

WiFi Edition

User Guide

Model TM-WIFI330



User Guide

Thank you for choosing Temperature@lert to protect your highly valuable belongings from unexpected changes in temperature. We hope that you will find our products and services the simplest and most reliable wireless temperature monitoring system available.

If you encounter any trouble setting up or installing this device, please email support@temperaturealert.com and we'll get right back to you.

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About Temperature@lert

Temperature is a significant threat to companies around the world, especially in data centers, server and telecommunications rooms, biotechnology/pharmaceutical/medical facilities, and companies involved with commercial refrigeration and food services. A temperature change can cost thousands, if not millions of dollars in damage and lost productivity. Temperature@lert's cloud-based temperature monitoring solutions provide real-time alerts and historic records to allow customers to immediately react to potentially disastrous temperature fluctuations and provide logs for regulatory requirements. Temperature@lert has more than 40,000 devices installed in over 50 countries around the globe.

The WiFi device alerts you when the slight changes in the environment are detected. We believe in the simplicity of our device – in design, set-up, and operation.

We have a long history of designing devices to measure environmental changes. Our line of monitoring devices takes environmental monitoring to the next level by allowing for customized timing of monitoring efforts and customized methods of alert notifications.

User Guide

WiFi Edition at a Glance

The Temperature@lert WiFi Edition measures the environmental conditions surrounding the sensor(s). If the sensor reading goes outside the specified threshold, the unit will alert you via email (Visit <http://www.temperaturealert.com/sensorcloud> to view our optional add-on service that provides Internet based monitoring for use with your WiFi Edition product).

What's Included

The Temperature@lert WiFi Edition includes the following items:



WiFi Edition



AC Adapter



6' Cable and
Temperature Sensor

Additional sensors are available from [temperaturealert.com](http://www.temperaturealert.com).

Jacks and Connectors

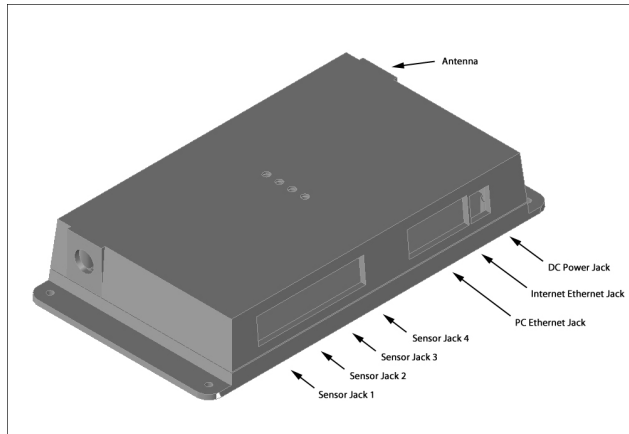


Figure 1

Sensor Jack 1 - Accepts any sensor made for the Temperature@lert WiFi Edition Model TM-WIFI330.

Sensor Jack 2 - Accepts any sensor made for the Temperature@lert WiFi Edition Model TM-WIFI330.

Sensor Jack 3 - Accepts any sensor made for the Temperature@lert WiFi Edition Model TM-WIFI330.

Sensor Jack 4 - Accepts any sensor made for the Temperature@lert WiFi Edition Model TM-WIFI330.

DC Power Jack - Temperature@lert WiFi Edition can be powered by connecting a 9-48V power supply (one is included with your device) to the DC Power Jack or via Ethernet (PoE) by using a **power injector** (sold separately). PoE is **not** supported with powered hubs and switches (802.3 af). Insertion of power supply connector disconnects Ethernet power feed line. Power jack accepts DC 2.1/6.3mm coaxial power connectors of 12VDC at 1A

Reboot Button – The reboot button is a small pinhole located on the bottom of the device. Restarts the device when pressed and released. Pressing and holding the reboot button for 10 seconds will revert the unit back to factory

default settings. *Be sure to firmly press and hold the button, if the button “bounces” the device will be rebooted, instead of reverting to defaults.*

10/100 Ethernet “PC” Port – Provides wired Ethernet connectivity. PoE is supported with the use of an Ethernet power injector (powered switches are not supported). This connection is used for initial setup to 10.99.99.1.

10/100 Ethernet “Internet” Port – This Ethernet port is used for a permanent hardwire connection between your WiFi330 and router. **Reserved Button** - Button used for custom applications. This can be user programmed from within the device's operating system.

Indicator Lights

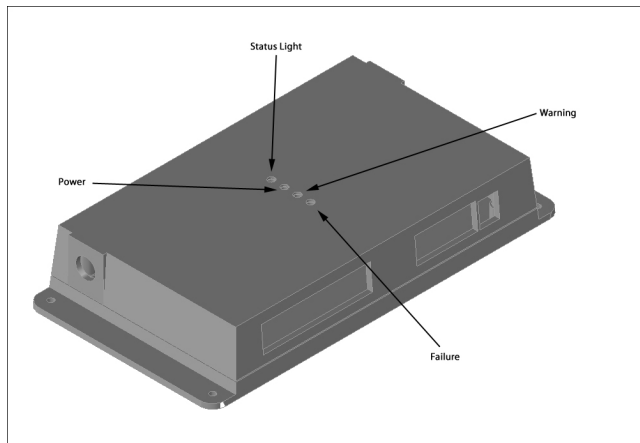


Figure 2

Status – Single blink, normal operation

Power – Reserved for future feature implementation

Warning – Reserved for future feature implementation

Failure – Single blink, no sensors detected

Connectivity Requirements

In order to operate properly and send email alerts when the sensor readings fall outside your thresholds, the device requires Internet access via a wireless or wired Ethernet connection.

