



## The New, Ultimate Wave in Wireless Monitoring Technology FOR HEALTHCARE FACILITIES



**VERSATRAK™**  
WIRELESS





- Works with WiFi (802.11), 900 & 868 (for use in Europe) MHz & Many Legacy Products
- Adapts to Any Existing WiFi Infrastructure
- Self-Supervised with Retention Capability even during Power Outages
- Custom Interval Sensing for an Array of Healthcare Monitoring Needs
- NIST Re-certification Built In & Accomplished by a Few Mouse Clicks

## VersaTrak Hardware

*Leading the Field in Flexible,  
Compatible, Versatile, Powerful Wireless Technology*

### Mix & Match Flexibility

VersaTrak wireless monitoring hardware is designed to easily integrate into different wireless communications systems. This means existing 802.11 wireless technology likely can be utilized by VersaTrak. VersaTrak hardware is built to mix and match WiFi 802.11 g/b and 900/868 MHz battery-operated sensors, and will work with some legacy hardware from other, older wireless temperature monitoring systems. Where limited or no wireless infrastructure exists, VersaTrak hardware provides complete, cost-effective solutions that integrate easily into any network.

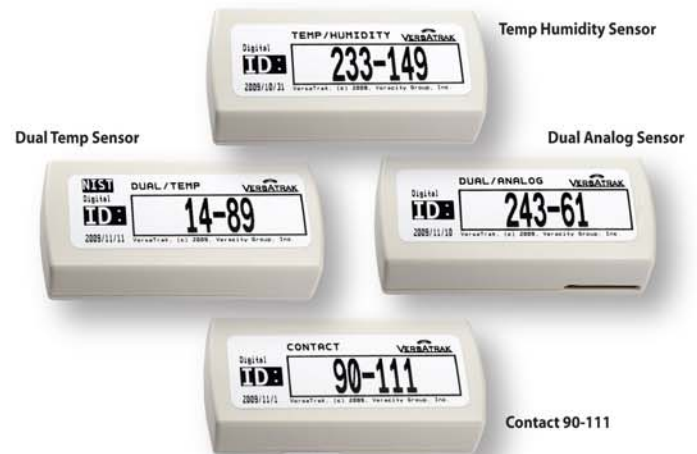
### New, Advanced WiFi Transmitters

**VersaTrak WiFi** transmitters are built with new advanced technologies. They are battery-powered 2.4GHz IEEE 802.11b/g radio transmitters, featuring an "energy-saver" onboard clock that controls the cycling to a low-power, quiescent state when not sampling. At user-determined intervals, sensors "wake up," sample temperature, and forward the sample to VersaTrak's software system.

Different than many other wireless systems, VersaTrak acknowledges receipt of temperature data from each sensor. If no acknowledgement is received, sensors automatically store and can resend data at the next transmission cycle. The store-and-resend feature protects against lost data, and continues to operate until all data has been received and acknowledged. This capability keeps data safe within the system, even during losses of power or communications.

### A Self-Supervised System

VersaTrak sends a "Missed Communication" alert to designated user personnel any time a component of the system fails to submit a routinely scheduled reporting packet. VersaTrak WiFi transmitters are equipped with both audible and visible alerting capacity to assure that no alarms will be missed. All batteries are monitored and any "weak" batteries are reported **before** failure occurs, thus eliminating the possibility of lost data due to battery failure.



VersaTrak WiFi users are able to select alarm limits for temperature and time out of range for each sensor. A built-in LED feature on the WiFi transmitter indicates the following conditions: alarm, alarm acknowledgement, and return to normal. The alarm-acknowledgement condition is indicated by a different LED flash sequence, and can be reset automatically by the VersaTrak system. The return-to-normal condition allows the user to determine the exact duration of an alarm condition.

At power up, the transmitter scans all available WiFi network channels (typically 1, 6, and 11). The transmitter associates with the 802.11 access point exhibiting the strongest signal (provided the security and encryption settings agree). This feature may be disabled by the user to allow operation of the transmitter on a fixed channel in order to optimize battery life.





