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Monitoring temperature and/or humidity in a Server Room

Monitoring the server room temperature and humidity does not have to be complicated.

The TV2 Master Thermometer is an ideal instrument for monitoring and documenting temperature and humidity. It can be used with four sensors.
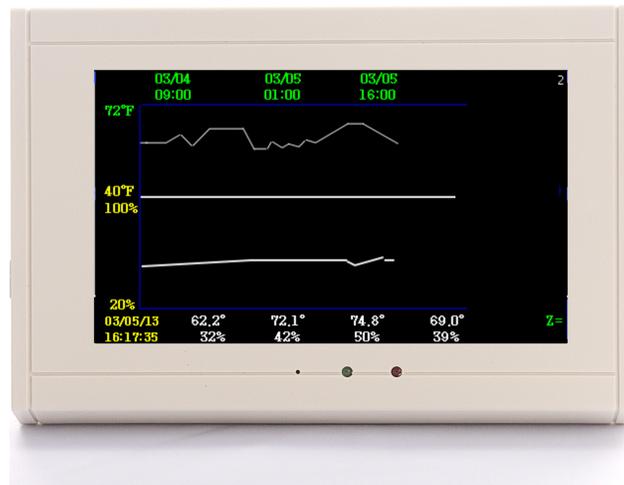

It is accurate and automatic, providing continuous monitoring and indicating trends so that corrective action can be taken. In addition to the display showing the current temperatures, it can also show a chart on the large LCD display.

It has a trace mode and a zoom function so that individual measurements as well as trends can be examined. It requires no special skills to read and interpret and comes equipped with an external N/O relay to trigger an alarm or auto dialer if out-of-spec conditions occur.

Using a TV2 is simple, with minimum set-up required. It needs no programming, maintenance, paper or pens to monitor and document temperature. Simply plug the ThermaViewer into a wall socket or a computer and begin collecting temperature history immediately.

Installation of the ThermaViewer is a simple 5-step process:
1. **Position the sensor modules in the areas to be monitored**
2. **Plug the TV2 power adaptor into a wall socket.**
3. **Attach the auto dialer (if purchased).**
4. **Set the time and monitoring frequency (see below for suggested settings).**
5. **Set the alarm in needed.**

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Installation and setup

Mount the TV2 display unit in the room or office area near the area to be monitored. Position each sensor in a separate area. Each sensor is attached with a wire if you are using wired sensors. If you have wireless sensors ensure that there is a clear line-of-sight to the display unit and attach the auto dialer (if purchased) to the relay connection.

The following are suggested settings. You should use the settings required by your standards.
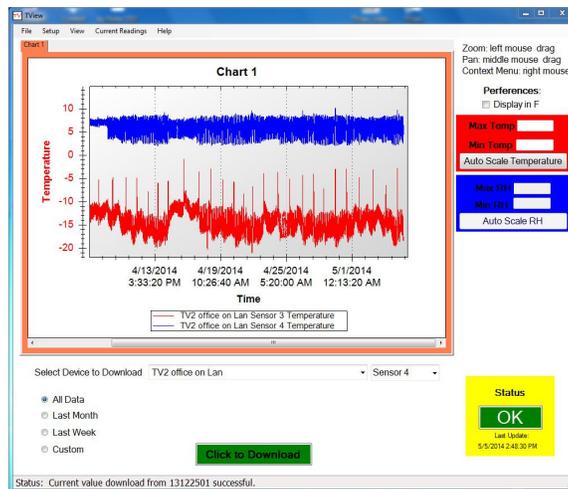
Suggested display settings:

Room 1 Sensor	
Sample Data once every 00:10:00 HH:MM:SS	
Type of Averaging Med	
Maximum temperature line	80°F
Minimum temperature line	60°F
Maximum RH temperature line	60%
Minimum RH temperature line	30%

Room 2 Sensor	
Sample Data once every 00:10:00 HH:MM:SS	
Type of Averaging Med	
Maximum temperature line	85°F
Minimum temperature line	60°F
Maximum RH temperature line	60%
Minimum RH temperature line	30%

Downloading data:

Connect the TV2 to a computer with a USB cable or connect the TV2 to a Local Area Network (LAN) with a wired Ethernet cable to download data. Install the free software on a PC and an automatic download can be set up which copies the logged temperature/humidity data to a computer or server every few seconds, storing the downloaded data in a file.

Alerts:

Once the TV2 is communicating with a PC via the TView software and as long as the PC has internet access a Text or Email alert can be sent anytime an alarm occurs. The TV2 also has a dry-contact relay which can be used to trigger a phone call if an auto dialer is used.
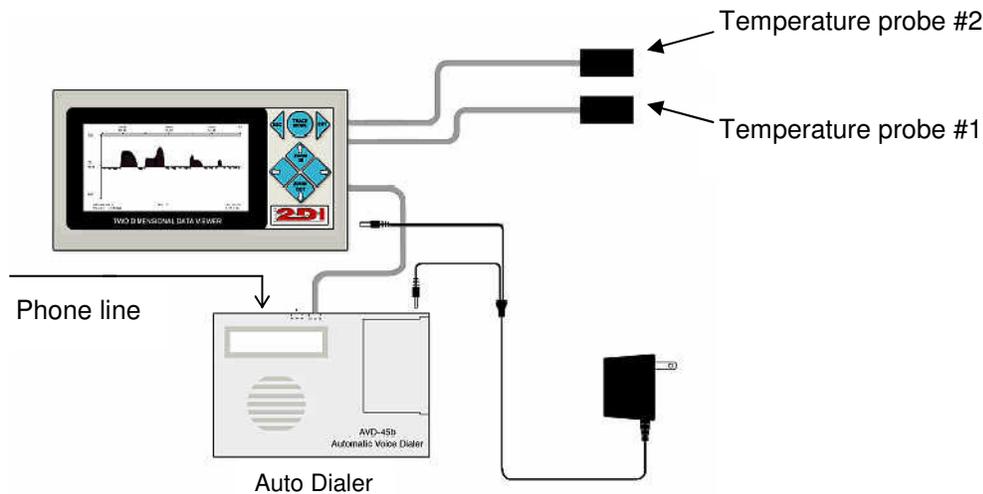
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Optional Auto-Dialer

The TV2 comes equipped with a dry-contact relay that can be used to trigger an alarm or auto dialer. Each channel of each sensor has its own high and low trigger point. The relay will be closed when temperature rises above 80°F for more than 20 minutes or falls below 65°F for more than 15 minutes, *if the suggested settings above are used*. Once the relay has been triggered, the alert clock is reset.

If you need faster response time you can decrease the time on the alarm menu. You could have the ThermaViewer trigger the alarm if the temperature rises or falls below your safe values for 5 seconds, or for more than 24 hours.

If an auto dialer is ordered a separate power supply is provided.

The auto dialer will call four phone numbers (i.e. phone, pager, answering machine or service) and leave a 16 second message when triggered by the ThermaViewer. It will keep calling the four numbers until someone picks up and the message is delivered.

The auto dialer can be set with:
- 60 second exit delay
- 10 second entry delay
- N.O. (meaning that the relay is normally open).
- MOM (meaning that it only takes a momentary activation from the relay to trigger the dialer).

A relay test function on the System Parameter of the ThermaViewer causes the relay to be immediately triggered. Entering 'yes' in this field causes the ThermaViewer enter an alarm condition that causes the auto dialer to immediately call the four phone numbers stored in its memory. Allow 90 seconds to elapse between the time you exit the programming mode of the auto dialer and you activate the relay.

Technical support for Auto Dialer only (858) 413-0149