Turning on the Hardware

Connect one to four sensors to any jacks on the side of the device (see figure 1). **Note: The device does not have any built in sensors.**

Plug the AC adapter into a wall outlet and connect the power to the device.

Please wait about 60 seconds for the device to finish booting up. Your device is now ready to connect to your PC.

Connect an Ethernet cable to your computer and to the Ethernet jack of the Temperature@lert WiFi unit.

Connecting to the Web Based Admin Interface

For initial setup, ensure the unit is connected **directly** to your computer's Ethernet port. If your computer's Ethernet adapter is set to acquire an IP address, via DHCP, the WiFi device will assign it an address. Otherwise, you will need to configure a static IP address on the same subnet as the WiFi device (such as 10.99.99.2). The default IP/subnet of the device is 10.99.99.1 / 255.255.255.0

Open a web browser and browse to <http://10.99.99.1/>.

Default IP Address

10.99.99.1

Default Username and Password

Username: admin

Password: password

You will see the current sensor reading along with a graph. This page will automatically refresh itself every few minutes. If you do not see a sensor reading or the reading is 0.00000, please see the *Obtaining Service and Support* section of this document.

It is highly recommended that you click on the Preferences tab and set a new administrative password.

Configuring the Device

Status Page

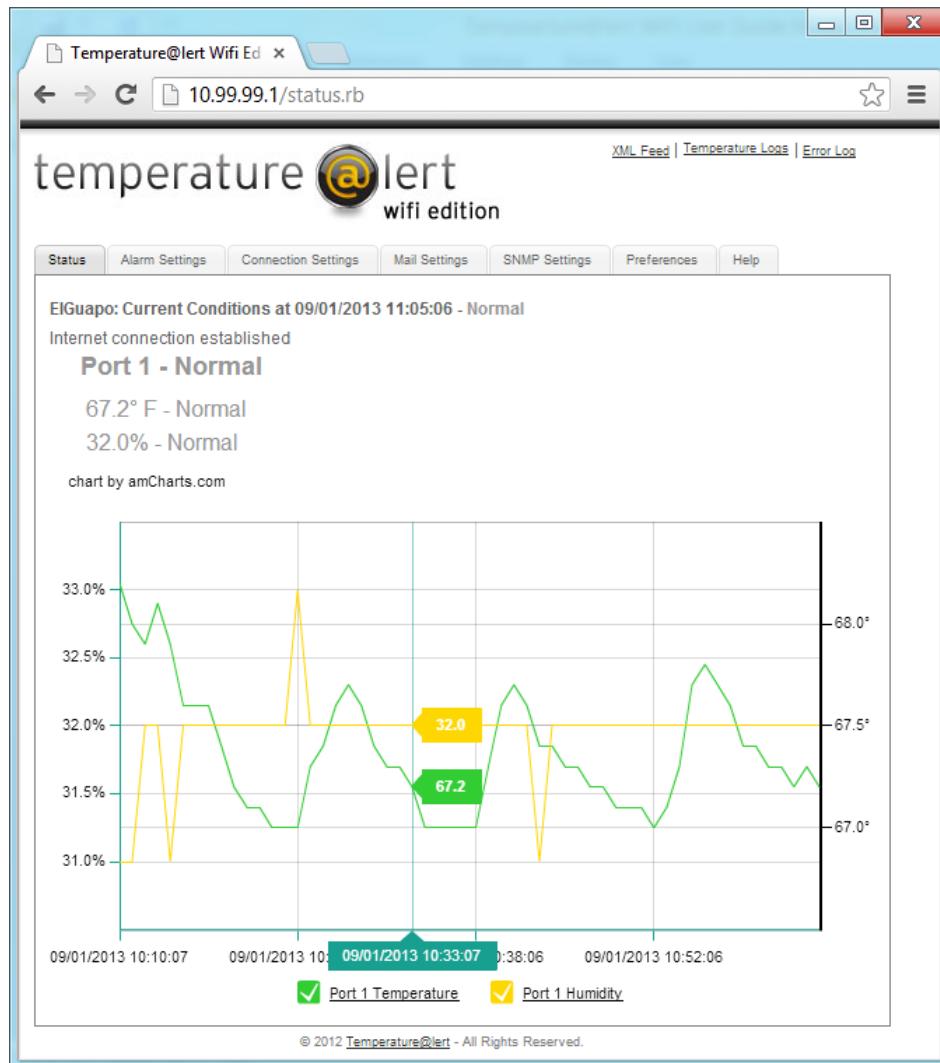


Figure 3

Navigation

Figure three (3) shows the Status tab of the administrator interface; the other tabs displayed across the top are used for configuration. The Status tab

displays the current sensor readings, while the Alarm Settings tab allows the sensor thresholds to be set for each sensor and also allows the user to register the device with the **optional** Sensor Cloud service (<http://www.temperaturealert.com/sensorcloud>). The Connection Settings tab allows the wireless and wired network settings to be configured. The Mail Settings tab is used to specify what mail server to use for sending alarm notifications. The SNMP Settings tab is used for configuring Simple Network Management Protocol for integration into enterprise management systems. The Preferences tab is used to set the time zone, degree units (F or C) and admin interface password. Finally, the Help tab displays the current software version and license agreement.

The Graph

Figure three (3) displays the sensor readings. In this example, a combination temperature/humidity probe is plugged into Jack 1, which has been renamed 'Cabinet 1'. The most recent temperature reading is displayed in large numbers at the top. If the reading is outside of your set threshold, the reading will turn red and display the word "Alarm". The system clock is automatically set once the device has Internet access. If the clock is not set, please check your Internet access and your firewall for outbound NTP access.

As temperature data is gathered, the graph will automatically refresh. You can click and drag on the graph to zoom into specific areas. If you do not see a graph, please ensure that you have the latest version of Adobe Flash installed.

