

SENSAPHONE® IMS-4000 Infrastructure Monitoring System

MONITOR WHAT YOU WANT



DELIVERED THE WAY YOU WANT



THE SENSAPHONE IMS-4000 MONITORS AND REPORTS THE INFORMATION THAT YOU NEED TO KNOW:

Get critical environmental status information, such as temperature trouble, humidity problems, power outages, unauthorized access, and more, sent directly to you.

Receive instant notification through a voice telephone call, an alpha-pager message, an e-mail message, an SNMP trap, or a fax report.

Monitor important IP devices in single rooms, in buildings, across the city, even across the country.

Control power to your equipment.

Scale your needs to match your growing infrastructure. Monitor one room or an entire network. Add up to 32 networked IMS devices.

Introducing the Sensaphone® IMS-4000, a stand-alone infrastructure monitoring system with an integrated voice and modem, an internal UPS, flash-disk storage, and a web server, in a simple-to-install 1U rack-mountable package. From the wide array of its plug-and-play monitoring devices to its sophisticated software, the IMS-4000 is a complete, flexible, integrated system.

With the IMS-4000 you can sleep at night, because it's on guard . . . watching your world.

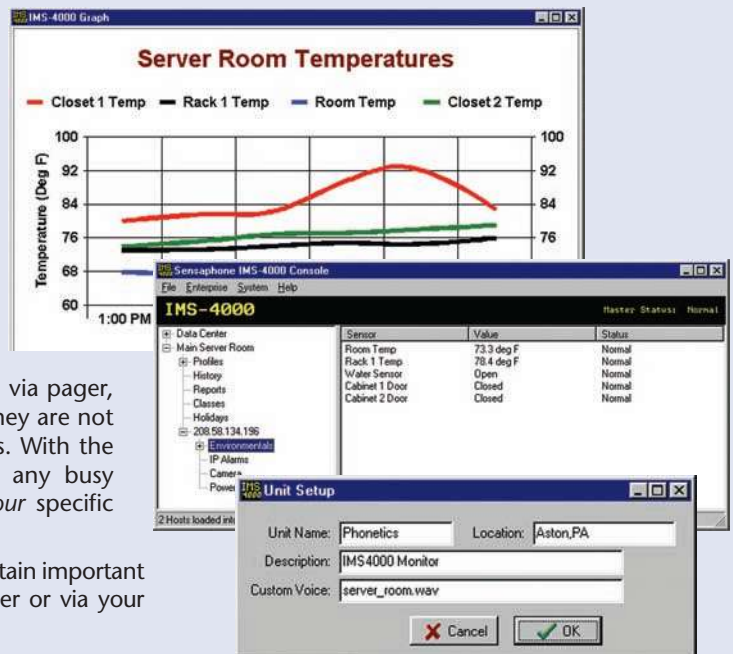
The IMS Console: Your gateway to enterprise-wide monitoring capabilities.

From this Windows™ interface, you can configure the system, review historical events, determine the status of all monitored network devices, and create and maintain alarm schedules. The IMS Console software is included with each IMS-4000 and is a multi-user network-based application. Whether you are accessing the system from your LAN or from a workstation at home via the remote dial-in access port, you utilize the same easy-to-use interface.

Following detailed options you have specified to the IMS, environmental alarms and network events are sent to you immediately. Through User Profiles, events are sent to you only when you have decided you need to know about them—by day, shift, holiday, or time zone.

A user may wish to be called at home first, then contacted via pager, and finally on a mobile telephone. Users can specify that they are not to be called during certain time periods or on certain days. With the IMS-4000 scheduler, users can match alarm delivery to any busy schedule. Alarms and events are configured to match *your* specific schedules.

With the embedded Web Server, you can quickly and easily obtain important status information and historical data through a web browser or via your Web-enabled wireless device.



Comprehensive Monitoring

Environmental

Monitor critical environmental conditions such as Temperature, Humidity, Smoke, Sound Level, Motion, Water, Intrusion, and Power Outages with the IMS-4000 Host and Node. Each Host and Node unit supports up to eight Environmental Sensors.

