RC2100

Wireless Steam or Hot Water Receiver-Controller

The RC2100 series wireless heating system controller utilizes reliable MESHNET900™ technology. Together with the ACI WT2630A wireless space sensors and OST2630 wireless outside air temperature (OSA) sensors, the RC2100 controller will control the boiler system based on the average space temperature (up to 12 zones) and wireless outside air temperature. If the OSA temperature is below OSA setpoint and the average temperature is lower than the average space temperature set point, the heating system will be activated after a preset time delay (adjustable) by a relay output from the RC2100 controller to the boiler control system. The RC2100 provides maximum flexibility with extensive system adjustability, sensor selectability, alarms and reliable wireless sensor capability. The maximum radio transmission distance is dependent on building type. The maximum open-air transmission distance is one mile. In a typical commercial building with steel I-beam construction, concrete floors with reinforcing rod, and metal stud walls, it can be expected that transmissions will penetrate vertically through floors and horizontally through 200 to 500 feet of walls, furniture and air.

The RC2100 is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, www.workaci.com.

SPECIFICATIONS

Input Voltage	24 VAC 60 Hz (+10% /- 15%)
Power Consumption	4 VA Maximum
RF Data Protocol	IEEE 802.15.4 - 2003/2006
Sensor Indicating Ranges	Outside air sensor: -40 to 160ºF, Space Temperature: 32 to 104ºF, Accuracy: +/-1ºF
Boiler System Controls	3 Pilot Duty relay contacts (Common, Manual & Auto), SPST N.O., 1 amp maximum at 24 VAC
Low Battery/Lost Transmitter Alarm Output	Pilot Duty relay contact (SPST N.O. 1A maximum at 24 VAC)
Low Limit Alarm Output	Pilot Duty relay contact (SPST N.O. 1A maximum at 24 VAC)
Set Point Adjustment Range	35 to 95ºF
Operating Frequency Channel	902-928 MHz
Output Power	+11 dBm
Receiver Sensitivity (Average Power)	-107 dBm
Field Adjustable: Space Temp Setpoint	Day/night setpoint & schedule
Field Adjustable: Space Set Point Differential	Time of day
Field Adjustable: Outside Air Temp Setpoint	Output time delay
Field Adjustable: OA Temp Setpoint Differential	Sensor high/low limit range
LED Display: Average Space Temp	Time of day & day/night schedule
LED Display: Space Temp Setpoint & Differential	Space temperatures included in avg. calculation
LED Display: Outside Air Temp Setpoint	Outside air temperature, set point, & differential
LED Display: Night Mode Setpoint Offset	Indivdual space temperature(s)
LED Display: Sensor Limit Range for Calculation	Low battery, lost sensor & space temperature low limit alarms
Case	NEMA 4, transparent cover, UL94V-2 Flammability Rating
Open Field Range	One Mile (line of sight)
Scalability	Up to 12 space temperature sensors and 1 outside air sensors
Enclosure Material	Polycarbonate
Enclosure Rating	Nema 4X, UL 94 HB
Approvals	FCC
Product Dimensions	(L) 9.37" (W) 4.62" (H) 2.37"

ORDERING

Please select one Model (A). **NOTE:** An additional sensor can be ordered separatley as well. RR2552B Signal Repeaters may be required based on application parameters. If a RR2552B is required, please refer to page XX for ordering information.

Ⓐ Model

○ **RC2100YA** (One Controller, Four WT2630A Wireless Space Sensors & One OST2630 Wireless OSA Sensor)
○ **RC2100YB** (One Controller, Eight WT2630A Wireless Space Sensors & One OST2630 Wireless OSA Sensor)
○ **RC2100YC** (One Controller, Twelve WT2630A Wireless Space Sensors & One OST2630 Wireless OSA Sensor)

BUILD PART NUMBER

After completing (A) from the above table, fill in the Part Number Table below. An example part number is offered.

Ⓐ

EXAMPLE: RC2100YA

UL94V-2 Flammability Rating