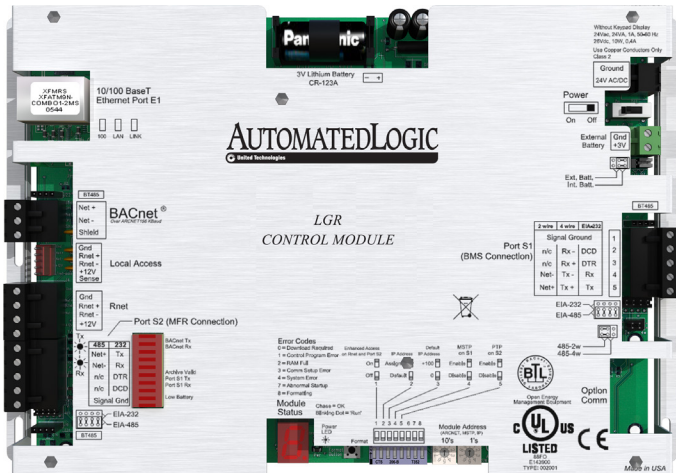# LGR25, LGR250, & LGR1000

High-Speed BACnet Routing & Integration

The Automated Logic® LGR router is an integral component of the WebCTRL® building automation system.

The LGR router is an extremely powerful, high-speed router/gateway that can connect hundreds of control modules to a BACnet/IP backbone. Support for BACnet/IP, BACnet over Ethernet, BACnet over ARC156, and BACnet over MS/TP communications are standard. A wide range of open and proprietary protocol drivers allow the LGR to also serve as a gateway to other manufacturers' equipment. Fully programmable, the LGR can also execute complex control strategies for high-level system integration.

Key Features and Benefits

- Provides BACnet routing capabilities between the WebCTRL building automation system backbone (BACnet/IP), and a subnetwork of WebCTRL controllers (BACnet over ARCNET or BACnet over MS/TP)

- Connects directly to the building LAN and provides the WebCTRL server with access to the entire building network

- Supports a wide range of open and proprietary TCP/IP and serial protocol drivers, enabling the ME-LGR to serve as a gateway to other manufacturers' equipment

- Can route messages from BACnet/IP to BACnet over Ethernet, providing compatibility with older BACnet systems

- Supports the Automated Logic line of communicating room sensors and Automated Logic's touchscreen interface

- Tough construction delivers superior performance and reliability. Controllers are constructed with a rugged aluminum cover which provides optimum electrical protection and noise immunity.

- Supports EIKON® graphical programming, an object-oriented tool that provides complete flexibility for any custom control sequence that you need

- Supports live, visual displays of control logic, which use real time operational data to aid in optimizing and troubleshooting equipment and system operation

- Readily supports the toughest system integration applications by supporting hundreds of controls programs

- Available in three different versions:
  LGR25 - supports 25 third-party points
  LGR250 - supports 250 third-party points
  LGR1000 - supports 1000 third-party points

The WebCTRL® building automation system gives you the ability to understand your building operations and analyze the results. The WebCTRL system integrates environmental, energy, security and safety systems into one powerful management tool that allows you to reduce energy consumption, increase occupant comfort, and achieve sustainable building operations. Our web-based platform allows building managers to control and access information about their HVAC, lighting, central plant and critical processes on premises or remotely at any time of day.

We make data **big.**™
Next level building automation engineered to help you make smart decisions.

LGR25, LGR250, & LGR1000

Specifications

BACnet Support:	Conforms to the BACnet Building Controller (B-BC) Standard Device Profile as defined in ANSI/ASHRAE Standard 135-2012 (BACnet) Annex L, Protocol Revision 9
Communication Ports:	The following ports are available on the ME-LGR controllers: **10/100 BaseT Ethernet**: 10/100 Mbps port for BACnet/Ethernet, BACnet/IP, or third-party communications **BACnet**: EIA-485 port for ARCNET 156 kbps communications **Port S1:** EIA-232 or EIA-485 configurable port for BACnet MS/TP (9600 bps–76.8 kbps) communications or third-party device communications at various baud rates **Port S2:** EIA-232 or EIA-485 configurable port for BACnet PTP (9600 bps–115.2 kbps) communications or third-party device communications at various baud rates **Rnet:** for communicating room sensors and touchscreen displays **Local Access:** for system start-up and troubleshooting
Microprocessor:	32-bit Motorola Power PC microprocessor with cache memory, Fast Ethernet controller, high-performance 32-bit communication co-processor, ARCNET communication co-processor, and I/O expansion CAN co-processor
Memory:	16 MB non-volatile battery-backed RAM (12 MB available for use), 8 MB Flash memory, 32-bit memory bus
Real-time clock:	Battery-backed real-time clock keeps track of time in event of power failure
Battery	10-year Lithium CR123A battery retains the following data for a maximum of 720 hours during power outages: time, control programs, editable properties, schedules, and trends
Status indicators:	LED status indicators for communications and low battery status. Seven-segment status display for running, error, and power status
Router addressing:	Rotary dip switches for intuitive network addressing of module
Protection:	Built-in surge and transient protection circuitry for power, communications and I/O
Listed by:	UL-916 (PAZX), cUL-916 (PAZX7), FCC Part 15-Subpart B-Class A, CE
Environmental operating range:	-20ºF to 140ºF (-29ºC to 60ºC); 10 to 90% relative humidity, non-condensing
Power requirements:	24 Vac ±10%, 50-60 Hz, 24 VA, or 26 Vdc ±10%, 10 W
Physical:	Rugged aluminum cover, removable screw terminal blocks
Weight:	1.4 lbs. (0.64 kg)

Dimensions:

Overall
Width: 11 5/16 in. (28.7 cm)
Height: 7 1/2 in. (19 cm)
Depth: 2 3/4 in. (7 cm) panel depth

Mounting Holes
Width: 10 13/16 in. (27.5 cm)
Height: 5 in. (12.7 cm)

AUTOMATEDLOGIC
United Technologies

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Next level building automation engineered to help you make smart decisions.