XML Feed & Log File

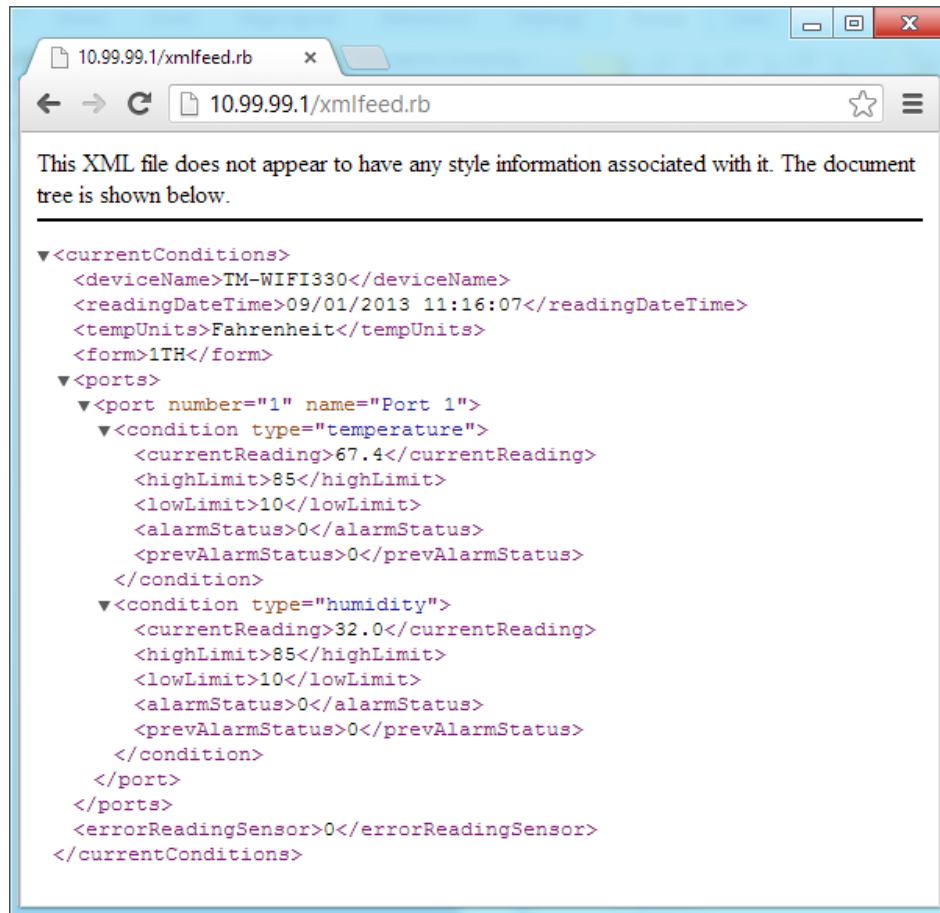


Figure 4

Figure four (4) above is an example of the XML feed data that can be viewed by clicking the 'XML Log' link at the top of the page. The Temperature and Error log files can be viewed by clicking their respective links. The XML feed can easily be integrated into other applications.

Logging In

If you click on any other tab, you will be prompted for a username/password. See Default Username and password earlier in this manual for the factory default.

Alarm Settings

Temperature@lert Wifi Edition

10.99.99.1/protected/alarmSettings.rb

temperature@lert wifi edition

XML Feed | Temperature Logs | Error Log

Status | Alarm Settings | Connection Settings | Mail Settings | SNMP Settings | Preferences | Help

Temperature@lert Sensor Cloud [\(what's this?\)](#)

Use Sensor Cloud

Temperature Alarm Settings

Sensor Port 1

Custom port name:

Temperature Probe

Send an e-mail to when the temperature gets above degrees or below degrees.

Humidity Probe

Send an e-mail to when the humidity gets above percent or below percent.

Sensor Port 2

Custom port name:

Sensor Port 3

Custom port name:

Sensor Port 4

Custom port name:

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Figure 5

Figure five (5) shows the Alarm Settings tab which is used to connect the device to the **optional** sensor cloud service and set the thresholds for your sensors. You will also enter the email address of the recipient who will receive the alert emails. Be sure to click 'Save' once you have entered all the settings. If you add or remove different sensor types, you will need to click the reset sensors button to rescan for the new sensor types and display the appropriate threshold options. **Note: clicking reset sensors will remove old log data.**

Connecting to Temperature@lert sensor cloud

The screenshot shows a web browser window with the address bar displaying '10.99.99.1/protected/alarmSettings.rb'. The page title is 'Temperature@lert wifi edition'. The navigation menu includes 'Status', 'Alarm Settings' (selected), 'Connection Settings', 'Mail Settings', 'SNMP Settings', 'Preferences', and 'Help'. The main content area is titled 'Temperature@lert Sensor Cloud (what's this?)' and contains the following elements:

- A 'Use Sensor Cloud' section with a 'Yes' dropdown menu.
- A message: 'Your device is not currently registered. Before using Temperature@lert Sensor Cloud you need to register this device with the Temperature@lert Sensor Cloud service by following these steps:'
- Two numbered instructions:
 - (1) Follow this link to register this device with your account
 - (2) Once you've registered the device with your dashboard account, specify your username & password below and press the Associate button
- A 'Device ID' field with the value '11444000828029441169'.
- A 'Specify Alarms' dropdown menu with the value 'Using Sensor Cloud Only'.
- 'Username' and 'Password' input fields.
- An 'Associate' button.

Below this section is the 'Temperature Alarm Settings' section, which includes:

- A 'Sensor Port 1' section with a 'Custom port name' field containing 'Port 1'.
- A 'Temperature Probe' section with a 'Send an e-mail to' field containing 'you@yourdomain.com' and a note 'when the temperature gets above 85 degrees or below 10 degrees'.

