SENSAPHONE®
REMOTE MONITORING SOLUTIONS

30 Anniversary
1985 - 2015

MADE IN USA

HOW LONG BEFORE **YOU** KNOW
SOMETHING IS WRONG?

Countless industries depend on Sensaphone for the most comprehensive remote monitoring systems available. When you need to be absolutely sure a remote site is stable, secure, and monitored around the clock, there's no substitute for certainty.

SENTINEL
— CLOUD BASED MONITORING —

- Real Time Web-Based Monitoring
- Unlimited Datalogging & Trending
- Comprehensive Alarm Notification

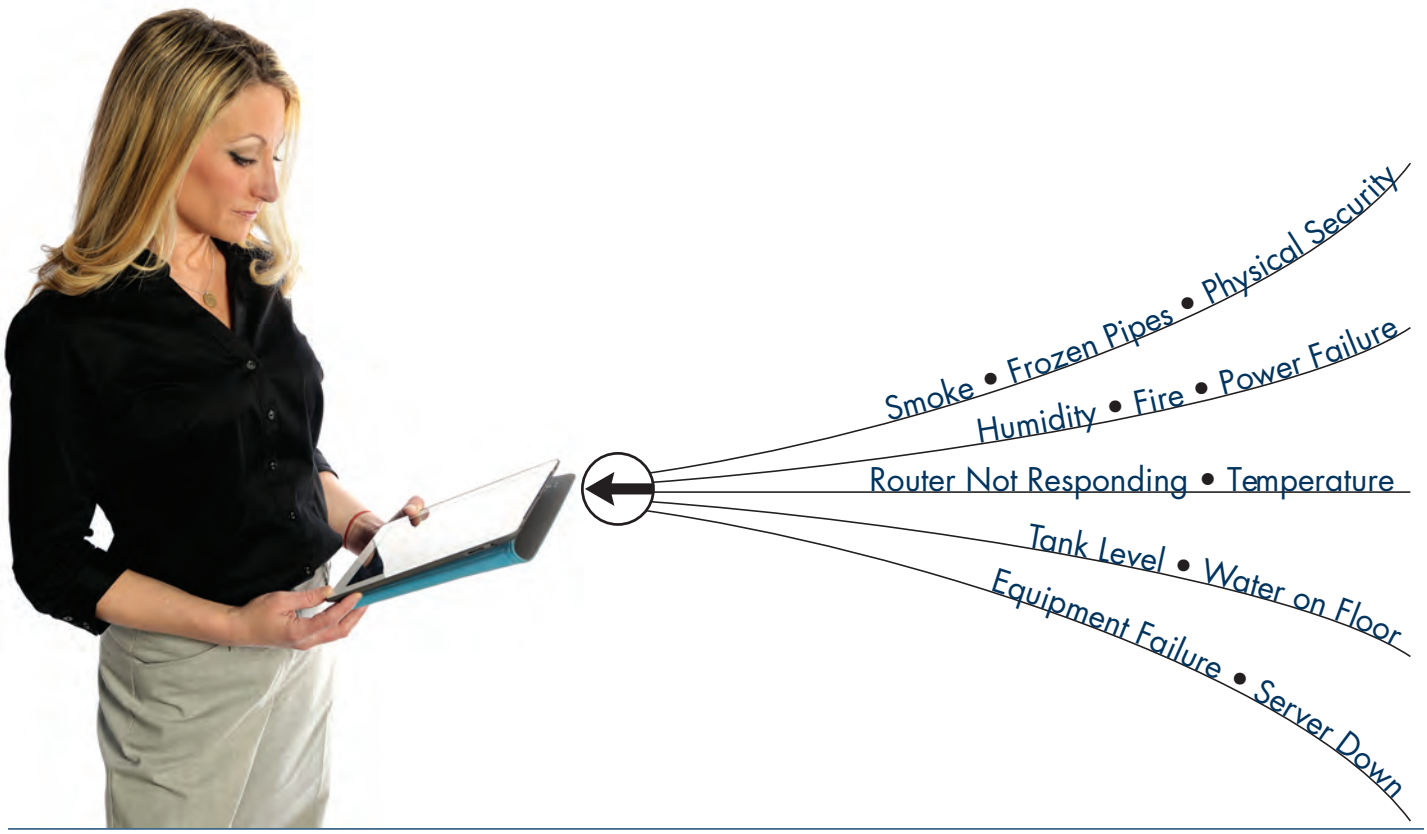
NOW ADD WIFI CONNECTIVITY

A high-speed, long-range outdoor wireless bridge adds Wi-Fi connectivity to any network based Sensaphone

Family owned and made in the USA since 1985

901 Tryens Road • Aston, PA • 19014 | PH 877.373.2700 | www.sensaphone.com

What is a Sensaphone?



24/7 Monitoring

A SENSAPHONE monitors a remote location and contacts you when problems are detected. You can check at any time to make sure everything is okay.

Alarm Notification

SENSAPHONE products can notify you in a variety of ways when a problem is detected. They can call you on the phone and talk to you about an event that is occurring. They can even fax you, page you, e-mail you, and more. As soon as a situation arises, the Sensaphone will find you and tell you about it.

Real Time Status

Even when there are no critical events, you can always check the status of your remote site to give you peace of mind. You can make a phone call and hear the Sensaphone tell you that everything is okay, or you can check the live status on a website on select Sensaphone products.

If you have something important at a remote site, then you need a SENSAPHONE to watch it for you.

Why Choose Sensaphone?

