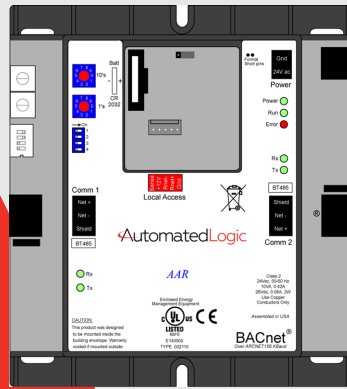# AAR ROUTER

## HIGH SPEED ARCNET TO ARCNET ROUTER

Automated Logic

ROUTER FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The AAR is designed to expand or segment high speed ARC156 kbps networks. AAR's can be installed on native BACnet control networks that utilize ME, SE and ZN controllers. Conveniently housed in a rugged and compact enclosure for panel mounting, the AAR is designed with two ARC156 kbps communication ports.

KEY FEATURES AND BENEFITS

- Two isolated high speed ARC156 kbps communication ports offering cost effective expansion of ARCNET control networks

- Expands number of controllers that may be routed through an LGR controller

- Allows segmentation of control networks for maintenance and redundant configurations

- Rotary dip switches for ease of setting network addresses

- Built-in surge and transient protection for ARCNET control networks

- Compact and rugged plastic enclosure for easy panel mounting

System Architecture
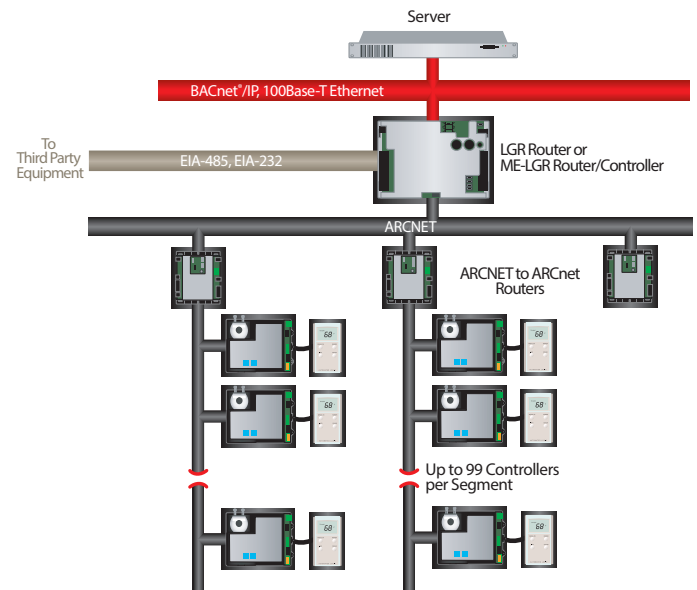
WebCTRL®

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

Part #	AAR ARCNET to ARCNET Router
BACnet Conformance	Conforms to the BACnet Application Specific Controller (B-ASC) Standard Device Profile, as defined in BACnet 135-2012 Annex L, Protocol Revision 9
Power	24 Vac +/- 10%, 50 - 60Hz, 20 VA | 26 Vdc (25 V min, 30 V max)
Communication	
Comm Ports	Comm 1 communicates with the ARC156 backbone network. Comm 2 communicates with the AAR's ARC156 network.
Local Access Port	For system start-up and troubleshooting
Status Indicators	LED's indicate status of communications, running, errors, and power
Environmental Range	0 to 130°F (-17.8 to 54.4°C), 10–90% relative humidity, non-condensing. Must be installed within the building
Physical	Rugged GE 2950 Cycoloy plastic
Memory	1 MB non-volatile battery-backed RAM, 1 MB flash memory, 16-bit memory bus
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, REACH compliant
Microprocessor	High speed 16-bit microprocessor with ARCnet communication co-processor
Battery	10- year Lithium CR2032 battery retains the following data for a maximum of 10,00 hours during power outages: time and editable properties
Protection	Built-in surge and transient protection for power and communications in compliance with EN61000-6-1
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
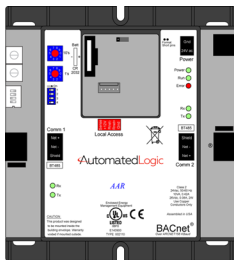
	in.	cm
Width:	5.01	12.9
Height:	5.69	14.4
Weight:	0 .4 lbs	0.2 kg

Assembled in the United States

8-18-2023