14 (135-2012). BTL Listing | PICS | WPSCert Conformance Certificate
BACnet Objects	Maximum number of BACnet objects: 12,000 depending upon available memory.
Power	24Vac/ 24Vdc +/- 10%, 50 - 60Hz, 55VA / 20W (80VA / 35W if additional Act Net devices are connected)
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	
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	High-speed EIA-485 port for communication of BACnet MS/TP network at 9,600 to 115,200 bps
Serial Port 2	Electrically isolated EIA-485 port for communication of Modbus at 1,200 to 115,200 bps
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
Universal Inputs	28 channels electronically configured to any of the following input types
	Dry Contact OR **Pulse Counting** inputs up to 40Hz OR Voltage (0-10 Vdc) OR Current (0-20 mA) OR **Thermistor** Precon Type II 10kΩ OR Precon Type III 10kΩ OR Carrier YSI 5kΩ OR S-5700-850 10kΩ w/ 11kΩ shunt **RTD** Platinum RTD TS-8000 1kΩ @ 32°F (0.00385 TCR) OR Platinum RTD 1kΩ @ 32°F (0.00375 TCR) OR Nickel-iron RTD 1kΩ @ 70°F, 699 Ω @ -40°F OR Balco (Nickel-iron) TS8000 RTD 1kΩ @ 70°F, 779 Ω @ -40°F **24VDC** auxiliary output - 200mA max. (AC power input) OR500 mA max. (DC power input)
Universal Outputs	**D/A Resolution (analog out)** 12 bits; 16 channels configurable to any of the following output types: Voltage (0-10 Vdc) OR Current (0-20 mA) OR Relay contacts, potential free, normally open, rated 24VAC/DC @ 1 Amp (resistive) **Hand/Auto/Off** override switches for all outputs **Potentiometer** for manual adjustment of all analog outputs **Status LED** for all outputs
Expanders	Supports up to 9 FIO expanders
Protection	Device is protected by 2 replaceable, fast acting, 250 Vac, 2A, 5 mm x 20 mm glass fuses The power and network ports comply with the EMC requirements EN50491-5-2
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
Mounting	DIN rail mounting or screw mounting

Figure 1: Physical Dimensions



	in.	cm
Width:	**12.75**	**32.38**
Height:	**6.96**	**17.68**
Depth:	**2.09**	**5.31**
Weight:	**2.7 lbs**	**1.22 kg**

Assembled in the United States

Automated Logic

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