Sensaphone products are designed to help you watch over a remote facility. Our range of Sensaphone solutions can instantly inform you when conditions are less than perfect, plus you can check on the status at anytime. Sensaphone is the leader in Remote Monitoring with over 25 years in business and over 350,000 installed systems worldwide.

Our vast experience has helped us to design products that are reliable, easy to use, flexible, and affordable. Listed below are just some of the reasons that Sensaphone is the best choice for your remote monitoring application.

No Monthly Fees:

Typical security systems charge you a monthly fee, which can add up to several hundred dollars per year. Most Sensaphone products do not have a monthly fee. You buy the product and program it to directly notify anyone you want without the cost of a central service.

Real Sensor Values:

We design our products with universal inputs that can read actual temperature values, tank levels, or other sensor information. You will always know the actual value of the monitored condition whether it is just okay or not okay.

Battery Backup:

All Sensaphone products either include battery backup, or offer it as an inexpensive option. Unlike other systems, when the power goes out, your Sensaphone product will continue to operate and deliver alarms and status.

Maximum Flexibility:

Solutions are available from Sensaphone to notify you using custom voice phone calls, e-mails, text messages, faxes, SNMP traps, and more. Our products can communicate using phone lines, ethernet, cellular, or satellite.

Remote Access:

Whether it's one of our phone line products, satellite products, or web-based products, there is always the ability for you to make programming changes remotely. With Sensaphone, you always have access to your critical information.

No Dependencies:

Most Sensaphone products are standalone solutions. The Sensaphone communicates directly to you and does not rely on the operation of a computer, server, or the response of a central service.

Field Proven in Sensitive Applications:

Sensaphone products have been successfully deployed to monitor the most sensitive applications including: emergency vaccines, medicines, tissue samples, blood banks, Homeland Security emergency response materials, military weapons systems, and countless others.

Innovation:

We have our own in house engineering team that is always busy. The Sensaphone tech team is constantly working on current and future technologies to make our products even more powerful and easier to use. Sensaphone currently owns three US Patents for our unique technologies.

Easy To Use:

One of the most obvious differences between Sensaphone products and any similar system is the ease of use. We make it a priority to make the programming and setup of our products to be as simple and clear as possible. Our programming interfaces are designed to be intuitive and not use any complicated codes or commands that you will see in other systems. Some of our products, like the IMS Series, will even automatically detect what type of sensor you have connected and configure it for you. And if you need any assistance with your Sensaphone product, our owner's manuals are very extensive with many examples and pictures. And if you still need more help we offer unlimited, toll free, telephone technical support. Just call us and we will walk you through it.

Made In The USA:

Sensaphone is based in Aston, Pennsylvania where we design and build our products. All aspects of the engineering design, manufacturing, servicing, testing, and support, are performed here in the United States.

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Table of Contents

Sensaphone wants to make the purchasing of your unit as accurate and painless as possible. Over the course of decades of environmental monitoring experience, we put together this guide to give you an understanding on what are the key monitoring factors for your application. Inside you will find information on which unit will best fit your application's specific needs. If you're not sure where to start take a look at our suggested basic monitoring packages. Several different popular advanced options are also recommended for each application.

Data Center

From small computer rooms to large data centers located around the globe, Sensaphone has an alarm monitor to fit your application. Sensaphone network based monitors are designed to detect, alarm, and notify you of any unfavorable condition immediately, regardless of where you are.

Water Treatment

Sensaphone systems are a perfect fit for the remote monitoring of water plants, labs, and other facilities. Operators in the water, wastewater, and environmental remediation industries use Sensaphone equipment to monitor water and wastewater treatment and management, pumping stations, operating equipment, labs, and offices.

Residential

Sensaphone products monitor residences for environmental conditions that could be potential threats to an unattended home such as temperature, humidity, and the presence of water. They also monitor for power outage, high sound alarms, and can even allow remote thermostat control.

Cold Storage

Faulty compressors, power outages, or doors left ajar can cause a major catastrophe in your Cold Storage environment. Prevent substantial financial loss by receiving early warning alarm notifications with a recommended Sensaphone product.

Livestock

Sensaphone systems monitor temperature, power failure and surges, ventilation/fans, smoke & fire alarms, and alert to condition deviations before damage to animals or inventory occur. The Sensaphone line helps ensure that environments are always under control with optimum conditions.

Greenhouse

A Sensaphone can monitor a greenhouse for extreme temperature fluctuations, frost protection, frozen irrigation lines, heater, and fan failures. From small nurseries to large commercial greenhouse facilities, Sensaphone protects 24 hours a day, 7 days a week.

Oil & Natural Gas

Sensaphone offers two solutions – either satellite or cellular based – to monitor power failures, temperature, tank levels, pressure, flow, and other selected conditions–helping oil and gas operators protect against equipment damage and downtime.

HVACR

Keeping indoor environments comfortable and safe can require many moving parts. Sensaphone products remotely monitor unattended HVAC units such as chillers and boilers. The Sensaphone line helps ensure that environments are always under control with optimum conditions.

Sensaphone Monitoring Systems

Sensaphone Sentinel . . . . . .pg 16
- Manage multiple devices from one account .
- Access status and programming from a mobile app or desktop.

Sensaphone Sentinel with Cellular . .pg 18
- Uses wireless cellular, no need for a phone line.
- Access status and programming from mobile app or desktop.

Sensaphone CELL682. . . . . .pg 20
- Uses wireless cellular, no need for a phone line.
- Website to access status and programming.

Sensaphone SAT4D . . . . . .pg 22
- Able to monitor very remote locations by using direct satellite communications.

Sensaphone WEB600. . . . . .pg 24
- Web based system with data logging.
- Flexible sensor options, including 4-20mA analog.

