

# RC642/RC642D

## Room Controller



RC642D



RC642

Automated Logic's RC642 Room Controller provides unprecedented power and flexibility to control a variety of packaged HV-ac equipment. Attractively packaged, the RC642 mounts directly on interior walls and provides local setpoint adjustment, schedule and override capabilities. The Room Controller has a large high contrast LCD and easy-to-use occupant controls. Additional remote RS sensors can easily be networked to the Room Controller for large spaces.

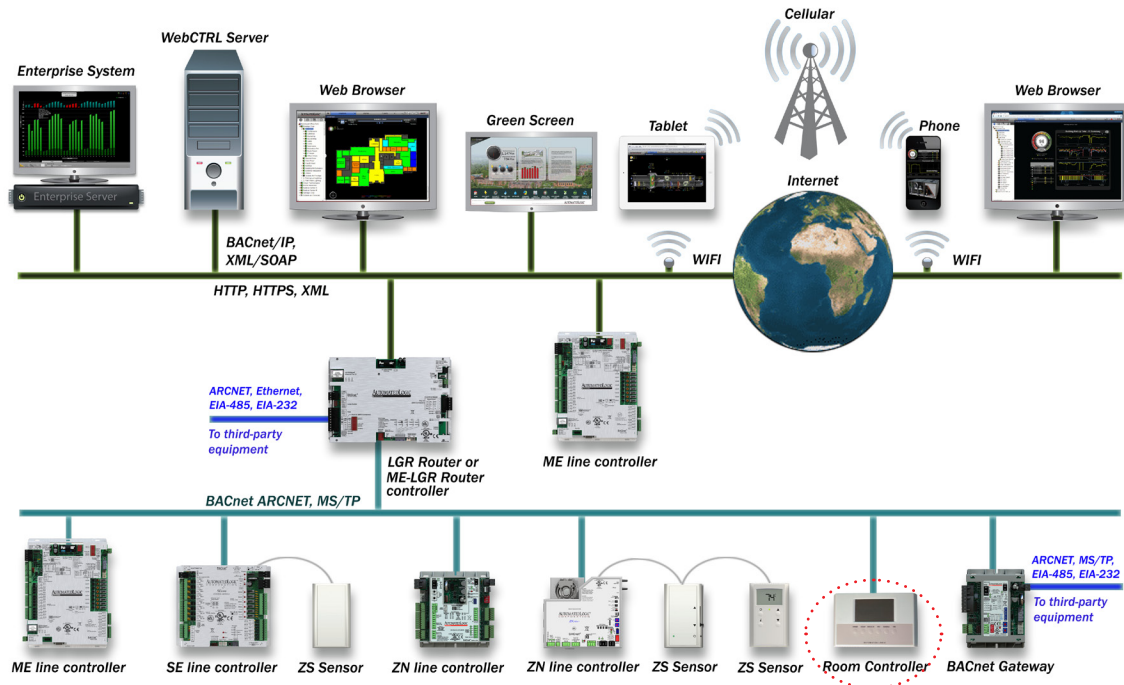
### Key Features and Benefits

- Attractive, low profile enclosure in a neutral color complements any space.
- Powerful zone controller for Fan Coil Unit, Heat Pump, Unit Ventilator, small Roof Top Units and similar applications.
- Standalone or networked using native BACnet communications over a high speed ARCNET 156 Kbps or BACnet MS/TP network.
- Precise built-in 10K Ohm thermistor with +0.36 F (0.2 C) standard accuracy and less than 0.18 F (0.01 C) drift over a ten year span – requires no maintenance or re-calibration.
- Large easy-to-read high contrast LCD displays zone temperature, outside air temperature, heating and cooling setpoints, time, schedule and local override.
- Uses a high speed 16-bit microprocessor with 1 Mbyte Flash and 512 Kbyte of RAM for unparalleled performance and flexibility – firmware upgrades are 'flushed-in' remotely.
- The RC642 Room Controller is part of a full line of zone controllers which include Universal Inputs, relay driven Binary Outputs and 0-10V-dc Analog Outputs.
- Battery backed real-time clock for standalone operation and local storage of trend data.
- Rnet port supports Automated Logic's complimentary line of RS room sensors and provides local access to the system.
- Built-in control algorithms can easily be selected by DIP switches.
- Custom programmed sequences of operation using Automated Logic's powerful graphical programming tool, EIKON®-LogicBuilder.
- Mounts on standard electrical boxes for easy installation.

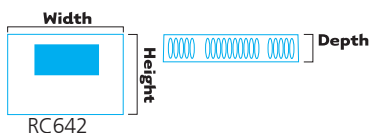
**AUTOMATED LOGIC**  
United Technologies

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## Specifications



BACnet® Support:	Conforms to the Advanced Application Controller (B-AAC) Standard Device Profile as defined in ANSI-ASHRAE Standard 135-2004 (BACnet) Annex L. Tested to Protocol Revision 9
Communication:	The following ports are available on the RC642 module: EIA-485 port for ARCNET 156 Kbps or MS/TP (9600 bps – 76.8 Kbps). Local access port for system start-up and troubleshooting. RC642D Rnet port: Supports up to four RS sensors for averaging or high/low. RC642 Rnet port: Supports up to four RS sensors and one RS Pro sensor for averaging or high/low.
Digital Outputs:	Six digital outputs, relay contact rated at 1A max @ 24V-ac, configured normally open.
Universal Inputs:	Four universal inputs with 10 bit A/D resolution. Two are configurable for dry contact or thermistor; and two for either dry contact, thermistor or 0-5 V-dc.
Analog Outputs:	Two analog outputs, 0-10V-dc with 8-bit resolution, 10mA maximum.
Microprocessor:	High speed 16-bit microprocessor with ARCNET communication co-processor.
Memory:	512 Kbyte non-volatile battery-backed RAM, 1 MByte Flash memory, 16-bit memory bus.
Battery:	7 year Lithium BR325 battery provides minimum 10,000 hours of data retention during power outage.
Status Indicators:	LED status indicators for EIA-485 communication, running, error and power.
Module Addressing:	Rotary dip switches for intuitive network addressing of modules.
Protection:	Built in surge and transient protection circuitry for power, communications and I/O.
Listed by:	UL916 (Canadian Std C22.2 No. 205-M1983), CE, FCC Part 15 – Subpart B – Class A, CE EN50082-1997
Environmental Operating Range:	0°F to 130°F (-17.8°C to 54.4°C); 10 -90% relative humidity, non-condensing.
Power Requirements:	24V-ac ± 10%, 26V-dc (25 V min, 30 V max), 50-60Hz, 12VA
Physical:	Plastic enclosure, removable screw-type terminal blocks.
Weight:	10.6 oz. (.03 Kg)
Dimensions:	



**Overall**  
 Width: 6.8 inches (17.3 cm)  
 Height: 4.3 inches (10.9 cm)  
 Depth: 1.3 inches (3.3 cm)

**Mounting**  
 2 inches x 4 inches electrical box U.S.  
 4 inches x 4 inches electrical box U.S.  
 35mm BS4662 single gang electrical box