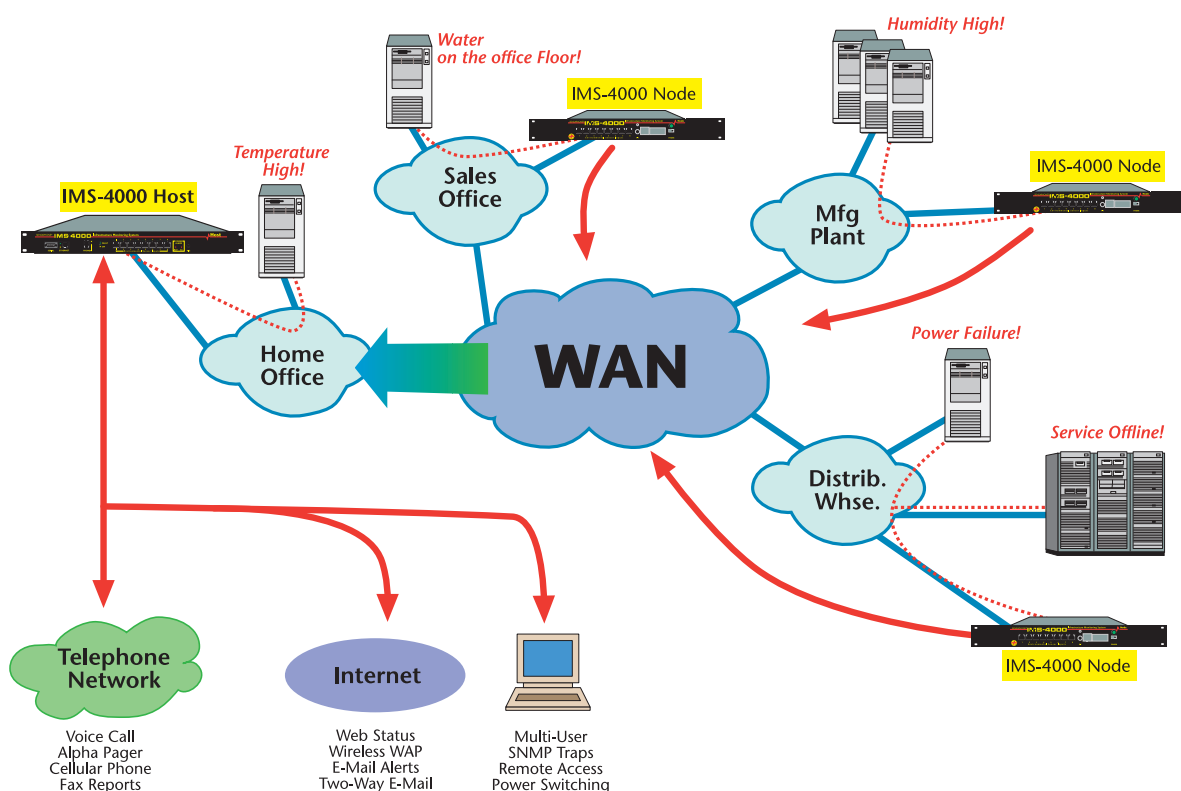
When a sensor exceeds the threshold you configure—high temperature for example—you are notified by the IMS-4000 about the condition. Lights on the face of the IMS Host instantly reveal any outstanding problems. With sound level monitoring you can be notified if an audible alarm goes off, and you can remotely listen in, via the Host unit, to the server room to assess the situation yourself at any time.

Device

The IMS-4000 monitors IP Devices through pinging and port availability. When a network component becomes unavailable, the IMS-4000 notifies you about which IP device is unavailable. You can monitor the status of network links, routers, printers and servers—any device which has an IP address.

Each IMS-4000 Host and Node can monitor up to 64 devices. When a device does not respond to the IMS query, it contacts you immediately to alert you to the situation.

Local and Enterprise-Wide



System Capacity and Expansion

Each IMS-4000 Host monitors up to eight environmental conditions via sensors you attach. The IMS-4000 Host also monitors the power where it is plugged in. And that's not all: Each IMS Host continually monitors the availability of up to 64 IP addresses on your network. When a device is unreachable for a period of time you specify, you are immediately notified.

