

REMOTE THERMISTORS

Remote temperature and humidity sensors

The RT family of thermistors and optional wireless transmitters provide remote monitoring of temperature and humidity for INNCOM Energy Management Systems. Remote Thermistors are available in a variety of models and can function as a primary or supplemental sensor.

RT3 / RT4 Remote Thermistor with S541.RF Wireless Transmitter

The S541.RF family is a transmitter that can be used to wirelessly report temperature and humidity readings from the RT3 or RT4 remote thermistor to an INNCOM energy management system.

The RT3 (S541.RFT) remotely monitors room temperature where the thermostat's location isn't ideal for sensing (e.g. close to a heating/cooling source). The RT3's temperature accuracy is 0.5°C from 0°C to +65 °C.

The RT4 remotely monitors room temperature and humidity where the thermostat's location isn't ideal for sensing (e.g. close to a heating/cooling source). The RT4 has a temperature accuracy of 0.5°C from 0°C to +65 °C and can measure relative humidity to +/- 5%RH over a compensated range of 5°C–50°C.

The S541.RF family operates in three modes: sleep (to conserve battery life when there are no events to report), operation (to transmit switch status, temperature, or humidity), and bind (when commissioning the product into the INNCOM RF Integrated Room Automation System). The S541.RF is powered by 2 AAA batteries.



INNCOM S541.RF Wireless Transmitter

RT5 Remote Thermistor

The RT5, a ruggedized replacement for the RT1, is a probe-type negative-temperature coefficient (NTC) thermistor, which can be connected to e527, e528, e6i, and e7 thermostats, or to select HVAC controllers such as the X47 or X05b to provide remote-temperature sensing.

The RT5 sensor, connected to the configurable device, can be used to measure room temperature, pipe temperature, discharge air temperature, or outside temperature. The measurement is used by the controller for HVAC control operation, and can be reported to the INNcontrol server or displayed in the room.

RT5 cable can be affected by electromagnetic interference (EMI), and should therefore be routed separately from line-voltage wires or other EMI sources.



RT1 / RT5 Remote Thermistor



Remote wireless
RF battery operated
reporting of temperature
and humidity



Connects seamlessly
to an INNCOM
energy management
system (EMS)



Operates in three
modes: Sleep,
Operation and Bind



May be integrated with
the INNCOM Room
Automation System over
the Deep Mesh network

REMOTE THERMISTORS*

S541.RF / RT3 / RT4 SPECIFICATIONS	
DIMENSIONS	3.5"W x 3.5"H x 2.5" D (88.9mm W x 88.9mm H x 63.5mm D)
RF DATA RATE	250kbps
ANTENNA TYPE	SMT
INDOOR RANGE	70ft
OUTDOOR / RF LINE-OF-SITE	540ft
TRANSMIT POWER	1mW (+0dBm)
RECEIVE SENSITIVITY	-94.6dBm
FREQUENCY BAND	2.4Ghz
ENCRYPTION	AES-128
PROTOCOL	802.15.4
FREQUENCY CHANNELS	11-26
PARAMETER	S541.RF
INPUT VOLTAGE	3VDC (Battery Powered—2AAA)
BATTERY LIFE	5 years
APPROVALS	FCC Part 15 Listed

RT1 & RT5 SPECIFICATIONS	
REMOTE SENSING	Up to 10ft
LEAD WIRE	22 AWG
WIRE LENGTH	10ft
RESISTANCE	10K Ohm +/- 1% accuracy at 25 degrees C
B VALUE	3435K +/- 1 % at 25/85 °C
APPROVALS	FCC Mark

Product	SAP Part #	Long Description
RT5	04-1096	RT5 Remote Thermistor (for e527, e528, X47)
RT5.MOD	04-1096.MOD	RT5 Remote Thermistor, Modified (for X05B)
RT5.FL	04-1096.FL	RT5 Remote Thermistor with Flying Leads, 10K ohm (for e7)
RT4	201-913-RFHHW.P	RT4 Remote Thermistor with Humidity, Wireless (battery-powered), White
RT4	201-913-RFH BK.P	RT4 Remote Thermistor with Humidity, Wireless (battery-powered), Black
RT4	201-913-RFH LA.P	RT4 Remote Thermistor with Humidity, Wireless (battery-powered), Almond
RT4	201-913-RFHXX.P	RT4 Remote Thermistor with Humidity, Wireless (battery-powered), Custom color
RT3	201-913-RFTWH.P	RT3 Remote Temperature Sensor, Wireless (battery-powered), White
RT3	201-913-RFTBK.P	RT3 Remote Temperature Sensor, Wireless (battery-powered), Black
RT3	201-913-RFTLA.P	RT3 Remote Temperature Sensor, Wireless (battery-powered), Almond
RT3	201-913-RFTXX.P	RT3 Remote Temperature Sensor, Wireless (battery-powered), Custom color

*For indoor use only

For more information
www.inncom.com

Honeywell Hospitality
 12 Clintonville Road
 Northford, CT 06472
 1-800-543-1999

IN-DT-Thermistors | 01-00243 | 2021-07-23
 © 2021 Honeywell International Inc.

Honeywell