Trs Systems
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Wireless Sensors and Controls
For All Your Applications

RM9500
Spread Spectrum Wireless WebLogger

General Description

The RM9500 provides the user with ***Internet/intranet*** remote monitoring, control and logging capability.

It is a standalone internet ***web server*** that can communicate with all other Trs sensors and controllers wirelessly. In addition, the RM9500 automatically and continuously logs all wireless sensor data such as temperature, humidity, tank level and alarm information for the last 30 days at 20 minute intervals.

The RM9500 WebLogger utilizes reliable Spread Spectrum Radio technology. Up to two (2) RC2105 controllers or 50 separate wireless sensors can be used with one RM9500 and up to 100 data points can be monitored and logged with one (1) RM9500 Weblogger.

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.

Generally a wireless system will cover at least three floors - one floor above and one floor below the receiver location. In some buildings with favorable transmission characteristics the system may cover more floors.

Ordering Information

Model	Description
RM9500A	WebLogger with internet remote monitoring, logging and control capability.

Features

- Monitor and log up to 100 data points per RM9500 WebLogger
- Monitor and control up to two RC2105 controllers
- Remote adjustment of setpoints, differential, time delay, day/night schedules and many others
- Multiple RM9500s can be used for large systems with one internet connection
- Standalone web server for broadband internet connection
- Communicate wirelessly with existing Trs wireless sensors and controllers. No new sensors and wiring are needed to add remote monitoring, logging and control capability.
- Automatic and continuous logging of all data points for a running 30 days at 20 minute intervals. No set up is required.
- Log files can be viewed on line or download (as Excel® CSV files)for additional analysis
- Low battery and lost sensor alarm indications

System Requirements

- High speed (constant-on) broadband internet connection
- Fixed router WAN (Wide Area Network) IP address provided by your ISP (Internet Service Provider).

Specifications

Input Voltage/Current:
- 24 VAC 60 Hz, 250 mA norminal

Dimensions:
- 8.8” x 4.7” x 2.25”

Operating Conditions:
- 32 F to 150 F
- 5 to 95% non-condensing

Case
- Flame Retardant ABS Plastic (Black)
- UL Flame Rating – 94-5VA

Network/Internet Connections:
- Ethernet – RJ45, Cat. 5 cable

RF Characteristics
- Operating Frequency Channel
  - 923.58 MHz
- Receiver Sensitivity (avg. power)
  - –107 dBm
- Jam Resistance
  - 60 dB out-of-band rejection

Approvals
- FCC part 15.247

System Overview

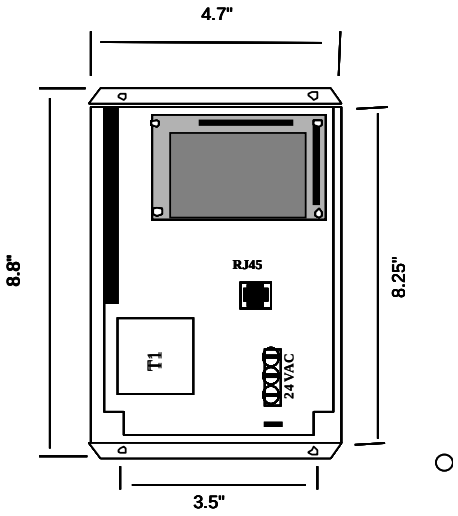

Figure 1

Wireless sensor transmitters should be installed within 200 to 500 feet of the RM9500 WebLogger.

RR1552 signal repeaters can be installed as needed to increase transmission distance between sensors and receivers.

⚠ CAUTION

Sensors, Repeaters and receivers should NOT be installed in the following areas:

- **Inside metal enclosure/panel**
- **Inside or immediately next to elevator shaft/elevator banks**
- **In front of or immediately next to large trees or a large body of water**

Transmission distance and performance will be drastically reduced.

Installation

- Refer to the configuration setup instruction manual for configuration of the RM9500 registers and input variables setup. A PC is required for the setup of the WebLogger.
- Choose a location close to the broadband Internet connection and away from the floor.
- Mount the WebLogger on the wall using four #8 screws.
- 24 VAC Input - Connect 24VAC 60 Hz to the input terminals using 20 AWG wire (See Figure 1).
- Connect to the Internet connection (or a network/router port) using a RJ45 ethernet cable.

⚠ CAUTION

Do not use this product in any safety related applications where human life may be affected.

***Disclaimer & Limitation of Liability* –User assumes all risks in applying an internet device such as the RM9500 to remotely control & monitor their buildings. Trs Systems makes no representations or warranties of any kind, express or implied, as to the fitness and security in using the RM9500 for remote buildings and/or systems control using the Internet/Intranet. Trs Systems' liability shall not exceed the purchase price paid for the products giving rise to any liability. In no event shall Trs be liable for any special, consequential or incidental damages arising in any way from using this product by the customers.**

