

- Native BACnet MS/TP Communications for Interoperability to Third-Party Systems
- Supports 18 BACnet Object Types including Trends, Schedules, Calendars, and Loops
- Powerful, Flexible System Controller for the Most Demanding Applications
- Ideal for Monitoring Small or Large Groups of Inputs in a Concentrated Area
- Universal Inputs can be Configured as a Supervised Input for Monitoring Open Wires or Short Circuits
- Non-Volatile Flash Memory Provides Utmost Reliability — Stores Both Application Program and Operating System
- Local, Extended Storage of Log Data
- BTL Listed B-AAC Controller with Local Trends



# Continuum™ b3600 Series Local Controllers

The Andover Continuum<sup>TM</sup> b3600 series controllers are native BACnet controllers that communicate on an RS-485 field bus as Master devices using the MS/TP BACnet protocol. The b3600 series are designed for monitoring a small or large concentration of input points from a single controller. Choose the b3600 series controller with the input configuration that matches your application:

- The b3608, with eight Universal inputs, is designed for stand-alone equipment monitoring for a small concentration of input points. This controller is also configurable for Supervised Input monitoring to determine broken wire detection or shorts. The b3608 is ideal for security applications (motion detection, glass break detection, intrusion detection) or traditional control applications (temperature, humidity, etc).
- The b3624 provides the same functionality as the the b3608 and in the same small footprint of the b3608, but with three times the number of input points (24) for monitoring various device signals. With the small footprint and high point count, the b3624 is ideal for large concentration of inputs, reducing the number of controllers required in the system, and decreasing cost, complexity, and maintenance requirements.

The b3600 series also features Flash memory, increased user memory, and a fast (32-bit) processor for faster scan times, with plenty of memory available for data logging of your critical data.

As a native BACnet controller, the b3600 series can communicate with other BACnet devices on the MS/TP network, in strict accordance with ANSI/ASHRAE standard 135-2004, and are listed with the BACnet Testing Labs (BTL) as BACnet Advanced Application Controllers (B-AAC). By connecting to an Andover Continuum b4920 device or bCX1 Network Controller, the b3600 series and other MS/TP devices can share data from the wider Ethernet/IP network of controllers.

### **INCREASED RELIABILITY WITH FLASH MEMORY**

The b3600's non-volatile Flash memory stores your operating system and application programs, so that in the event of a power loss, your application will be restored when power is returned. In addition, the Flash memory allows for easy upgrades of your operating system via software downloads, eliminating the need to swap out proms. The b3600 controllers include an on-board battery to safeguard your runtime data — protecting all point data and log data from being lost if power is removed.





## b3600 Series Local Controllers

### **INPUTS**

The input configuration on the b3600 series consists of eight full range, 10-bit Universal inputs that accept voltage (0-5VDC), digital (on/off), counter signals (up to 4Hz), temperature signals, or supervised alarm circuits for security applications or broken wire detection.

### SOFTWARE CAPABILITIES

The dynamic memory of the b3600 can be allocated for any combination of programs, scheduling, alarming, and data logging using the powerful Andover Plain English programming language. Our object-oriented Plain English language with intuitive keywords provides an easy method to tailor the controller to meet your

exact requirements. Programs are entered into the b3600 using the Continuum CyberStation<sup>™</sup>. Programs are then stored and executed by the b3600 controllers.

Programming multiple b3600 series controllers is inherently easy with Plain English. A complete copy of one b3600's programs can be loaded directly into other b3600s without changing any point names or programs.

## SPECIFICATIONS b3600 Series Local Controllers

### **ELECTRICAL**

#### Power

24VAC, 12-24VDC - auto sensing, +10% -15%, 50/60 Hz

**Power Consumption** 25 VA

**Overload Protection** Fused with 3 amp fuse. MOV protected

Software Real-Time Clock Synchronized through MS/TP via BACnet

### **MECHANICAL**

### **Operating Environment**

32°–120°F (0–49°C), 10–95% RH (non-condensing)

### Size

9.03"H x 6.01"W x 2.14"D (229 H x 153 W x 54 D) mm

Weight

1.19 lbs. (.54 kg)

### **Enclosure Type**

UL Open class, IP 10. Flammability rating of UL94-5V

### Mounting

Panel mount

### BATTERY

#### **Battery Backup**

Replaceable, non-rechargeable, lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory

### **COMMUNICATIONS**

### **Communications Interface** RS-485 BACnet, MS/TP 127 devices maximum

**Communications Speed** 9600, 19.2K, 38.4K, 76.8K baud

### **Bus Length**

4,000 ft. (1,220m) standard; BACnet repeater allows extension to longer distances.

#### **Bus Media**

Twisted, shielded pair, low capacitance cable

**BACnet Device Profile** B-AAC, BACnet Advanced Application Controller

**BTL Listed** BL B-AAC with Local Trends

## **INPUTS**

Inputs

b3608: 8 Universal inputs b3624: 24 Universal inputs Voltage (0-5.115 VDC); Temperature -30°F to 230°F (-34°C to 110°C), Digital (on/off), Counter (up to 4Hz at 50% duty cycle, 125 ms min. pulse width). Supervised Alarm (single or double resistor). Current input (0 - 20 mA) using external 250 ohm resistor

### Input Voltage Range

0-5.115 volts DC

### Input Impedance

10K ohm to 5.120V or 5M ohm with pull-up resistor disabled

Input Resolution 5.0 mV

### Input Accuracy

±15mV (±0.56°C from -23°C to +66°C OPTIONS or  $\pm 1^{\circ}$ F from  $-10^{\circ}$ F to  $\pm 150^{\circ}$ F)

### **CONNECTIONS**

### Power

3-position fixed screw terminal connector

### Inputs

Inputs 1-8 (both b3608 and b3624): 12-position fixed screw terminal connector

b3624 only: Inputs 9-16: 12-position fixed screw terminal connector

Inputs 17-24: 12-positon fixed screw terminal connector

#### Communications

3-position removable screw terminal connector

### **Service Port**

4-position shrouded connector

### **USER LEDS/SWITCHES**

### Status Indicator LEDS:

- CPU CPU Active
- TD Transmit Data
- RD **Receive Data**

### Switches

RESET Input Pull-up Resistor Switch (per input)

### **GENERAL**

### Memory

128K SRAM, 1MB FLASH

Processor Motorola 32-bit Coldfire

### **AGENCY LISTINGS**

UL/CUL 916, FCC CFR 47 Part 15, ICES-003, EN55022, AS/NZS 3548, Class A, CE

UL864, Smoke Control System Equipment, UUKL (b3608-S, b3624-S)

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SDS-B3600-US 02/06





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