Sensaphone WSG30. . . . . .pg 26
- Accepts up to 30 wireless sensors.
- Works with existing HMI systems.

Sensaphone 400/800 . . . . . .pg 28
- Convenient telephone calls for alarms and status.
- Best way to monitor a vacation home without a monthly fee.

Sensaphone 1400/1800 . . . . . .pg 30
- Able to monitor outdoors and in harsh environments.
- Monitors temperatures as low as -85°C.

Sensaphone 2800 . . . . . .pg 32
- Accepts 4 wireless and 4 hard-wired sensors.
- Monitors temperatures as low as -85°C.

Sensaphone Express II . . . . . .pg 34
- Expand inputs and outputs to 40.
- Voice guided keypad interface.

Sensaphone SCADA 3000 . . . . . .pg 36
- 16 inputs, 8 outputs standard with expansion available.
- Free HMI software.

Sensaphone Monitoring Sensors & Accessories

Temperature Sensors . . . . . .pg 40
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Water Detection Sensors . . . . . .pg 44
Power Sensors. . . . . .pg 45
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Sensaphone IMS Monitoring Expansion, Sensors & Accessories

Sensaphone IMS-1000. . . . . .pg 54
- Effective infrastructure monitoring and alarm notification for a single location.

Sensaphone IMS-4000 . . . . . .pg 56
- Effective infrastructure monitoring and alarm notification for multiple locations.

IMS-4000 Node . . . . . .pg 58
IMS-4000 Dual Relay Output Module . . . . . .pg 59
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Sensaphone Product Comparison

	Sentinel	Sentinel w/ Cellular	CELL682	SAT4D	WEB600	WSG-30
Inputs	12	12	14	4	6	Up to 30
Outputs	1	1	2	0	1	0
Input Type						
Dry Contact	✓	✓	✓	✓	✓	✓
Thermistor	✓	✓	✓		✓	✓
Temp Sensing Range	-109˚ to 168˚F	-109˚ to 168˚F	-100˚ to 124˚F		-109˚ to 168˚F	-109˚ to 115˚F
4-20mA	✓	✓	✓		✓	✓
Wireless Sensors						✓
I/O Expansion						
Sound Level Monitoring						
Remote Programming	✓	✓	✓	✓	✓	✓
Ladder Program/PID						
Pump Control			✓			
Alarm Notifications	Unlimited	Unlimited	24	14	32	32
Alarm Delivery						
Offline Status Alarm	✓	✓				
Voice Phone Call	Optional	✓	✓	✓		
Email	✓	✓	✓	✓	✓	✓
SMS Text Message	Optional	✓	✓	✓	✓	✓
Internal Web Server					✓	✓
Audit Trails & Reporting	✓	✓				
Mobile App	✓	✓				
Web Status	✓	✓	✓	✓	✓	✓
Datalogging	✓	✓			✓	✓
Communication	Ethernet	Cellular	Cellular	Satellite	Ethernet	Ethernet
Enclosure	Metal	NEMA-4X	NEMA-4X	NEMA-4X	Plastic	Plastic
Mounting	Table or wall	Wall	Wall	Panel or Pole	Table or wall	Table or wall
Battery Backup	✓	✓	✓	✓	Optional	✓
Monthly Fee	Optional	✓	✓	✓	No	No

400 | 800	1400 | 1800	2800	Express II	SCADA 3000	IMS-1000	IMS-4000
4 | 8	4 | 8	4/4 (1)	8-40	16-144	8	8-256
1	1	1	1-17	8-32	1	Optional
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
-20˚ to 150˚F	-109˚ to 168˚F	-109˚ to 168˚F	-85˚ to 300˚F	-100˚ to 300˚F	-122˚ to 140˚F	-122˚ to 140˚F
	✓	✓	✓	✓	✓	✓
		✓				Opt
			✓	✓		✓
✓	✓	✓	✓			✓
✓	✓	✓	✓	✓	✓	✓
				✓		
				✓		
4 | 8	4 | 8	8	48	64	64	512
✓	✓	✓	✓	✓	Optional	✓
					✓	✓
					✓	✓
					✓	✓
				(2)	✓	✓
				✓	✓	✓
Phone Line	Phone Line	Phone Line	Phone Line	Phone Line	Ethernet (Optional Phone)	Ethernet & Phone
Plastic	NEMA 4X	NEMA 4X	NEMA 4X	Metal	Metal	Metal
Table or wall	Wall	Wall	Wall	Wall	Rackmount or Tabletop	Rackmount or Tabletop
✓	✓	✓	✓	Optional	✓	✓
No	No	No	No	No	No	No

(1) 4 Hard Wired / 4 Wireless Sensors
(2) Requires dedicated PC connected to device

Data Center

OVERVIEW

"We're offline again!" No one wants to hear those words. Computer downtime is no longer acceptable in our fast paced world, so keeping your systems up and running should be a high priority. Sensaphone has a solution to watch over any size computer facility from small computer closets to large data centers. Be notified immediately whenever something starts to threaten the operation of your computer systems.

- Server Temperature
- Security
- Humidity
- Connectivity
- Power Failure
- UPS
- Water

STARTER SOLUTION

Sensaphone WEB600

The Web600 is an easy, cost-effective, network-based monitoring solution ideal for smaller-scale computer rooms. The system can monitor up to six external conditions including temperature, humidity, air quality, power failure and water detection. Web600 users can make programming changes, access status conditions and review data logs online through any web-enabled device. The system's advanced data logging can record up to 100,000 samples. In the event of an alarm, the system can notify as many as eight people by email, text message or SNMP trap.

