# SE6166 AND SE6166SP

SINGLE EQUIPMENT CONTROLLERS





## CONTROLLERS FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The Automated Logic® SE controllers are an integral component of the WebCTRL® building automation system. The SE controllers are fully programmable, native BACnet Advanced Application Controllers that provide a rugged solution for single-equipment applications. Designed to operate in a wide range of environmental conditions, SE controllers can be used inside rooftop units, mechanical rooms, equipment closets, or almost any other weather-tight location.

### **KEY FEATURES AND BENEFITS**

#### **Application Features**

- Versatile controller suitable for a variety of applications, including rooftop units and lighting
- Standard library of control programs available for most 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 sensors, which are available in a variety of zone and equipment sensing combinations and support setpoint adjustment and occupancy overrides
- Supports Automated Logic touchscreen interfaces for managing and troubleshooting the connected equipment easily
- Supports live, visual displays of control logic, helping operators troubleshoot and optimize system operation

#### **Hardware Features**

- Controls up to 28 points (6 binary outputs, 16 universal inputs, and 6 analog outputs)
- High-speed native BACnet over ARC156 communications delivers high speed response when you need it. Also supports BACnet over MS/TP communications
- Fast, powerful, and fully distributed control allows complete independence from any other devices in the system
- Firmware upgrades can be performed remotely
- Easy start-up and commissioning using the WebCTRL system user interface





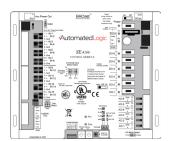
The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve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

## **SPECIFICATIONS**



	Computati
Part #	SE6166 and SE6166sp Single Equipment Controllers
BACnet Conformance	Conforms to the BACnet Advanced Application Controller (B-AAC) Standard Device Profile as defined in ANSI/ASHRAE Standard 135-2012 (BACnet) Annex L, Protocol Revision 9
Power	24 Vac +/- 10%, 50 - 60 Hz, 20 VA (38.4 VA with a BACview® device attached) single Class 2 source only, 100 VA or less
Communication	
BACnet Port	Communication with the controller network using ARC156 or MS/TP at 9,600 bps to 76.8 kbps
Local Access Port	For system start-up and troubleshooting
Rnet Port	12 VDC @ 210 mA supporting: -Up to 15 ZS wireless and/or ZS sensors (SE6166a); Up to 5 ZS wireless and/or ZS sensors (SE6166sp) -One Equipment Touch or OptiPoint™ interface
LogiStat Port	Supports LogiStat and LogiStat Plus zone sensors and uses 2 universal inputs
Inputs - 16 inputs configurable for 0-10 Vdc, 0-20 mA, RTC, thermistor, or dry contact and 1 Logistat port.	
Resolution	12 bit A/D
Pulse Frequency	40 pulses per second. Minimum pulse width (on or off time) required for each pulse is 12.5 msec
Outputs	
Resolution	8 bit A/D
Analog Outputs	6 analog outputs, 0-10 Vdc or 0-20 mA selectable
Digital Outputs	6 digital outputs, relay contacts rated at 3 A max @ 24 Vac. Configured normally open
Program Capabilities	SE6166a: Driver - DRV_SE; BACnet Objects - up to 600; Programs - up to 5 SE6166sp: Driver - DRV_SESP; BACnet Objects - up to 400; Programs - 1
Status Indicators	LED's indicate status of communications, running, errors, power, and digital outputs
Microprocessor	High-speed 16-bit microprocessor
Environmental Range	-20 to 140°F (-29 to 60°C), 10–90% relative humidity, non-condensing. Should be mounted in a protective enclosure.
Physical	Rugged aluminum cover, removable screw type terminal blocks
Memory	1 MB non-volatile battery-backed RAM, 1 MB flash memory, 16-bit memory bus
Battery	10-year Lithium CR2032 battery retains the following data for a maximum of 10,000 hours during power outages: time, control programs, editable properties, schedules and trends
Real Time Clock	Battery-backed real-time clock keeps track of time in the event of a power failure
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
Protection	Built-in surge and transient protection for power and communications in compliance with EN-61000-6-1
BT485 Connector	Attach a BT485 (not included) to a controller at the beginning and end of a network segment to add bias and to terminate a network segment

# Figure 1: Physical Dimensions



in. cm
Width: 8.32 21.1
Height: 7.0 17.8
Depth: 1.5 3.8
Weight: 1.05 lbs 0.48 kg

Assembled in the United States

