



## ACM GLOBAL CONTROLLER

The backbone of Alerton's BACtalk™ 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, 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

- Advanced processor and extended memory provide 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 uptime by enabling service on one system without impacting another, and maximizing flexibility in programming configuration.

## TECHNICAL DATA: ACM

**POWER** 24VAC @ 40 VA, 47–63 Hz, full-wave rectified, with optional battery backup (see other side).

**DATA BACKUP/STORAGE** One removable microSD card.

**PROCESSOR AND MEMORY** Efficient, high-speed, quad-core CPU based on the ARM® Cortex™-A9 architecture (Freescale i.MX6Quad); 1GB DDR3 SDRAM, 64-bit-wide, 533 MHz (1066 MT/s).

**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 both 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.

**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** 7-1/4 W 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** Without battery:  
-4 to 149 °F (-20 to 65 °C), 0 to 95% RH, non-condensing.

**PLATFORM** Linux.

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

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

#### CERTIFICATIONS AND STANDARDS

- RoHS compliant
- CE (EN 60730-1)
- FCC Part 15 Class B
- ICES-003
- C-Tick listed
- UL 916 for open energy management equipment.

### TECHNICAL DATA: ACM BATTERY

The ACM has an optional 12 volt NiMH battery, which provides backup power that allows for orderly shutdown should power remain OFF for more than 60 seconds.

**POWER** 12 VDC supply voltage

#### ENVIRONMENTAL

Operational temperature and humidity:

32 to 122 °F (0 to 50 °C), 0 to 95% RH, non-condensing

Recommended storage temperature and humidity (to extend life):

41 to 77 °F (5 to 25°C), RH 65% ±5% non-condensing

Allowed storage temperature and humidity:

32 to 122 °F (0 to 50 °C), RH 5 to 95% non-condensing

#### CERTIFICATIONS AND STANDARDS

- UL 2054 ed 2 rev 2011-09-14
- EN 62133 ed 1 (2002), ed 2 (2012)

### ORDERING INFORMATION\*

#### ITEM NUMBER

ACM Ascent Control Module

ACM-BATT Optional ACM battery

\***IMPORTANT!** There are a many ACM options for dealers who want specific license quantities. Please check the Alerton Support Network at [asn.alerton.com](http://asn.alerton.com) for a complete list.

**INNOVATIVE  
GLOBAL  
CONTROLLER  
WITH EXTENSIVE  
FLEXIBILITY.**

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