FGD-WEB600 . . . . . .pg 24

ADVANCED SENSAPHONE SOLUTIONS

Sensaphone IMS-1000

The Sensaphone IMS-1000 Single Room Monitoring Solution simultaneously monitors network devices and the data center environment to safeguard continuous performance and avoid costly downtime. The IMS-1000 system is a lower-cost, non-expandable version that provides almost all of the same functions as the 4000, but with the needs of smaller facilities in mind. Each IMS-1000 device supports up to eight environmental sensors to monitor critical conditions such as temperature, humidity, smoke, motion, water leaks, intrusion, and power outages.

IMS-1001 . . . . . .pg 54
IMS-1002 . . . . . .pg 54

Sensaphone IMS-4000

The IMS-4000 provides a very modular and expandable remote monitoring solution for a wide area enterprise solution. It is similar to the IMS-1000 with both the Ethernet connection and a phone line connection, but is designed for monitoring multiple locations. The IMS-4000 system is made up of one Host and up to 31 Nodes that can be spread out over a large area. Each Host or Node can monitor up to eight sensors, and the group of Hosts and Nodes can be managed from one common interface.

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IMS-4200 . . . . . .pg 66

Water Treatment

OVERVIEW

Sensaphone provides a wide variety of solutions available for remote water and wastewater facilities. Products are available to perform anything from simple monitoring and alarm notification, up to data logging, control, and sophisticated SCADA functionality. Whatever level of remote monitoring and control you need, Sensaphone has a solution to keep you informed and in control 24/7.

- Tank Levels
- Power Failure
- Flow Rates
- Turbidity
- Pump Status
- Security
- Equipment Failure

STARTER SOLUTION

Sensaphone 1400 & 1800

The Sensaphone 1400 system remotely monitors unattended water and wastewater applications. When environmental changes or equipment malfunctions threaten wastewater facilities, the Sensaphone 1400 system automatically alerts managers who can quickly address the potentially costly situation. The system is a simple, convenient, cost-effective solution ideal for smaller operations. The system monitors status conditions 24/7, for up to four conditions. When the system identifies a potential problem, it can immediately alert up to eight people with custom phone calls. The internal rechargeable battery backup provides 24 hours of continuous monitoring and alerts in the event of a power outage. Each unit is sealed in an enclosure to protect it from moisture, dirt, and chemicals. Operators can obtain the status of each monitored condition at the installation site or by telephone.

FGD-1400 | FGD-1800 . . . . . .pg 30

ADVANCED SENSAPHONE SOLUTIONS

Sensaphone Sentinel with Cellular Modem

Sentinel is a cellular-based system that remotely monitors up to 12 different environmental and equipment status conditions in water and wastewater applications. When Sentinel detects issues, it instantly sends alerts via phone, text or email over standard cellular networks. The system is ideal for operations where Internet or landline connectivity is unavailable. Users can access information and make system changes from any web-enabled device. Sentinel stores all readings in the cloud, which protects against data loss, provides unlimited information storage and allows multiple devices to be managed from one account. No software is required, so installation, integration and management are easy. Sentinel can deliver daily event reports and generate an audit trail of user data activities.

SCD-1200-CL . . . . . .pg 18

Sensaphone Express II

The Express II™ system remotely monitors water and wastewater facilities to prevent costly downtime. The system is ideal for 24/7 monitoring of conditions such as pump failure and tank levels and is expandable to include up to 40 channels. When the system identifies a potential problem, it can immediately alert up to 48 people with custom phone calls. The Express II system easily integrates with existing floats, pump alarm outputs and level transducers. The internal rechargeable battery backup provides 12 hours of continuous monitoring and alerts in the event of a power outage. Each unit is sealed in an enclosure to protect it in harsh environments. The LCD window displays continuous status information and provides keypad programming instructions for easy setup.

FGD-6700. . . . . .pg 34

Residential

OVERVIEW

If you are away from your home for long periods of time, or if you have more than one home, then a Sensaphone can give you the peace of mind to know that everything is okay. In addition to monitoring and alarming for critical problems, the Sensaphone 400 can allow you to change your thermostat remotely between two set points. The best part is that there are no monthly fees. Once you purchase a Sensaphone you never have to pay any service fees to use it.

- Freezing Pipes
- Water
- Smoke & Fire
- Security
- Power Failure

SENSORS AND ACCESSORIES

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Water Detection Sensors . . . . . .pg 44

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Dual Setback Thermostat . . . . . .pg 48

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Motion Detection Sensor . . . . . .pg 46

Smoke Detector . . . . . .pg 46

Bluetooth Cell Phone Interface . . . . . .pg 48

RESIDENTIAL SENSAPHONE SOLUTIONS

Sensaphone 400 & 800

The Sensaphone 400 provides the important functions that you need to monitor your vacation home, cabin, or primary home. It comes with a pre–installed temperature sensor that you can program for any temperature level you need to warn for potential frozen pipes. The 400 will also detect power failures and even includes a microphone to listen for the sound of a smoke detector. If any problems are detected, it will make four phone calls to you, your family, friends, or neighbors to announce the problem in your own customized voice.

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Sensaphone WEB600

The Sensaphone WEB600 provides homeowners a flexible web-based remote monitoring option at an affordable price. It helps to keep track of critical conditions such as temperature, humidity, the presence of water on a floor, and other conditions. Users can be notified immediately when current values exceed the normal range via an e-mail or text message. An optional battery backup provides uninterrupted power to the WEB600 for approximately two hours in the event of a power loss. The system can be configured to monitor the battery backup and send an alarm when the battery becomes low.