For larger networks and campus environments there is the IMS-4000 Node. Each IMS Node added to your network gives you eight additional environmental inputs, the ability to monitor another 64 IP addresses, and additional power monitoring. Up to 31 IMS Nodes can be managed from one IMS Host unit, giving you the capacity to monitor 256 environmental elements, 2048 IP addresses, and power in 32 separate locations.

Comprehensive Communication

Alarm

When a problem occurs in your network, the IMS-4000 will find you and notify you of the problem no matter where you are. Multiple communication interfaces—Ethernet port and standard telephone interface—guarantee that you get the message. You receive early notification before a problem turns into a disaster. The integrated modem/voice interface of the IMS-4000 Host means network events and environmental problems are sent to you in your own voice. When all you have is a phone, you will still know what's going on in your network. You get the message fast. Anytime, anywhere.

Status

Curious about your network? You can always obtain status information about your infrastructure—anytime, anywhere.

Call into the IMS-4000 using your computer's standard dial-up networking. The IMS Console software operates the same remotely as it does locally for complete management and control of your IMS system. If you're not near a computer, then just pick up any phone and call into the IMS-4000: It will tell you in a real voice report the status of all conditions.

The IMS-4000 Two-Way E-mail tool even allows you to obtain important information about your infrastructure from any E-mail-capable device. Simply send the IMS-4000 an E-mail message and it will instantly reply back to you with status and alarm information.

Alarm Notification

Voice Call
Text Pager
E-Mail
SNMP
Fax

Check Status

Voice Call
Two-Way E-mail
Web/WAP
Remote Dial-In
IMS Console™

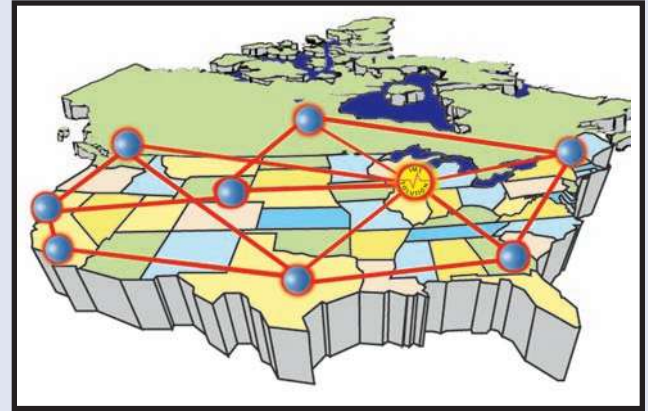
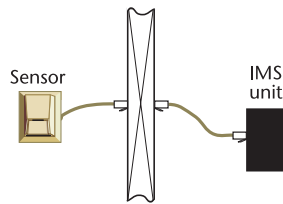
Easy Installation

Each IMS Solution Sensor connects to the Host or Node input with an RJ45 jack. Because the sensors utilize your existing Category-5 structured wiring system, no special wiring or schematics are needed to install them.

Simply locate where you want to place a sensor, attach a standard patch cable, plug it into your patch panel and do the same in your server room to connect your sensor to the IMS-4000. It's no different than wiring up a workstation or a printer.

Once connected, the IMS-4000 will automatically recognize the type of sensor installed and configure it for you, using a standard template that you can modify at a later time. Because the IMS-4000 supplies power and configuration data for each sensor, the IMS-4000 can detect faults with your sensors: If there's a cable disruption or your sensor is accidentally unplugged, you'll know it.

Each IMS Host or Node attaches to your Ethernet network via the IMS Network Interface for monitoring of your network events.



IMS-4000: The Scalable Solution

Whether your monitoring needs are a single server room or a wide-area-network, the IMS-4000 is the solution that will grow with your needs. Each IMS-4000 network begins with an IMS-4000 Host unit. From the Host you can network up to 31 additional remote monitoring Nodes, extending the reach of your IMS Solution.