Temperature Sensor

Digital Repeater

## 900 Plus Hardware

VersaHub



Digital Receiver

Another advantage of VersaTrak WiFi is that costly repeaters and receivers are not required in facilities with existing WiFi infrastructure. This advantage results in significant cost savings in both installation fees and hardware, and eliminates the need to install special power and network outlets for receiver and repeater hardware.

### WiFi & 900/868 Plus Capabilities

The VersaTrak 900/868 Plus frequency-hopping spread spectrum system is designed to be used wherever WiFi does not exist within a facility. Generally, there are some areas in every facility without WiFi 802.11 coverage. VersaTrak 900/868 Plus features FCC-approved high-powered radios, capable of transmitting over great distances.

VersaTrak 900/868 Plus utilizes an RF network of repeaters and base stations with built-in battery back-up. The RF network relays data back through the existing ethernet network to the VersaTrak server. As with VersaTrak WiFi transmitters, 900/868 Plus transmitters are battery powered, and provide the same battery and communication alerts.

### VersaTrak Broad Sensing Capability

Whether a WiFi solution, a 900/868 Plus solution, or a mix of each, the VersaTrak system provides the same steady, dependable, uniform performance. VersaTrak transmitters sample at least once per minute and transmit at least every five minutes. A variety of sensors are available to support both solutions, including:

**Temperature (single, dual and internal), Temperature/Humidity (internal and external); Contact-Door Open/Close; Analog Input (0-5v, 0-10v, and 4-20 mA); Pressure Differential; CO<sub>2</sub>; NO<sub>2</sub>; Water-Leak Detection; Steam Trap; and more.**

The VersaTrak system has the power to support virtually an unlimited number of sensors, repeaters and base receivers spread over hundreds or even thousands of locations.

**VersaTrak—The Wireless Wave for Today's Healthcare Facility Monitoring**

## New WiFi Hardware



WiFi Temp-Sensor

WiFi Temp Humidity 2

WiFi Temp-Humidity

Probe Connected to Temperature Sensor

WiFi Temperature Sensor

Probe

# WiFi Hardware

- Single and Dual Channel Units
- NIST Traceable
- 16 mW 2.4 GHz 802.11g/b Wireless Radio
- Communicates with Industry Standard 802.11 Access Points
- Configurable Alarm Utility with Return to Normal
- LED Status Indicator
- Up to 3-Year Battery Life
- Supports WEP 128 and WPA2-PSK (AES)
- Supports DHCP or Static IP Addressing
- Small Data Packets (~75 bytes or less)
- Temperature Channel Sampled Every 15 Seconds
- Channel Agility
- FCC, CE, and IC Class B Compliant

## Temperature Transmitter

PARAMETER	STANDARD PROBE	EXTENDED RANGE PROBE
RTD Power on Duty Cycle	2%	2%
Resolution	.1° C	.1° C
Accuracy 60-125 ° C	+/- .5° C	+/-1.3° C
Accuracy 30-60 ° C	+/- .3° C	+/-1.1° C
Accuracy 0-30 ° C	+/- .1° C	+/- .9° C
Accuracy (-50)-0 ° C	+/- .3° C	+/-1.1° C
Accuracy (-200)-(-50) ° C	N/A	+/-1.3° C
Battery Life	87,600 Transmissions	87,600 Transmissions
Storage Temperature	-40° to 60° C	-40° to 60° C
Probe Operating Temperature	-50° to 125° C	-200° to 125° C
Battery	1.5v Lithium L91 (2)	1.5v Lithium L91 (2)

## Temperature/Humidity Sensor

Operating Temperature	-40° to 60° C
Temperature Accuracy (@25° C)	+/- .4° C
Humidity Accuracy (20% to 80% RH)	+/- 3%
Sample Rate	15 seconds
Battery Life	87,600 Transmissions
Battery	(2) 1.5 vdc Lithium L91
Weight	5.0 oz.
Storage Temperature	-40° to 60° C



