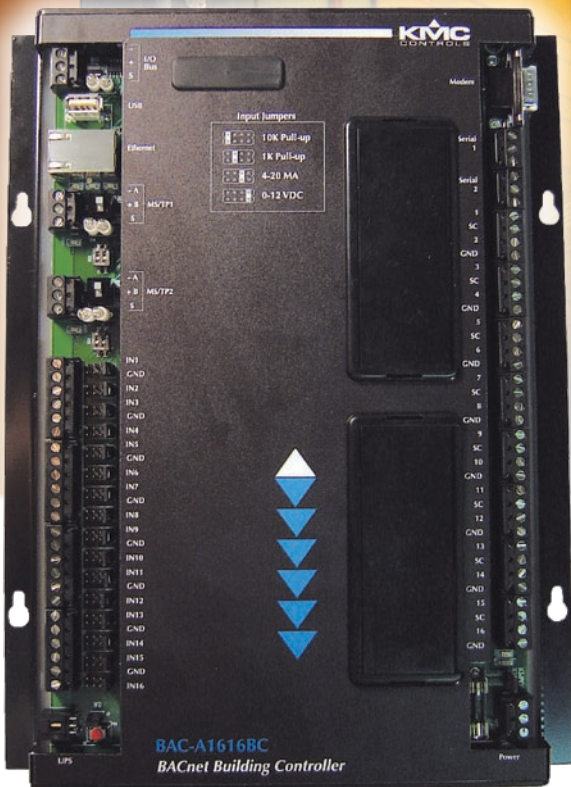


**KMC**  
CONTROLS

Think inside the box



## BAC-A1616BC Building Controller

With expandable inputs and outputs plus a built-in router and web server, this native BACnet 16 x 16 B-BC gives you the power of multiple devices inside one box

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CONTROLS



For the most demanding applications, the BACnet Building Controller (B-BC) is a high-performance, native BACnet direct digital controller. As part of a complete interoperable building automation system, this 16 x 16 B-BC provides precise monitoring and control of connected points. Integrated into the controller is a BACnet router, a web server, and expandable I/O in a native BACnet device.

A web server allows a remote web browser to configure I/Os, set-up objects, and monitor values (configuration/monitoring also available through TotalControl). Firmware is easily upgradable (without requiring physical access) through the web or Ethernet connection.



Up to seven CAN-A168EIO expansion modules can be connected (via standard shielded twisted-pair wire up to 200 feet from the B-BC). Each provides an additional 16 universal inputs and 8 universal outputs (for a maximum total of 128 inputs and 72 outputs)...if you have to think outside the box.

**building your comfort zone™**

## Specification Highlights

### Inputs

- Inputs configurable via jumper for 1K or 10K ohm pull-up resistors (for unpowered contacts or devices), 0–12 VDC, or 4–20 mA
- Analog inputs accept industry-standard 1K ohm platinum and 10K ohm thermistor sensors, 0–12 VDC devices, or 4–20 mA devices
- Binary inputs accept 0 or 12 VDC (on/off)
- Pulse (passive or active up to 12 VDC) counting to 16 Hz
- Input overvoltage protection (24 volts AC, continuous)
- 16-bit analog-to-digital conversion on inputs
- Expandable up to a total of 128 inputs (with expansion modules)

### Outputs

- Each short-circuit protected output capable of driving up to 100 mA (at 0–12 VDC) or 600 mA for all outputs
- 16 slots for HPO-6700 series output override cards
- 12-bit digital-to-analog conversion on outputs (total)
- Expandable up to a total of 72 outputs (with expansion modules)

### Web Functions

- Built-in web configuration pages allow web browser to configure I/Os, set-up objects, and monitor values
- Custom graphic interface (created/published in TotalControl, ver. 1.7 or higher) for remote web browser
- Firmware is easily upgradable (without requiring physical access) through the Internet or local Ethernet connection

### Router Functions

- Routes traffic between two MS/TP ports, one BACnet PTP (point-to-point) port, four (logical) BACnet IP ports, and one (logical) BACnet Ethernet port
- Supports BACnet IP foreign device registration and BBMD, supports PTP modem communications, and performs IP packet assembling/disassembling (PAD) routing for up to four BACnet IP PAD networks
- Each of the four (logical) BACnet IP ports can be configured for BACnet IP, BBMD, foreign device registration, or PAD

### Other Key Features

- Up to 32 Control Basic custom program sequences for optimal control of a central plant, air handlers, and other connected equipment
- Email notifications of alarms and events
- Real-time clock with power backup for 72 hours
- High-performance 32-bit processor

(NOTE: For additional specifications, see the BAC-A1616BC data sheet.)