- Each Host supports up to 31 IMS-4000 Nodes
- Host and Node each monitor 8 environment conditions
- Supports 64 IP addresses per Host and Node
- Internal battery backup
- 1U rack-mountable configuration, or wall-mountable
- 230/115v auto-power sensing

100% Fault Tolerant

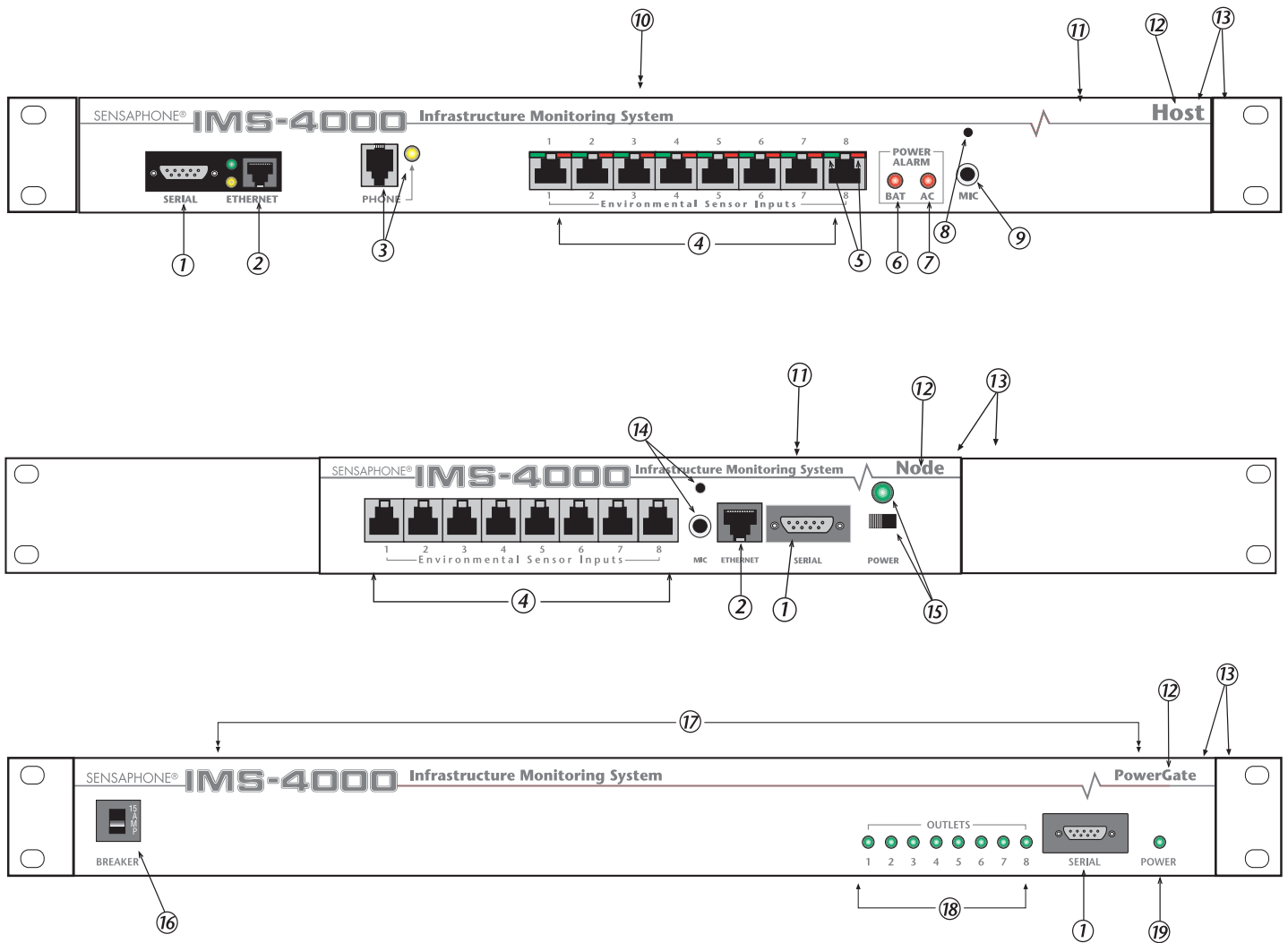
The IMS-4000 is designed to be fault-tolerant, because it has to be. Host and Node have no moving components—non-volatile storage makes disk problems impossible. Each unit contains its own internal UPS so that power failures will not stop the IMS from getting the message out that your infrastructure is in trouble.

