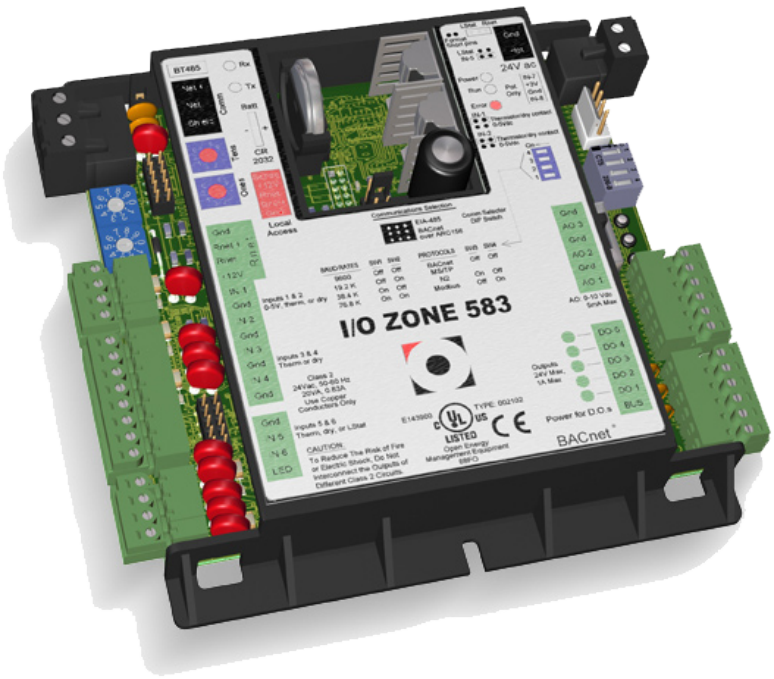
Stand-Alone Controller



OEMCtrl's I/O Zone 583 controller delivers powerful control and communications features all in a compact, economical package. Highly flexible, yet easy-to-use programming tools allow customization for a wide variety of small equipment applications. Fully capable of operating in a 100% stand-alone control mode, the I/O Zone 583 can connect to a Building Automation System (BAS) using any of today's most popular protocols, such as BACnet, Modbus, N2, LonWorks, and HTTP. The I/O Zone 583 also supports communication to OEMCtrl's line of intelligent space sensors and keypad/display units.

Key Features and Benefits

- I/O point count: 5 digital outputs (relayed), 8 inputs (6 universal and 2 for optional adjustment POTS), and 3 analog outputs.
- Built-in protocol support: BACnet (ARCNET and MS/TP), Modbus RTU, and N2. Protocols and baud rates are DIP switch selectable.
- Optional plug-in communications boards: LonWorks and Ethernet (for BACnet-over-IP support and HTTP for serving up a web page).
- On-board battery-backed real-time clock is standard, thus enabling full stand-alone scheduling capabilities as well as historical trend data storage and alarm event time-stamping.
- Custom programmable using our powerful Eikon graphic programming tool. Eikon allows you to create graphic logic sequences for your application, which can be fully simulated off-line (with Eikon's simulation tool), and graphically viewable live on your equipment - the ultimate diagnostic tool.
- Powerful, high-speed 16-bit processor with 1MB Flash memory and 512KB of battery-backed RAM - plenty of room for even demanding and complex applications. Software modifications or upgrades can be downloaded locally or remotely - no chip replacements necessary.
- Local laptop computer access ports provided at both the I/O Zone 583 and the intelligent RS series sensors, which enable full diagnostic and configuration capabilities.

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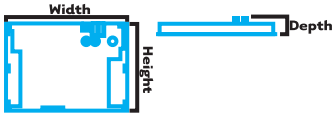
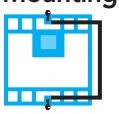
I/O Zone 583 Specifications

Power:	24VAC ± 10%, 50-60Hz, 20VA power consumption (single Class 2 source only, 100VA or less).
Physical:	Rugged GE C2950 Cycoloy plastic.
Environmental Operating Range:	0° to 130°F (-17.8° to 54.4°C), 10%-90% RH non-condensing.
Digital Outputs:	Five digital outputs, relay contacts rated at 1A resistive @ 24VAC, configured as dry contact, normally open.
Universal Inputs:	Eight universal inputs. Inputs 1-6 configurable as thermistor or dry contact; inputs 1 and 2 also configurable as 0-5VDC type inputs; inputs 7 and 8 are reserved to use with 1k-10k ohm adjustment potentiometers. Resolution of 10 bit A/D.
Analog Outputs:	Three analog outputs, rated as 0-10VDC, 5mA (max). Resolution of 8 bit D/A.
Standard Communication Ports:	**Port 1**: Jumper configurable for ARCNET or EIA-485 communication. In ARCNET mode, the port speaks BACnet (at 156k bps). In EIA-485 mode, the communication protocol and baud rate desired are DIP switch selectable between BACnet MS/TP, Modbus RTU, or N2. **Port 2**: Local laptop and/or service tool access port. **Port 3**: Rnet port (EIA-485) for network communication to OEMCtrl's line of intelligent (RS series) space sensors and keypad/display units. Up to 5 RS series sensors may be networked to the I/O Zone 583 through its Rnet port; sensors utilized on the Rnet are in addition to base I/O capacity of the controller. **Port 4**: Connector and software support included for use with optional plug-in communications card.
Optional Plug-Ins:	**Option 1**: LonWorks **Option 2**: Ethernet - for local or Internet access to the controller using BACnet/IP and/or to access a custom web page served up by the I/O Zone 583 (using a standard Internet browser package, such as Internet Explorer).
Status Indication:	Visual (LED) status of serial communication, running, errors, power, and all digital outputs.
Memory:	1MB Flash memory and 512KB non-volatile, battery-backed RAM.
Battery:	Seven-year lithium battery provides a minimum of 10,000 hours of data and time clock retention during power outages.
Protection:	Built-in surge transient protection circuitry. Module protected by internal solid state Polyswitches on incoming power and network connections. Polyswitches do not need to be replaced as they will reset themselves once the condition that caused them to "trip" returns to normal.
Listed by:	FCC Part 15 - Subpart B - Class A. Pending listings at the time of publishing this document: UL 916 (PAZX), cUL C22.2 No. 205-M1983 (PAZX7), CE (1997).
Weight:	0.6 lbs. (0.27 Kg)
Overall Dimensions: 	5-1/16" (width) by 5-11/16" (height) by 1-1/2" (recommended panel depth). 129mm (width) by 144mm (height) by 38mm (recommended panel depth).
Mounting Hole Dimensions: 	Two mounting holes center line as at left with 5-9/16" (141mm) spacing (height).

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