The first section in figure six (6) indicates if you are using the unit with Temperature@lert's **optional** Sensor Cloud service. Temperature@lert's Sensor Cloud allows you to view temperatures and set alerts online from any browser-capable Internet device. In addition, you can receive phone call notifications, configure alarm escalation, set 'Missed Report' alarms, and more. Visit temperaturealert.com/sensorcloud to learn more.

There are three modes of operation for the sensor cloud settings:

1. Local mode (Sensor Cloud OFF) uses only the alarm settings and logging on the device itself.
2. In Sensor Cloud ONLY mode, the Temperature@lert WIFI Edition will report temperatures to the online system and only use Sensor Cloud alerts and settings.
3. Dual mode uses the built-in / local alarm settings and logging **as well as** the sensor cloud logging and alarm settings.

Before you enable sensor cloud, you will need to sign up for a sensor cloud account by following the on screen instructions. Once you have an account, enter your username and password into the form on the WiFi edition. The Temperature@lert WiFi unit will attempt to register itself on the sensor cloud system.

Setting the Temperature Alarm

The second section of figure five (5) is used to configure where the sensor thresholds are set. Enter the email address of the person whom you wish to receive the sensor alerts. **If you need to send alerts to more than one address, separate the email addresses by a comma and no space.** Enter the low and high sensor thresholds. When the temperature/humidity falls outside of this range, an alert will be generated. A 'Normal' alert will also be generated if the temperature/humidity comes back within range. Be sure to click 'Save' to save all your settings.

If you connect new sensors or change which ports the sensors are connected to, you will need to press the 'Reset Sensors' button. Pressing the 'Reset Sensors' button will erase the data and alarms associated with the unit. The unit will automatically reboot after pressing 'Reset Sensors', detecting the new sensors. Once the unit has rebooted the alarms can now be set on the 'Alarm Settings' tab.

Connection Settings

Your Temperature@lert device can connect to the Internet through a wired Ethernet cable or wirelessly. Initial set up of the device must be done through the Ethernet cable, after the initial set up of the device, it can be configured to operate on your wireless network.

Current WAN IP – Once the Temperature@lert unit has successfully connected to your wireless network, an IP address will be displayed here. Type this IP into your browser to view the device.

Current LAN IP – This is the IP that you can use to access the unit if it is connected via Ethernet. Type this IP into your browser to view the device.

Wireless/Ethernet MAC – The MAC address associated with each connection type is displayed.

Connect to Internet Via – Choose how you would like the device to connect to the Internet. To connect via Ethernet skip to the next section, for wireless connection follow the steps below.

Wireless Settings

The screenshot shows a web browser window with the address bar displaying `10.99.99.1/protected/connection.rb`. The page title is "Temperature@lert wifi edition". The navigation menu includes: Status, Alarm Settings, Connection Settings (selected), Mail Settings, SNMP Settings, Preferences, and Help. The main content area is divided into two sections: "Connection Status" and "Connection Settings".

Connection Status

Wireless Client Is:	Connected
Current WAN IP:	192.168.1.196
Current LAN IP:	10.99.99.1
Wireless MAC:	00:C0:CA:66:94:92
Ethernet MAC:	00:C0:CA:66:94:91

Connection Settings

Connect To Internet Via:

WiFi Network SSID to Join:

Encryption Type:

Obtain WAN IP Via:

Wired LAN Ethernet IP:
(for debugging)

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Figure 7

Figure seven (7) indicates the fields that must be filled out in order for your device to operate on your wireless network. Once all the fields are complete click 'Save Settings' and the device will automatically reboot. After the device has restarted, navigate to the 'Connection Settings' tab and enter the **Current WAN IP** into your browser bar. You should now be viewing the device over your wireless connection; at this point you can disconnect your Ethernet cable.

SSID – Enter your wireless network’s SSID (network name) or press the ‘Scan’ button to view available networks. If you do not know your SSID, please contact your IT technical support department. ***The SSID is CASE SENSITIVE.***

Encryption Type – Choose the type of encryption required for your wireless network. If you used the ‘Scan’ button to find your SSID the encryption type will be determined automatically. If you do not know what type of encryption is in use, please consult your IT technical support department.

Password – Enter your network’s encryption key. If you are using WEP, you must specify a hexadecimal encryption key and not an ASCII passphrase. If you do not know your encryption key, please consult your IT technical support department. (Only applicable when an encryption type other than “None” is chosen).

Obtain WAN IP Via – If you would like the Temperature@lert WiFi unit to automatically obtain an IP address from your wireless network, choose DHCP here. Otherwise, to specify a static IP address, choose static. The next four fields will become available to configure a static IP address, Figure six (6).

NOTE: If you choose a static IP address, you must enter the IP, Net Mask, Gateway, and DNS fields in order to receive email alerts.

The screenshot shows a web browser window with the address bar displaying "10.99.99.1/protected/connection.rb". The page title is "Temperature@lert wifi edition". The navigation menu includes "Status", "Alarm Settings", "Connection Settings" (which is active), "Mail Settings", "SNMP Settings", "Preferences", and "Help".

Connection Status

Wireless Client Is:	Connected
Current WAN IP:	192.168.1.196
Current LAN IP:	10.99.99.1
Wireless MAC:	00:C0:CA:66:94:92
Ethernet MAC:	00:C0:CA:66:94:91

Connection Settings

Connect To Internet Via:

WiFi Network SSID to Join:

Encryption Type:

Obtain WAN IP Via:

Temp@lert Device IP:

Netmask:

Gateway IP:

DNS Server IP:

Wired LAN Ethernet IP: (for debugging)

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Figure 8

Figure eight (8) indicates the fields that must be filled in if you want to give your device a static IP. Be sure to click 'Save Settings' once all the fields have been entered.