And that's not all. All supported sensors are continually supervised. If a cable failure occurs in your infrastructure, you'll be notified. And with the use of the IMS Dry Contact Bridge, you can monitor devices such as your air conditioner or UPS.

Collect Data for Information Protection

Full event-history and trending are provided with the IMS-4000 Data Logging feature. User-selectable sampling lets you store critical temperature, humidity, or other environmental information about your infrastructure by the minute, hour or day.

Use the data for graphing, database, or auditing purposes. Events are recorded for review: user access, alarm detection, dispatch, and alarm acknowledgment. Everything you need for a reliable and consistent audit trail.



1. DB9 Serial Port. Used for initial setup of the IMS-4000 unit and to connect to/from the IMS PowerGate outlet device.
2. Ethernet Port connects your IMS-4000 to your network.
3. Telephone jack connects your IMS-4000 Host to the telephone network. The yellow Phone Status LED shows if the phone line interface is in use.
4. Eight environmental inputs support all of the IMS sensors with standard RJ45 connectors.
5. Red and green lights show the real-time alarm status of the environmental inputs.
6. Battery Alarm indicator shows the status of the internal battery backup system.
7. AC Power Alarm indicator shows the status of the AC power line into which the IMS is plugged.
8. Internal microphone for sound level alarming and remote listen-in.
9. Microphone jack for attachment of the IMS Remote Mic for sound level alarming and remote listen-in.
10. The IMS-4000 includes a standard PC-type grounded power cord.
11. Internal UPS battery backup holds operation for several hours after utility power has been interrupted.
12. Identifies your IMS-4000 unit as the main Host, Node, or PowerGate unit.
13. Rack-mountable 1U high, 19" mounting configuration. The IMS-4000 can also be mounted on a wall with the IMS wall-mounted kit purchased separately.
14. Built-in mic and external microphone jack in Node unit are for detecting sound level alarms.
15. Power On/Off switch and Green LED power indicator on the Node unit.
16. 15 AMP breaker on the PowerGate unit.
17. Eight Power Outlets on the back of the PowerGate Unit.
18. Eight LEDs, indicating the on/off status of each outlet.
19. LED indicates that the PowerGate is plugged in and receiving power.



IMS-4000 Sensors & Accessories



The heart of the system is the IMS-4000 Host. It manages all monitoring, alarming and configuration functions. For each IMS unit, Host or Node, you can monitor up to eight sensor inputs. You can have up to thirty-two IMS units in your network managed from one IMS Console. Additional IMS-4000 Nodes can be installed throughout your building or network to monitor conditions wherever you need. A full complement of IMS-4000 Solution Sensors are available to handle your growth and your environmental monitoring needs.



Temperature sensor for mounting on a wall or flat surface or gang box. Available with a display for local viewing of current temperature.

Mini-Temperature probe for mounting in tight places such as in equipment bays, on cooling fans, inside server farms, or on relay racks.

Humidity sensor for mounting on a wall or flat surface or in a gang box. Available with a display for local viewing of current relative humidity.

Water Detection sensor for detecting presence of water on the floor or in a false ceiling. The sensor comes with one WaterRope™ cable. Multiple WaterRopes™ can be connected to extend the reach of the sensor. Additionally, the Water sensors can be daisy-chained to further expand your water sensing needs.

Smoke Sensor detects the presence of fire or smoke and sounds an audible alarm as well as notifying the IMS-4000 of the condition.

Motion detection sensor using passive-infrared to detect movement.

Power Outage sensor allows for monitoring of additional power sources at outlets and UPS systems.

Axis® Network Camera: The IMS-4000 supports the Axis 2100 Network Camera. Each Host or Node can support a single camera—for a total of 32 cameras network-wide provide crisp images and streaming video from anywhere on your network. No PC is required—the Plug and Watch™ digital camera can be placed wherever there is a LAN connection. View images from any browser on your network or directly from the IMS-4000 Console software. Even have snapshots e-mailed directly to you anywhere.

PowerGate: Control up to eight power outlets remotely with the IMS PowerGate, providing for manual or automatic control of power. You can remotely reboot critical gear via e-mail or touch-tone telephone, or through events which occur in your network.

SENSAPHONE®
IMS-4000 ...Watching Your World

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