## 900 Plus

### Temperature and Humidity Transmitters

- Dual Channel (One External and One Internal)
- NIST Traceable
- ISM 900 MHz Spread Spectrum Frequency Hopping (902-928 MHz) @ 50mW
- 3- to 5-Year Battery Life
- Small Data Packets (~14 bytes)
- Temperature & Humidity Sampled Every 60 Seconds
- Fast Burst - Complete Message in < 30ms, Transmitting for < 4% of That Time
- Open Field Range: 2500 feet

### Temperature/Humidity Sensor

Operating Temperature	0°F to 140°F (-17°C to 60°C)
Temperature Accuracy (@25° C)	+/- 1°F (External), +/- 2°F (Internal)
Humidity Accuracy (20% to 80% RH)	+/- 2% between 10% & 90% RH
Sample Rate	15 – 30 Seconds
Battery Life	3 – 5 Years
Battery	2/3rd 3V Series Lithium Ion Battery
Weight	5.0 oz.
Storage Temperature	-40° to 60° C

Some accuracy can vary based on the probe/sensor type. If there is a variance it will be noted on the specific probe. Please refer to the probe/sensor section.

## VersaTrak Genesis

### VersaTrak Genesis

The VersaTrak System is a design that incorporates the refinements of more than 12 years' developmental experience in the field of wireless monitoring in critically important healthcare applications.

VersaTrak truly is the "next generation" in wireless temperature and condition-monitoring systems. Developed by the creators of TempTrak®, the VersaTrak system utilizes the most current standards in wireless sensor technology, while maintaining compatibility with some older legacy systems. VersaTrak features more tools than any other system on the market today,

and is designed to reduce rather than add to the burdens of the hospital staff, while favorably impacting the need for improved patient safety. VersaTrak meets or exceeds all standards of regulatory compliance.



*Log in to a  
new, easier,  
more  
convenient  
world of  
healthcare  
monitoring*

## No More Laboring Over Paper Log Sheets

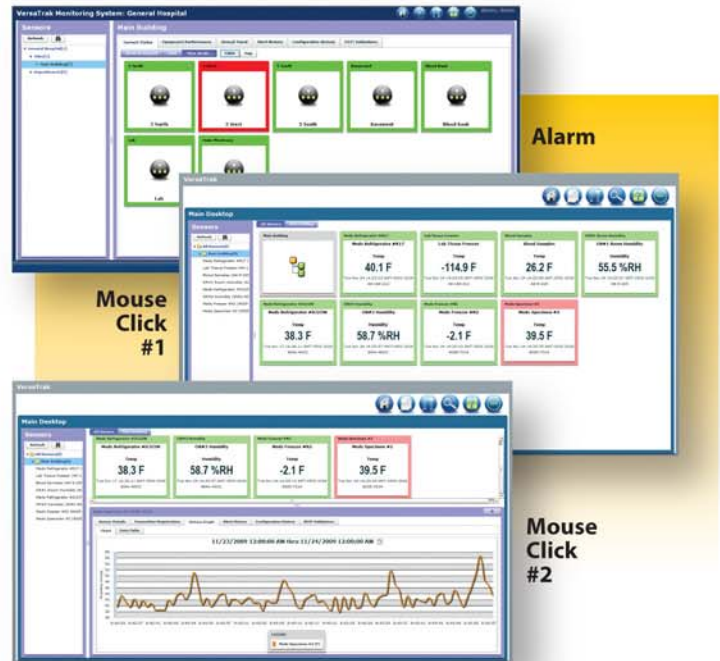
VersaTrak provides complete, reliable, precise temperature and condition monitoring for healthcare environments. The software was designed from the ground up, around reliability and ease of use, incorporating every nuance of a broad knowledge base gained from over a decade of research, development, field application, installation and operational experience in wireless systems. VersaTrak designers created a software system that is feature rich, yet easy to use, forever eliminating paper log sheets and the labor needed to maintain them. Reporting essential data has never been easier. Older monitoring systems generally have dozens upon dozens of reporting screens. All those screens have been reduced to just a handful with VersaTrak. Archiving historical data is as simple as it gets with VersaTrak. A simple, yet comprehensive list of audit logs keeps track of every move within the system, and printing reports is a snap.