Temp@lert Device IP – The IP address on the wireless network to assign to your Temperature@lert WiFi unit.

Netmask – The net mask for the Temperature@lert WiFi unit's wireless IP address.

Gateway IP – The IP address of the gateway on your wireless network.

DNS Server IP – The IP address of the DNS server on your wireless network.

Ethernet Settings

The screenshot shows a web browser window with the address bar displaying `10.99.99.1/protected/connection.rb`. The page title is "Temperature@lert wifi edition". The navigation menu includes: Status, Alarm Settings, Connection Settings (selected), Mail Settings, SNMP Settings, Preferences, and Help. The main content area is titled "Connection Status" and displays the following information:

Wireless Client Is:	Connected
Current WAN IP:	192.168.1.196
Current LAN IP:	10.99.99.1
Wireless MAC:	00:C0:CA:66:94:92
Ethernet MAC:	00:C0:CA:66:94:91

Below the status section is the "Connection Settings" section. It includes the following fields and options:

- Connect To Internet Via:** Ethernet (selected from a dropdown menu)
- Obtain WAN IP Via:** Use Static IP (selected from a dropdown menu)
- Temp@lert Device IP:** 192.168.1.5
- Netmask:** 255.255.255.0
- Gateway IP:** 192.168.1.1
- DNS Server IP:** 192.168.1.1
- Wired LAN Ethernet IP: (for debugging):** 10.99.99.1

A "Save Settings" button is located at the bottom of the settings section. The footer of the page reads: © 2012 Temperature@lert - All Rights Reserved.

Figure 9

If you would like the device to automatically obtain an IP address from your wired Ethernet network, choose DHCP here. To specify a static IP address,

choose 'Static' and fill in the fields shown in figure nine (9). **NOTE: If you choose a static IP address, you must enter the IP, Net Mask, Gateway, and DNS fields in order to receive email alerts. The IP address of the Ethernet jack must be on a different subnet than the wireless IP. If you change the Ethernet settings to DHCP and click save YOU WILL NO LONGER BE ABLE TO ACCESS THE DEVICE ON 10.99.99.1. With DHCP enabled, the device will be expecting to receive an IP address from your router. The IP address assigned by the router will be the IP address of the unit.**

Temp@lert Device IP – The IP address on the wireless network to assign to your Temperature@lert WiFi unit.

Netmask – The net mask for the Temperature@lert WiFi unit's wireless IP address.

Gateway IP – The IP address of the gateway on your wireless network.

DNS Server IP – The IP address of the DNS server on your wireless network.

Mail Settings

The screenshot shows a web browser window with the address bar displaying '10.99.99.1/protected/mailSettings.rb'. The page title is 'Temperature@Alert wifi edition'. The main content area is titled 'Mail Server' and contains the following fields and values:

Field	Value
SMTP Server	Use Custom SMTP Server (dropdown)
	smtp.emailsrvr.com
Username	outbound@temperaturealert.com
Password	*****
Port Number	8025
Mail From Address	you@yourdomain.com
Send Daily Status Email To	hjs@temperaturealert.com

At the bottom of the form are two buttons: 'Save' and 'Send Test Mail'. The footer of the page reads '© 2012 Temperature@Alert - All Rights Reserved.'

Figure 10

In order for the device to send email alerts, an SMTP server is required. Figure ten (10) indicates the required fields for the SMTP settings. The device requires an SMTP server that supports BASIC authentication. Contact your IT technical support department or email provider if you do not know your SMTP settings. If you do not have an SMTP server available, please contact support@temperaturealert.com.

SMTP Server – If you have a Gmail account select 'Use Gmail SMTP server' and enter your Gmail username and password. Otherwise, any SMTP server accessible from your network that supports BASIC authentication can be used. Accepts fully qualified domain names and IP addresses.

Username – The username of the email account sending the alerts.

Password – The password of the email account sending the alerts.

Port Number – The port on which your SMTP server is running (default is 25). This will not be displayed if you are using your Gmail account.

Mail From Address– The account from which the alerts are sent.

Send Daily Status Email To – At midnight, a daily email will be sent to the specified account with the previous day's high and low readings, the average reading, and an attached log file with all the readings.

After you save the settings, you can click Send Test Email to send one or more test messages. If you do not receive the email, check with your systems administrator to ensure your firewall allows SMTP traffic and that your server supports BASIC authentication. If you are unable to send messages, please contact Temperature@lert technical support.

SNMP Settings

Figure eleven (11) indicates where the SNMP Trap settings are configured (the unit does not respond to SNMP Get requests at this time). If you do not know what SNMP is, you can ignore this section.