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FGD-W610-B . . . . . .pg 24

Cold Storage

OVERVIEW

Whether you are storing frozen foods, medical tissue samples, or critical vaccines, Sensaphone has a solution to help you verify that everything is stored at the correct temperature. Products are available to monitor standard freezer temperatures and even –80°C ultra low freezer temperatures. Early warning detection can also be performed by watching other critical conditions like power failure, equipment failure, leaks, and more. Upgraded Sensaphone solutions can also perform detailed temperature data logging and trending in addition to instant alarm notification.

- Temperature
- Smoke & Fire
- Humidity
- Power Failure
- Ventilation
- Security

CLOUD-BASED SOLUTION

Sensaphone Sentinel

The Sentinel remotely monitors freezers and refrigerators to protect valuable cold storage assets. The Sentinel system monitors up to 12 different environmental and equipment status conditions including temperature from -109 °F to 168 °F, humidity, power failure and water detection. When the system identifies issues, it instantly sends alerts via phone, text or email over a standard Internet connection. It can also deliver daily event reports. Users can access information and make system changes from any web-enabled device. The system stores all readings in the cloud, which protects against data loss, provides unlimited information storage and allows multiple devices to be managed from one account. No software is required, so installation, integration and management are easy.

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WEB–BASED SOLUTIONS

Sensaphone WSG30

The WSG30 system remotely monitors freezers and refrigerators to protect valuable medical, food, and research assets. The WSG30 is a flexible web-based monitoring solution for use when hardwiring sensors is not a cost-effective or viable option. A single WSG30 unit can support up to 30 wireless sensors, which is ideal for expanding operations. The system can monitor conditions including temperature from -109 °F to 115 °F, humidity, power failure and water detection. In the event of an alarm, the WSG30 system notifies up to 32 people by e-mail, or text message. WSG30 users can make programming changes, access status conditions and review data logs on a local network.

WSG30 Wireless Sensors . . . . . .pg 51

FGD-WSG30 . . . . . .pg 26

Sensaphone IMS-1000

The IMS-1000 system remotely monitors freezers and refrigerators to protect valuable food and medical assets and cold storage equipment. The system is ideal for food manufacturing, processing and storage facilities, research and testing laboratories, and food service and retail locations. The system can monitor up to eight external conditions such as temperature, humidity, power failure and water detection. A built-in web server lets you to view status, make changes and review history. In the event of an alarm, the system can notify users by email, text message or voice phone call.

IMS-1001 . . . . . .pg 54

IMS-1002 . . . . . .pg 54

Livestock

OVERVIEW

Whether you're raising swine, poultry, or other livestock, a simple equipment failure can quickly spell disaster if not fixed right away. To help keep your livestock alive and healthy, you need to watch over their environment and respond quickly to any problems that may arise. Sensaphone products provide the instant alarm notification that you need to keep things running smoothly.

- Air Temperature
- Smoke & Fire
- Humidity
- Power Failure
- Ventilation
- Security

CELLULAR SOLUTION

Sensaphone Sentinel with Cellular Modem

The Sentinel system remotely monitors livestock facilities to keep animals safe and operations running smoothly. The Sentinel system monitors up to 12 different environmental and equipment status conditions including temperature, humidity, power failure and water detection. When the system identifies issues, it instantly sends alerts via phone, text or email. It can also deliver daily event reports. Users can access information and make system changes from any web-enabled device. The system stores all readings in the cloud, which protects against data loss, provides unlimited information storage and allows multiple devices to be managed from one account. No software is required, so installation, integration and management are easy. .

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PHONE-BASED SENSAPHONE SOLUTIONS

Sensaphone 1400

The 1400 remotely monitors livestock facilities to help keep animals safe and operations running smoothly. The system is a simple, convenient, cost-effective solution ideal for smaller facilities. The system monitors status conditions 24/7, including indoor and outdoor temperature, humidity, ventilation, carbon dioxide, power failure and security for up to four locations. When the system identifies a potential problem, it can immediately alert up to eight people with custom phone calls. The internal rechargeable battery backup provides 24 hours of continuous monitoring and alerts in the event of a power outage. Each unit is sealed in an enclosure to protect it from moisture, dirt and chemicals. Operators can obtain the status of each monitored condition at the installation site or by telephone.

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Sensaphone Express II

The Express II remotely monitors livestock facilities to help keep animals safe and operations running smoothly. Immediate notification of equipment failure allows for prompt corrective action. The standard system provides 24/7 monitoring of up to eight conditions. The Express II system is ideal for facilities with growing needs because it is expandable to include up to 40 channels. When the system identifies a potential problem, it can immediately alert up to 48 people with custom phone calls. The internal rechargeable battery backup provides 12 hours of continuous monitoring and alerts in the event of a power outage. Each unit is sealed in an enclosure to protect it in harsh environments. The LCD window displays continuous status information and provides keypad programming for easy setup.

FGD-6700 . . . . . .pg 34

Greenhouse

OVERVIEW

Keeping your plants alive and healthy requires the best possible growing environment. Sensaphone can provide you with the proper notification system to let you know immediately when something is not perfect in your greenhouse. Many conditions can be monitored from sensors available from Sensaphone, but third party aftermarket sensors can work as well. Receive instant phone call notification as soon as conditions deviate from acceptable levels.

