

Powered by BACtalk



# ACM GLOBAL CONTROLLER

The backbone of Alerton's BACtalk<sup>TM</sup> Ascent product line, the Ascent Control Module (ACM) is the industry's most agile controller in its class. It combines Alerton's pioneering and proven BACnet® capability with Tridium's® Niagara Framework® flexibility.

It provides a powerful assortment of features such as multiple global controller instances, and multiple communication networks.

The ACM can incorporate up to six (6) global controller instances and supports up to six (6) MS/TP trunks or EIA-485 LANs, consolidating the functionality of these controllers into a single configurable platform, and exceeding the functionality of six individual devices.

Two onboard Ethernet ports support 10/100/1000 Mbps Ethernet connections to the BACnet network or for NiagaraAX integration protocols such as LON IP, Modbus TCP, and SNMP.

Easy to add option cards offer scalability for additional communication trunks as needed using the two slots available on the ACM. For example, you can use one option card slot for additional BACnet communication and the second card slot for LON communication by simply adding a dual 485 card and a LON card, respectively.

The ACM's quad-core processor future-proofs the system by providing high DDC execution speed for all the computing power you need. Two-direction DIN channel and direct panel mount options enable you to mount the ACM in different positions for the best fit.

The ACM hosts automation features such as schedules, calendars, trendlogs, alarms, zones and demand limiting.

## FEATURES AND HIGHLIGHTS

#### SCALABLE

• Supports up to six EIA-485, EIA-232 or LON LANs.

#### INTEROPERABLE

• Supports the BACnet Protocol on Ethernet, BACnet IP and MS/TP, as well as many Niagara<sup>AX</sup> supported protocols.

#### **ENTERPRISE READY**

• Supports BACnet/IP and can operate as a BACnet broadcast management device (BBMD) with NAT support for integration on enterprise and wide-area networks.

#### POWERFUL

 Powered by a high-speed, quad-core CPU based on the ARM® Cortex<sup>TM</sup>-A9 architecture. 1 GB DDR3 SDRAM provides a fast, reliable platform for running DDC programming and global automation routines.

#### SEGMENTED DDC CODE

 Allows multiple DDC program instances to run within a single controller, providing the ability to logically group sub-systems, improve uptimte by enabling service on one system without impacting another, and maximizing flexibility in programming configuration.

### **TECHNICAL DATA**

POWER - 24 VAC @ 40 VA, 47–63 Hz, full-wave rectified.

DATA BACKUP/STORAGE - One removable microSD card.

**PROCESSOR AND MEMORY** - Efficient, high-speed, quad-core CPU based on the ARM® Cortex<sup>TM</sup>-A9 architecture (Freescale i.MX6Quad).

**REAL-TIME CLOCK** - Provides system date and time.

**BACNET/IP** - IP support for interoperability on enterprise and WANs. Functions as up to four BACnet broadcast management devices (BBMDs) in accordance with Annex J BACnet/IP. Supports Alerton and BACnet Standard network address translation (NAT) implementations.

**MS/TP** - Supports two onboard networks that can be used for BACnet MS/TP or EIA-485 and up to two expansion cards (two networks each) for a maximum of six BACnet MS/TP networks per ACM.

**EXPANSION** - Supports up to two expansion cards for interface adapters, such as EIA-485, EIA-232 and LON.

PERSISTENT MEMORY - 1MB SRAM, one microSD card.

**COMMUNICATIONS** - Provides two Ethernet ports, two onboard 485 networks, two expansion cards give the ability to add up to four additional networks (for a total of six), or two 232 networks, or two LONworks networks.

Specifications subject to change without notice.

**MOUNTING** - 35mm DIN rail, either vertical or horizontal orientation.

**DIMENSIONS** - 7-1/4W x 8-9/16 H x 1-11/16 D (inches) 185 W x 220 H x 44 D (millimeters); fits 12 x 12 x 4 (inch) panel enclosure.

ENVIRONMENTAL - -4 to 149 °F (-20 to 65 °C), without battery, 32 to 122 °F (0 to 50 °C), with battery; 0 to 95% RH, non condensing.

**BACNET CONFORMANCE** - B-BC level device.

PLATFORM - Linux.

ETHERNET - Two integrated 8P8C modular connectors for use with two 10Base-T, 100Base-TX, and 1000Base-T Ethernet networks.

**NETWORKING** - Supports both BACnet and Alerton network address translation (NAT).

**SOFTWARE** - Programming interface is the Alerton Compass operator workstation software.

2