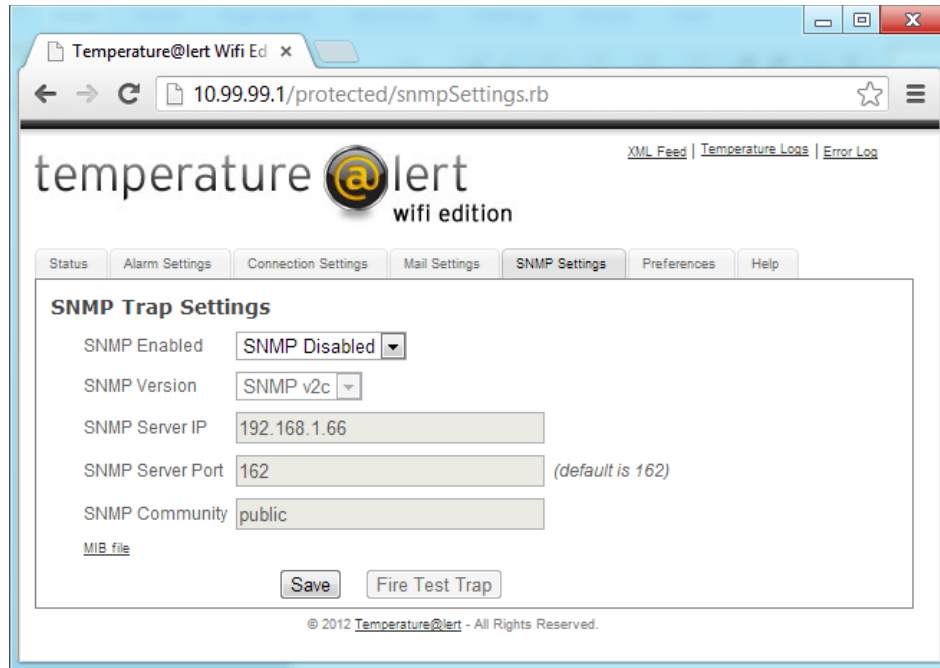


Figure 11

SNMP Enabled – Turns the SNMP Traps on or off.

SNMP Version – Sets the version of SNMP Traps to be sent.

SNMP Server IP – The IP address of where the SNMP Traps are to be sent.

SNMP Server Port – The port of where the SNMP Traps are to be sent.

SNMP Community – The Community String of your SNMP setup.

Preferences

Figure twelve (12) denotes the items you can customize in order to enable the device to fit your individual needs. Be sure to click 'Save' once you have entered all the settings.

The screenshot shows a web browser window with the title 'Temperature@Alert Wifi Ed'. The address bar shows '10.99.99.1/protected/preferences.rb'. The page features the 'temperature @ alert wifi edition' logo and navigation links for 'XML Feed', 'Temperature Logs', and 'Error Log'. A tabbed interface at the top includes 'Status', 'Alarm Settings', 'Connection Settings', 'Mail Settings', 'SNMP Settings', 'Preferences' (selected), and 'Help'. The 'Preferences' section contains the following fields:

- Device Nick Name:
- Units:
- Reading Interval (minutes):
- Interval To Plot:
- Enable Continuous Alert:
- HTTP Server Port:
- Date/Time:
- Date Format:
- Time Zone:
- NTP Servers:

Below these fields is a 'Save' button. The 'Device Password' section includes:

- Password:
- Re-enter to confirm:

A second 'Save' button is located at the bottom of this section. The footer of the page reads '© 2012 Temperature@Alert - All Rights Reserved.'

Device Nick Name – Provide the device with a nick name to be used on email alerts so you know which device the alert originates from.

Units – Choose whether you want your temperature readings and alerts in degrees Fahrenheit or degrees Celsius.

Reading Interval – Set the amount of time between sensor readings. The minimum is 1 minute.

Interval To Plot – Select the amount of time over which to display readings on the graph.

Enable Continuous Alert – Once the sensor falls outside your threshold, the device will send you an email alert. After the set reading interval has passed, if the sensor is still outside of your acceptable limits, you can enable the continuous alert will send you another message until the sensor comes back within range. **Note: The device will always send an alert when the sensor comes back within range regardless of how the continuous alert setting is configured.**

HTTP Server Port - The default is 80. This should only be changed if needed by an IT administrator for port forwarding from your router or other security reasons.

Date/Time – The device automatically sets the date/time once it has an Internet connection. You should not need to use this field.

Date Format – Choose the format for displaying the date.

Time Zone – Use this to specify the time zone for the device.

NTP Servers – By default, the NTP servers listed will automatically synchronize the time of the unit if Internet access is available. Alternatively, you can list your own NTP servers here.

Device Password – If you wish to change the password of your device from the default, enter the new password and click 'Save'.