- Indoor Temperature
- Outside Temperature
- Humidity
- Power Failure
- Ventilation
- Security

CELLULAR SOLUTION

Sensaphone Sentinel with Cellular Modem

The Sentinel remotely monitors greenhouses to prevent loss of valuable plant assets. The Sentinel system monitors up to 12 different environmental and equipment status conditions including temperature, humidity, power failure and water detection. When the system identifies issues, it instantly sends alerts via phone, text or email. Users can access information and make system changes from any web-enabled device. The system stores all readings in the cloud, which provides unlimited information storage and allows multiple devices to be managed from one account. No software is required, so installation, integration and management are easy. The standard Sentinel system is Ethernet based, but the product is also available with a cellular option for locations where Internet connectivity is not available.

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PHONE-BASED SENSAPHONE SOLUTIONS

Sensaphone 1400

The 1400 remotely monitors greenhouse facilities to help keep plants safe and operations running smoothly. The system is a simple, convenient, cost-effective solution ideal for smaller facilities. The system monitors status conditions 24/7, including indoor and outdoor temperature, humidity, ventilation, carbon dioxide, power failure and security for up to four locations. When the system identifies a potential problem, it can immediately alert up to eight people with custom phone calls. The internal rechargeable battery backup provides 24 hours of continuous monitoring and alerts in the event of a power outage. Each unit is sealed in an enclosure to protect it from moisture, dirt and chemicals. Operators can obtain the status of each monitored condition at the installation site or by telephone.

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Sensaphone Express II

The Express II remotely monitors greenhouses to prevent loss of valuable plant assets. The system is ideal for larger greenhouse operations that require many monitoring points or are considering future growth because it is expandable to include up to 40 channels. When the system identifies a potential problem, it can immediately alert up to 48 people with custom phone calls. The internal rechargeable battery backup provides 12 hours of continuous monitoring and alerts in the event of a power outage. Each unit is sealed in an enclosure to protect it from moisture, dirt and chemicals commonly found in a greenhouse environment. The LCD window displays continuous status information and provides keypad programming instructions for easy setup.

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Oil & Natural Gas

OVERVIEW

Remote oil and natural gas equipment locations need to be watched, and Sensaphone has two product solutions for these remote areas. A wide variety of conditions can be monitored for alarm and trending with access from any computer with a web browser.

- Tank Levels
- Power Failure
- Flow Rates
- Turbidity
- Pump Status
- Security
- Equipment Failure

SATELLITE SOLUTION

Sensaphone SAT4D

The SAT4D monitors equipment operating at oil and gas wells, refineries and storage facilities to protect valuable assets and avoid costly downtime. Because it communicates via satellite, the system is ideal for facilities in the most remote locations where telephone, Ethernet and cellular connections are unavailable. The system can monitor up to four critical conditions 24/7, including tank floats, pump status, security, power failure and equipment failure. If the system detects a potential problem, it sends alarm notification to up to eight telephone numbers or six email addresses. The SAT4D system runs without power and can operate for over three years on a replaceable internal battery. GPS locator technology pinpoints exactly where mobile oil & gas equipment is located. Each unit is sealed in an enclosure to protect it from harsh conditions.

FGD-SAT4D . . . . . .pg 22

CELLULAR SOLUTIONS

Sensaphone Sentinel with Cellular Modem

The Sentinel is a cellular-based system that remotely monitors up to 12 different environmental and equipment status conditions including tank levels, power failures, flow rates, pump status, and more. When Sentinel detects issues, it instantly sends alerts via phone, text or email over standard cellular networks. The system is ideal for operations where Internet or landline connectivity is unavailable. Users can access information and make system changes from any web-enabled device. Sentinel stores all readings in the cloud, which provides unlimited information storage and allows multiple devices to be managed from one account. No software is required, so installation, integration and management are easy. Sentinel can deliver daily event reports and generate an audit trail of user data activities.

SCD-1200-CL . . . . . .pg 18

Sensaphone CELL682

The CELL682 monitors equipment operating at oil and gas wells, refineries and storage facilities to protect valuable assets and avoid costly downtime. Because it communicates via standard cellular networks, the system is ideal for facilities in the most remote locations where telephone and Ethernet connections are unavailable. The system can monitor up to 14 critical conditions 24/7, including tank levels, turbidity, pump status, flow rates, security, power failure and equipment failure. If the system detects a potential problem, it sends alarm notification to up to 24 voice, text or email destinations. Users can access status information and make programming changes via a web portal. The CELL682 system is sealed in an enclosure to protect it from harsh conditions.

FGD-C682-3G . . . . . .pg 20

HVACR

OVERVIEW

Keeping indoor environments comfortable and safe can require many moving parts. Sensaphone products remotely monitor unattended HVAC units such as chillers and boilers. When environmental changes or equipment malfunctions threaten HVACR units and the assets they protect, the system automatically alerts facility managers, who can quickly address the potentially costly situation.

- Indoor Temperature
- Outside Temperature
- Humidity
- Power Failure
- Ventilation
- Security

PHONE–BASED SOLUTION

Sensaphone 1800

The 1800 is a simple, convenient, cost-effective solution ideal for smaller operations. The system monitors status conditions 24/7, for up to eight conditions. When the system identifies a potential problem, it can immediately alert up to eight people with custom phone calls. The internal rechargeable battery backup provides 24 hours of continuous monitoring and alerts in the event of a power outage. Operators can obtain the status of each monitored condition at the installation site or by telephone.

FGD-1800 . . . . . .pg 30

WEB–BASED SOLUTIONS

Sensaphone Sentinel

The Sentinel monitors up to 12 different environmental and equipment status conditions. When the system identifies issues, it instantly sends alerts via phone, text or email over a standard Internet connection. Users can access information and make system changes from any web-enabled device. The system stores all readings in the cloud, which protects against data loss, provides unlimited information storage and allows multiple devices to be managed from one account. No software is required, so installation, integration and management are easy.