*VersaTrak features an operational “dashboard” screen that allows users to see the overall monitoring regimen for a facility in performance terms, either in bar or pie chart graphics; all data in one, easy-to-access location.*

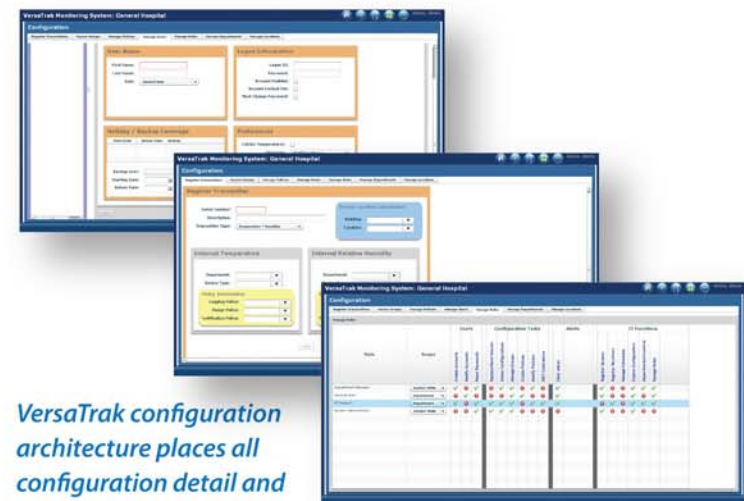
The real challenge is what is done **after** a problem has been detected. That’s where VersaTrak benefits your operation most. The VersaTrak software has been designed to collect and track corrective actions. VersaTrak automatically initiates the corrective action process, and completes that process in a single step.

VersaTrak truly is the first enterprise-wide solution, because its architecture allows wide-ranging access to a single system, while providing a high-level of security and performance. VersaTrak features accommodate campus-style facilities and hospitals with satellite departments and clinics.



*Current status within this general hospital setting shows a problem on 3 West; one click takes the user to the problem out-of-temp range meds specimen unit #2; and one further click provides a performance-history graph for the time period selected by the user, all with straight, direct-path drill-downs.*

Users are able to access and share the same information and reports within a single system, avoiding the log-in/log-out hassles and problems of patchwork software applications claiming enterprise-wide coverage. VersaTrak provides multiple language support triggered by the user’s ID, thus eliminating the language barriers prevalent in many systems.



*VersaTrak configuration architecture places all configuration detail and security/access protocols in one place, and not scattered throughout the system. All contact, address, holiday and vacation information on each employee is centrally located for easy, accurate notification.*



VersaTrak software and hardware combine to create the most powerful, versatile system available today. VersaTrak provides the ability to:

- Check temperatures at 1-minute intervals or less
- Report temperatures at 5-minute intervals, unless a problem arises, prompting an immediate report
- Power sensors by battery, or hard wire with battery backup
- Fully integrate sensors into VersaFridge refrigerators/freezers (sister products)
- Cover any healthcare facility or clinic, no matter how intricate or far-flung

VersaTrak can provide a specific solution for your healthcare monitoring needs, whether that means ten temperatures or 10,000, one building or hundreds of them.

In addition to the array of standard sensors (temperature, humidity, pressure differential, CO<sub>2</sub>, NO<sub>2</sub>, door status, and others), VersaTrak offers waterproof wireless data loggers that can be used for transportation of goods (food, blood, etc) across the hospital or across town. Also, the system supports an entire line of wireless indoor air quality sensors. The system combines WiFi and 900/868 MHz technology to leverage existing infrastructures and reduce deployment costs.

### NIST Certification a Snap with VersaTrak

VersaTrak virtually eliminates the expense and dramatically reduces the time needed to perform NIST recertification of hardware devices used to monitor temperatures and other tracked functions in hospitals. VersaTrak features **Automatic NIST Calibration** (ANC) built-in devices within its circuitry systems (patent pending). The ANC feature automates the entire recertification process required by the National Institute of Standards and Technology. Actual testing is performed remotely, from any computer on the network, and is achieved through a few simple mouse clicks. Testing for recertification can be performed on one device, on a group of devices, or facility-wide, at any time, depending on your needs. The ANC feature is available for both WiFi and 900/868 Plus systems.