Help Page

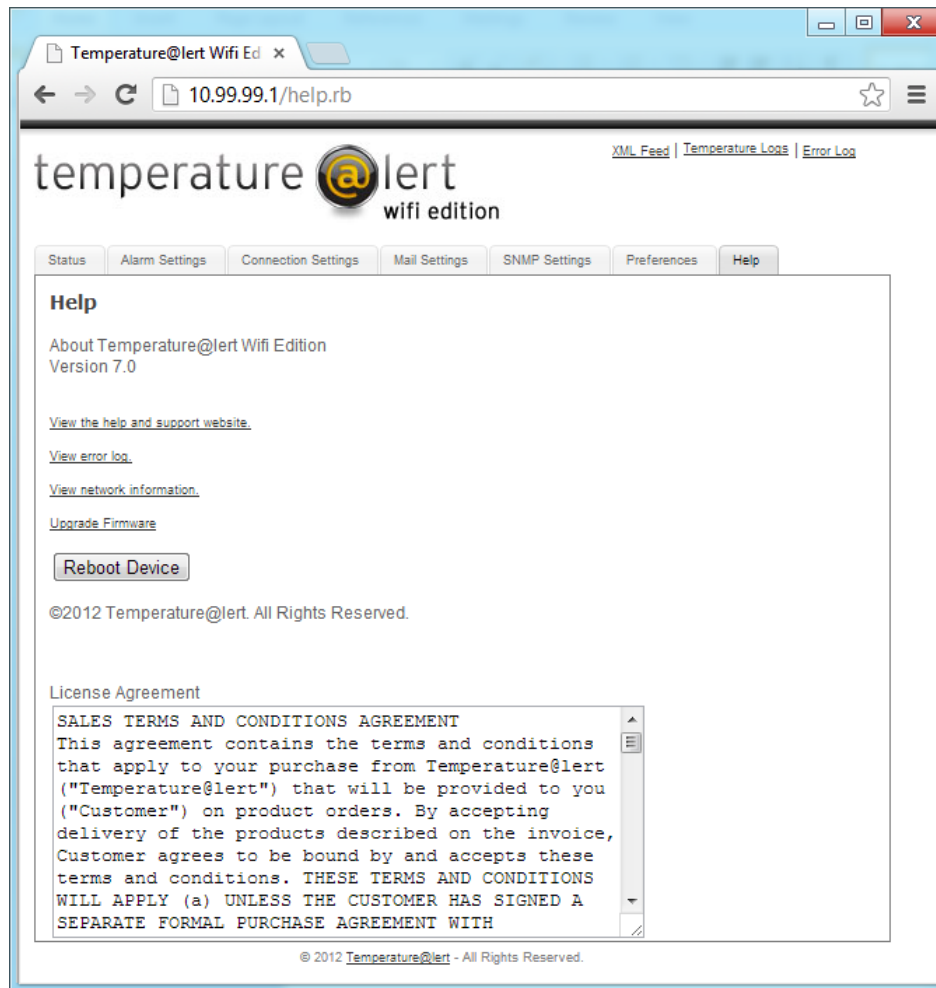


Figure 13

Figure thirteen (13) shows the Help tab. The first item on this page indicates the current version of the firmware running on the unit.

A link is provided to the Temperature@lert technical support site should you need to obtain technical support for this device. The 'view error log' link displays the local error log of the Temperature@lert WiFi device. The 'view network information' link may be needed when experiencing trouble

connecting to a wireless network. The 'Upgrade Firmware' link allows you to select the latest firmware edition and update your device.

If you need to remotely reboot the device, use the reboot button.

Finally, the license agreement for use of this device is presented.

Restoring Factory Defaults

To restore the unit to factory settings, visit <http://www.temperaturealert.com/support> and click on the Downloads section.

Under the Downloads for the WiFi device, you will see a firmware flashing kit. Follow the instructions in the readme file to restore the device to its factory settings.

Operating Guidelines

Placement

The unit should be placed indoors on a flat and level surface. The unit can be mounted vertically on a wall or other surface with additional user supplied hardware.

Using the External Sensor

When using the external sensor cable, care should be taken so that the cable is managed in such a way that it is not accidentally unplugged from the unit. If the external sensor is removed from the unit, the unit will not be able to monitor the environmental conditions.

Preserving the Temperature Log

Temperature@lert WiFi edition can store up to seven (7) days of sensor readings in its RAM. **If power is lost, the data will be lost as well.** This configuration is meant to preserve the FLASH memory. If you wish to permanently store your temperature log, it is recommended that you poll the XML or daily log feeds regularly with a small script. Alternatively, by entering an email address in the daily status field on the preferences page, the unit will

email you the previous day's temperature log file. This text file is then easily saved in your mailbox or to your PC's hard drive.

Wireless Reception

The unit requires a WiFi signal in order to operate wirelessly.

The antenna should be oriented in a vertical position perpendicular to the horizon.

We recommend that the antenna remain connected during operation. In order to disconnect the antenna, the device should first be powered down. If a signal is unavailable in the desired installation area, try moving the base unit to a different location (e.g. higher, away from large objects, etc.) within the length of the sensor cables to see if the WiFi connection improves. If the WiFi connection does not improve you have two options: (1) you can configure the device to communicate via the built-in wired Ethernet port, or (2) you can order a custom sensor cable length up to 200 feet (61 meters) from Temperature@lert.

Powering the Unit

We recommend the unit be connected to an uninterruptable power supply (UPS) or battery backup. If power to the device is lost, temperature readings in memory will be lost and the device will not be able to record temperatures and send alarms.

We recommend disconnecting power for 10 seconds or more before powering up the device again.

Specifications

WiFi330 Specification Sheet

Model	Temperature@lert WiFi Edition
Part Number	TM-WIFI330
Dimensions	1.21" x 3.87" x 7.24" (30.74 x 98.30 x 183.90mm)
Processor	32-bit MIPS R4Kc-class processor 183MHz
Flash	64 Mbit (8MB) of 3V supply Flash memory
RAM	256Mbit (32MB) of 16-bit 166MHz SDRAM
Ethernet	10/100 Base-TX Ethernet Port with PoE
Device Operating Temperature	0°C to 40°C (32°F to 104°F); Non-condensing
Power Source	9-48VDC
Operating Current	0.38A Typical @ 12V
Included Power Supply Requirements	115 VAC
Pre-Calibrated Sensor(s)	Yes
Temperature Sensor Range	-55°C to 125°C (-67°F to 257°F) (Optional -200°C to +200°C probe available at extra cost)
Temperature Sensor Accuracy	±0.5°C Accuracy from -10°C to +85°C
Temperature Sensor Datasheet	http://datasheets.maxim-ic.com/en/ds/DS18B20.pdf
Optional Temp/Humidity Sensor Range	-55°C to 125°C (-67°F to 257°F) 0% to 100% RH @ Operating Temperature
Humidity Sensor Accuracy	±3% from 11% to 89%RH
Temp/Humidity Sensor Datasheet	http://sensing.honeywell.com/index.php?ci_id=49692
Standard Sensor Cable Length	6 feet (1.8 meters)
Maximum Sensor Cable Length	200 feet (61 meters)
Network Requirements	WiFi Network (802.11 b/g/n) or Wired Ethernet
Wireless	802.11b/g/n, WPA/WEP security
Output Power	500mw
Antenna	2dbi (RPSMA)
Chipset	Atheros AR2315 chipset
Memory	32MB DRAM, 8MB Flash
Operating System	Open WRT
Installation Location	Indoors
Requires Computer Running	No