SCD-1200 . . . . . .pg 16

Sensaphone WEB600

The WEB600 can monitor up to six external conditions including temperature from 109°F to 168°F, humidity, power failure and water detection. The device's built in web server hosts a web page where users can make programming changes, access status conditions and review alarm history and data logs. The system can log up to 100,000 records. In the event of an alarm, the system can notify as many as eight people by email, text message or SNMP trap. An optional battery backup module will ensure the unit will continue to run if main power fails.

FGD-W600 . . . . . .pg 24

Sensaphone Sentinel

Cloud-Based Monitoring

Sentinel Details

- Secure, user–friendly online control panel provides a software–free, anytime, anywhere environment for managing your systems
- Store your sensor readings in the cloud to automatically protect against data loss and provide limitless information storage
- Receive alarm notifications through a supervised Internet connection
- Notifies an unlimited number of people by e-mail, text message or voice phone calls in the event of an alarm
- Up to twelve external sensors monitor temperature, humidity, water, third party sensors and more
- Manage multiple units, make programming changes and access status conditions using a simple, powerful web-based interface or mobile app

Add WiFi

Add the ability to have your Sentinel communicate over Wi-Fi. The Sensaphone Wi-Fi adapter is a high-speed, long-range outdoor Wireless Bridge that is an ideal solution for adding Wi-Fi connectivity to the Sentinel. This is the perfect cost effective solution compared to running communication cable or trenching long runs of wire.

What's in the box

- ✓ Sentinel
- ✓ Screwdriver
- ✓ User's Manual and Documentation
- ✓ 12V DC Power Adapter
- ✓ 7' CAT5 Cable

Included Features

- ✓ Internal rechargeable battery-backup system will provide 8 hours of continuous monitoring and alerting in the event of a power outage
- ✓ Power failure monitoring

Product Name	Part Number
Sensaphone Sentinel	SCD-1200
Sensaphone Sentinel in NEMA Enclosure	SCD-1200-SD | SCD-1200-CD
Ethernet to WiFi Adapter	FGD-0250

Monitoring for the Mobile Age

Gain access to your sensor readings from anywhere using a simple, powerful web–based interface and smartphone app. Alerts can be sent directly to your mobile device.

Web–Based Management

Manage multiple units from one powerful web-based interface. Make programming changes and access status conditions from any web–enabled device.

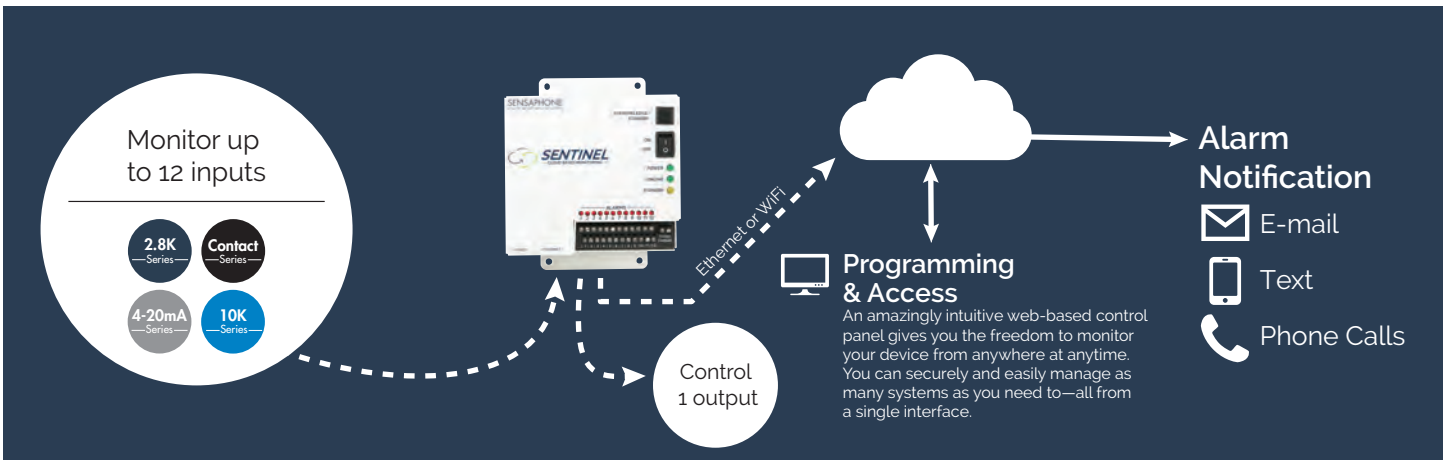
Supervised Monitoring

The Sentinel monitors its own internet connection to make sure it is always live. If the connection to the servers is lost, users will receive an alarm.

Download on the App Store

ANDROID APP ON Google play

How it works



Features & Specifications

Communication Method:	Ethernet
Number of Inputs:	12
Input Types:	Contact, 2.8K, 10K, 4-20mA
Temperature Sensing Range:	-109° to 168°F | -85° to 76°C
Output Relay:	One low voltage NO/NC relay output Manual or automatic alarm switching
Remote Access:	Website or app to access status and programming
Local Access:	LEDs for Alarm Status, Power Status, and Server Link
Alarm Notification:	An unlimited number of e-mail, text or phone calls
Data Logging:	Unlimited samples securely stored on the Sentinel servers, programmable sampling Interval - 1 min to 24 hrs
Physical:	5.5 x 5.5 x 1.5" | 140 x 140 x 38mm 1 lb. | .45kg
Warranty:	2 Years