*Tool bars provide instant access to equipment performance data in real time, giving up-to-the minute detail on all parameters built into the configuration protocol.*



*NIST certification detail and calibration reports are built into VersaTrak system capabilities (patent pending), reducing the time and expense of NIST recertification a few mouse clicks, and a huge advantage for your health-care facilities.*

Before you decide to buy any wireless monitoring system, check the advantages of VersaTrak, the new, ultimate standard in wireless monitoring technology.

# Software Features

VersaTrak utilizes the latest Microsoft.Net development platform.

- VersaTrak is a browser based application using Microsoft® IIS and Internet Explorer (with the Flash Player plug-in). There is no need for any custom software to be installed on user's PC. Access is available through any PC connected to the facility's network.
- Developed using the most current Microsoft development tools
  - VersaTrak is VM compatible
  - Supporting Windows Server 2005 and 2008, Windows 7
  - SQL Server 2005, 2008 and 2005 Express Edition
  - Supports 32 and 64 bit systems
  - Active Directory Authentication Support
  - Security to support and secure each department within each facility with multiple levels
- Robust and Intuitive Easy-to-use User Interface
  - Streamline Configuration for:
    - System Settings
    - Sensor
    - Alerts
    - Policies
  - User and Sensor Groups with Multiple Level Support
  - System Notifications and Escalations
  - Multi-Language Support based on User ID
  - Multi-Location, Multi-Time-Zone Support
  - Complete NIST Tracking and Recertification
  - Multi-Tier Alert Levels – Low, Medium, High
  - System Notifications – E-mail, Pagers, Enhanced Pop-ups, Cell Phones, Contact/Relay Switches, LED Message Boards, Voice, etc.
  - Complete System Audit Logs
  - Detailed Tracking and Documentation of All Corrective Actions
  - Self-Supervising System (All Components, including Hardware, Communication & Batteries)
    - Low and Failing Battery Alerts (2-3 weeks prior to failure)
    - Missing Sensor Alerts
    - Broken Probe Alerts
    - Missing Hardware or Missed Communication from a Piece of Hardware
  - Complete Data Archiving and Date Review without the Need to "Restore" Historic Data
  - Regulatory Compliance - JCAHO, AABB, CAP, HACCP, FDA, 21 CFR Part 11 Compliant

## VersaTrak Transport

VersaTrak Transport is ideal for tracking temperatures of sensitive items that are on the move. Use it for food, blood, or other perishables that need to be tracked and maintained at specific temperatures.

- Wireless Waterproof Transmitters
- Flashing LED Light Indicates Alert Condition
- Supported Temperature Ranges (-40°C to 60°C. -40°F to 140°F)
- Automatically Downloads Data when in Range of Wireless Network
- Accuracy +/- .3°C
- Temperature-Sampling and Alert are User Configurable
- Up to 5-year Battery Life
- All Collected Data is Stored, Presented and Alerted Within VersaTrak
- Sensors Report Real Time while in the Facility and will go into "Data Logging" Mode Automatically

## VersaTrak Support Help Desk

The 24/7 VersaTrak Help Desk is staffed by a team of knowledgeable, friendly individuals, all of whom are committed to delivering superior customer support. Staff members are available 8a.m. to 8 p.m. eastern time to assist with any questions you may have, and 24/7 for system emergencies, at 1-888-369-3601.

The VT Help Desk is equipped with today's most current remote support and diagnostic tools. Feel free to call for help any time. We are here for one purpose, to help you.

When you subscribe to a VT Support Contact, you not only receive fast, friendly support, but automatically receive all new software releases, updates and new hardware notifications as well. VersaTrak will always check for the most current version and notify you that there is an update available. It is as simple as a click and you are up to date. Need help? Just call. VT support is ready to assist.

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