Software Requirements	Any current web browser
Hardware Requirements	Accessible WiFi Signal
Internal Battery Back-Up Operation	No
Internal Temperature Probe	No
External Temperature Probe(s)	Yes (1 to 4)
Pre-Calibrated Sensor(s)	Yes (1 to 4)
Expansion Options	1 to 4 Sensors Standard (Up to 20 Special Order)
Celsius and Fahrenheit	User Selectable
Real Time Temperature Alerts	Yes (email)
Alert Frequency (minimum)	1 minute
Alert Frequency (maximum)	9999 minutes
Continuous or One-Time Alerts	User Selectable
Email Alert	Yes
Multiple Email Address Alerts	Yes
Mobile Phone Text Alert	Optional with Sensor Cloud Service (Subscription)
Telephone Call Alert	Optional with Sensor Cloud Service (Subscription)
On-Line History Archive	Optional with Sensor Cloud Service (Subscription)
Action on Return to Normal	Email
PC Shutdown	No
Real-Time Temperature Graph	Yes
Browser Based Web Access	Yes - internal network or Sensor Cloud (Subscription)
Action on Fault	None
Data Logging	Yes
Data Log Format	Text, XML
Supports SMTP Authentication	Yes
SNMP	Yes
Software Upgrades	1 year free, Free with Sensor Cloud Service (Subscription)
Activation Cost	None
Monthly Fee	None
Cancellation Fee	None
Shipping Charge	None

(Standard)	
	Embedded Software
	6 ft. (1.8 m) External Temperature Sensor
Included with Unit	110/240 VAC Adapter (North America Plug)
Warranty	1 year
Money Back Guarantee	30 Days Risk Free

Troubleshooting

Unit Does Not Power On

Check to make sure the unit is connected to wall power with the included power adapter or the unit is connected to a PoE connection with a power injector. **PoE via powered hub or switch is not supported. You must use a power injector if you choose to utilize PoE.** If you are still unable to power on your unit (indicated by the power light on the front), please contact support@temperaturealert.com.

Cannot Connect to the Web Admin Interface

Check Connections

Ensure the unit is receiving power. For initial setup, ensure the unit is connected **directly** to your computer's Ethernet port. **Do not connect the unit to a router, switch or hub for initial setup.** After you connect the power, you'll need to wait about 1 minute for the device to fully boot up.

Check the Computer's Ethernet Settings

You'll also need to be sure your computer's Ethernet card is set to obtain an IP address automatically. If you still have trouble connecting to the unit's built in web based administrative interface, please contact support@temperaturealert.com.

Cannot Send Email

Check Internet Connectivity

Before an email can be sent, the unit must be configured for Internet access. Internet access can be setup on either the wired or wireless connections. See the section titled Connection Settings.

Check DNS and Gateway Settings

In order to send emails using the fully qualified domain name of your SMTP server, ensure that the DNS and Gateway fields on the SNMP settings page are set properly for the interface (wired or wireless), which is providing Internet access.

Verify Credentials

Most mail servers now require a username and password to send email. Please verify you are using the correct settings for your mail server.

Check Your Junk or SPAM Folder

Verify that the test and alert messages are not being automatically sorted into your junk or SPAM folder. You may need to white list the messages in your email client to prevent them from being sent to your Junk or SPAM folder. Please see your email client's documentation for more details.

Email support@temperaturealert.com if you continue to experience problems sending email.

Cannot Connect to a Wireless Network

Check SSID

The SSID is case sensitive. Please check to ensure you have entered the correct SSID.

No Temperature Reading

Ensure the Device has Started Up

After you connect the power, you'll need to wait about 1 minute for the device to fully startup. During this time, you may not see the web based admin site or you may not see any temperature readings on the site. After 1 minute, refresh the page and the sensor readings should appear.

Check Sensor Connections

Ensure there is at least one sensor connected to the sensor jacks on the side of the unit. The unit does not have any built in sensors. Remove and reseal the sensor from the jack and click the rescan button on the Alarm Settings page.

Contact support if you are unable to view a temperature reading with a sensor cable connected.

No Humidity Reading

Humidity Sensors are Sold Separately

The base configuration of the Temperature@lert WiFi Edition includes one temperature sensor. To obtain humidity readings, you will need to purchase a second sensor. Visit <http://www.temperaturealert.com> to view the sensors available for this unit

Perform the Steps for No Temperature Reading

The humidity sensor operates in a similar manner as the temperature only sensor. Please perform the same steps as listed in the No Temperature Reading section above.

Email support@temperaturealert.com if you are unable to view a humidity reading with a sensor cable connected.

Temperature Reading is a Few Degrees Warmer than it Should Be

Check Sensor Position

If the sensor is positioned near the exhaust fan of a server or other heat producing device, it will read a higher temperature than the rest of the area.

Comparing Apples to Apples

When comparing the temperature readings from the unit to another thermometer, it's important to be mindful of the following:

1. The margin of error of the comparison tool. Many thermostats will have a much higher margin of error than the Temperature@lert WiFi Edition's sensor.
2. The temperature gradient of the room is in three dimensions. Measuring the temperature in one part of the room can yield a different result than in another part of the same room.
3. Air temperature changes faster than the temperature of a large amount of liquid. For instance, the air temperature in a refrigerator may rise dramatically when the door is opened, but the temperature of the contents of the refrigerator will rise more slowly due to their increased thermal mass.

Temperature Reading is Wildly Inaccurate

Contact Support

This may indicate a defect with your sensor cable assembly. Please email support@temperaturealert.com for assistance.

Obtaining Service and Support

We've worked very hard to ensure that the Temperature@lert WiFi Edition monitoring solution is simple and easy to use. Of course, we do realize that questions and other issues can pop up at any time. So, we'd love to hear from you.

If you require assistance at any time, please visit <http://www.temperaturealert.com/> and click on the Support tab.

Technical support and free software upgrades are included within one year of your purchase.