



RC-SERIES ELECTRONIC COMMUNICATING THERMOSTATS

- Stand Alone or Communicating
- Simple to Install
- Built-in RS-232
- PC Compatible (with PC Stat software)
- UL Listed

Fully interactive with all HAI controllers and compatible with most security systems.

DESCRIPTION

The RC-Series is a family of electronic communicating thermostats that can be controlled both locally and by remote commands from HAI and other systems. The RC-Series includes models designed for conventional single stage heat/cool, heat pump and multi-stage systems.

The RC-Series Thermostats feature a sleek, modern case design. They offer programmability for stand alone operation and robust, optically isolated communications to home automation systems, utility control systems, personal computers and burglar alarm systems.

As an ENERGY STAR Partner, Home Automation, Inc. has determined that these programmable thermostats meet the ENERGY STAR guidelines for energy efficiency.

REMOTE COMMUNICATIONS

- 4 communications modes for connection to:
 - home automation systems
 - utility demand side management systems
 - personal computers
 - burglar alarm systems
 - remote setback switches
- Data signal is electrically isolated from the 24VAC HVAC electrical system by optical isolators. Data connections: 4 wires, 24 gauge or larger
- Protocol: Addressable, bi-directional, 1 start bit, 8 data bits, 1 stop bit NRZ. 100, 300 baud data rates

FEATURES

- Compatible with systems using 24 volt (24 - 30 VAC) controls
- Simple user controls for: MODE, FAN, SET, HOLD, RAISE TEMP and LOWER TEMP
- Selectable for full auto changeover, manual changeover, heat only and cool only
- Adjustable cycle times and anticipation for heat and cool
- Selectable Fahrenheit or Celsius display, AM/PM or 24 Hour time format
- Large LCD display
- System runtime monitor (this week, last week)
- Filter clean/replace reminder
- 5-1-1 programming capability, day/night (on external signal) or non-programmable
- Non-volatile program memory, no batteries
- Built in short cycle protection
- Precise temperature control
- Advanced optimum start technology adjusts heat pump start time to minimize usage of auxiliary heat (Heat pump models only)
- 3 to 8 minute start up delay after a power failure, randomized to prevent simultaneous start up of multiple systems after a power failure
- Limits can be programmed for heat and cool setpoints to prevent users from setting temperature too low or high
- Dimensions: 5.5" W x 3.75" H x 1.1" D



RC-SERIES THERMOSTAT ACCESSORIES

MODEL RC-200 PCSTAT SOFTWARE

The HAI RC-Series Communicating Thermostats have RS-232 capabilities built in. The Model RC-200 PCStat software allows the owner to connect up to 127 RC-Series Thermostats to an IBM PC compatible computer. Complete access to all of the following thermostat functions:

- Change MODE: Off, Heat, Cool, Auto Changeover
- FAN: On/Auto
- SET: Programs, Time, Day of Week
- HOLD: On/Off
- RAISE Desired Temperature
- LOWER Desired Temperature

In SETUP, a separate "Page" is maintained in PCStat for each thermostat that displays that unit's programmed time schedules and desired temperatures for MORN, DAY, EVE and NITE time periods. (Warehouse thermostat (#5) could have different times and settings for any or all of these periods than the showroom thermostat (#2)), and so on. Separate schedules are included for Weekdays, Saturday and Sunday. Access is provided to configure various operational parameters including time and temperature format, heat/cool setpoint limits, anticipation and minimum system cycle times.

The SCAN function permits the user to read real time values for temperature, desired heat setting, desired cool setting and operational mode of each RC-Series Thermostat connected to the PC. This summary function displays all thermostats on one page.

The STATUS function gives a separate page of additional information for individual thermostats including the current operational status of heat, cool, fan, hold, system run (on/off), time of day and day of week. It also shows current and previous weeks system runtime in hours and filter reminder countdown in days.

The RC-200 includes PCStat software on 3.5" diskette, user manual and a cable (p/n RC-201) to connect a 9-pin RS-232 port to an RC-Series thermostat.

MODEL RC-202 SIGNAL BOOSTER

The Model RC-202 signal booster amplifies the serial data communications and is required if either of the following conditions apply to your installation: a) wiring length greater than 500 feet; b) more than 4 RC-Series Thermostats to be connected to one RS-232 port. The RC-202 extends wiring distance to 10,000 feet and allows up to 127 RC-Series Thermostats to connect to one RS-232 port.



RC-202 connectors: To PC: DB-25 female; To RC-Series Thermostats: DB-9 male. A "modem cable" is required to connect your computer's serial port to the RC-202. These are available at computer supply stores. A separate power supply is included.

(NOTE: The RC-200 and RC-202 are not required for connection to HAI Omni, Omni Pro or Aegis automation systems.)

OMNISTAT MODELS/APPLICATIONS

- RC-80: Single stage heating and cooling system, gas or electric heat.
- RC-90: Single stage heating and cooling system with zoned damper control system
- RC-100: Single stage heat pump heating and cooling system (1 stage cool, 2 stage heat)
- RC-110: Two speed heat pump system with auxiliary heat (2 stage cool, 3 stage heat)
- RC-122: Two stage heating and cooling systems
- RC-200: PC Stat Software and cable for connection to IBM compatible PC.
- RC-202: Signal booster to connect more than four RC-Series thermostats to PC

OMNISTAT REALTIME PRICING MODELS

- RC-81 - RC-80 with Real Time Pricing
- RC-91 - RC-90 with Real Time Pricing
- RC-101 - RC-100 with Real Time Pricing
- RC-121 - RC-122 with Real Time Pricing