Sensaphone Sentinel with Cellular Modem

Cloud-Based Monitoring from Anywhere

Sentinel Details

- Easy-to-install, easy-to-configure monitoring solution for locations with no access to a landline or Internet connection
- Secure, user–friendly online control panel provides a software–free, anytime, anywhere environment for managing your systems
- Store your sensor readings in the cloud to automatically protect against data loss and provide limitless information storage
- Receive alarm notifications through a cellular connection
- Notifies an unlimited number of people by e-mail, text message or voice phone calls in the event of an alarm
- Up to twelve external sensors monitor temperature, humidity, water, third party sensors and more
- Manage multiple units, make programming changes and access status conditions using a simple, powerful web-based interface or mobile app

CELLULAR SERVICE PROVIDED BY AMERICA'S LARGEST CELLULAR NETWORKS

verizon

at&t

What's in the box

- ✓ Sentinel
- ✓ Cellular Modem
- ✓ Screwdriver
- ✓ User's Manual and Documentation
- ✓ 12V DC Power Adapter

Included Features

- ✓ Internal rechargeable battery-backup system will provide 8 hours of continuous monitoring and alerting
- ✓ Power failure monitoring
- ✓ NEMA-4X enclosure

Product Name	Part Number
Sensaphone Sentinel with Verizon cellular service and a clear door enclosure	SCD-1200-CLVZCD
Sensaphone Sentinel with Verizon cellular service and a solid door enclosure	SCD-1200-CLVZSD
Sensaphone Sentinel with AT&T cellular service and a clear door enclosure	SCD-1200-CLATCD
Sensaphone Sentinel with AT&T cellular service and a solid door enclosure	SCD-1200-CLATSD

Monitoring for the Mobile Age

Gain access to your sensor readings from anywhere using a simple, powerful web–based interface and mobile app. Alerts can be sent directly to your mobile device.

Rugged & Weatherproof

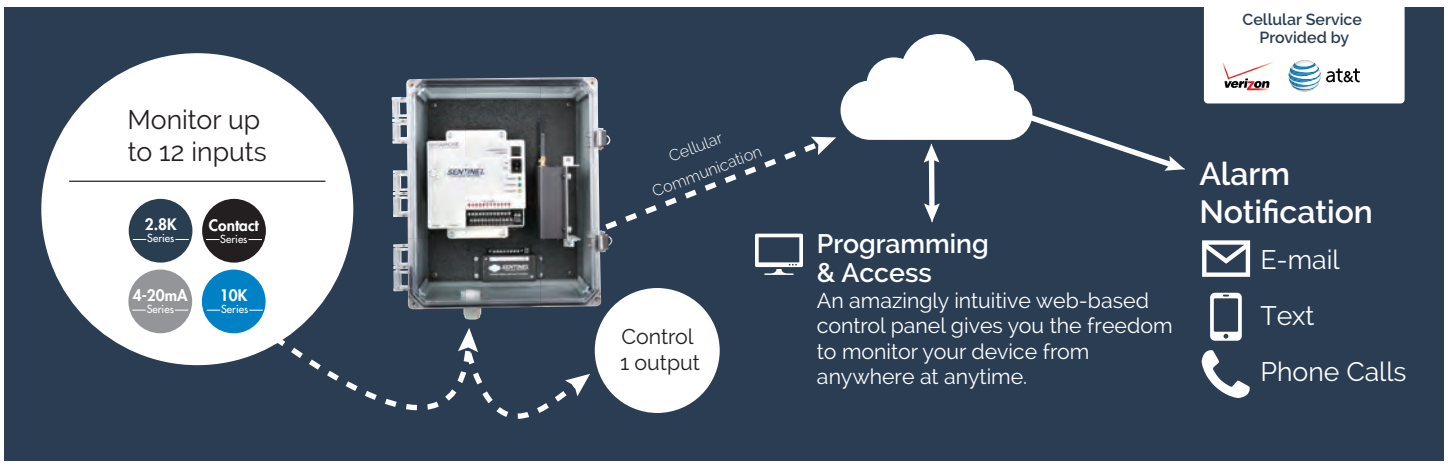
The Sentinel with Cellular Modem comes in a lockable, NEMA 4X enclosure that is suitable for harsh, corrosive environments such as greenhouses or other agricultural applications.

Web–Based Management

Manage multiple units from one powerful web-based interface. Make programming changes and access status conditions from any web–enabled device.

Download on the App Store | ANDROID APP ON Google play

How it works



Features & Specifications

Communication Method: Cellular

Number of Inputs: 12

Input Types: Contact, 2.8K, 10K, 4-20mA

Temperature Sensing Range: -109° to 168°F | -85° to 76°C

Output Relay: One low voltage NO/NC relay output
Manual or automatic alarm switching

Remote Access: Website to access status and programming

Local Access: LEDs for Alarm Status, Power Status, and Cellular Link

Alarm Notification: An unlimited number of e-mail, text or phone calls

Data Logging: Unlimited samples securely stored on the Sentinel servers, programmable sampling Interval - 1 min to 24 hrs

Physical: 14 x 12 x 7.4" | 355 x 304 x 188mm
12lbs. | 5.4kg

Warranty: 2 Years

Sensaphone CELL682

Remote Monitoring via Cellular

CELL682 Details

- Ideal for remote, unmanned facilities where telephone or Ethernet lines are not available
- Access status information and make programming changes via web page
- Receive voice alerts and alarm notifications over standard cellular networks
- Notifies up to 24 people by any combination of voice phone call, e-mail, or text message in the event of an alarm
- Includes 14 total inputs; with eight dry contact/six analog (temperature or 4-20mA) connections
- Two included relay outputs can switch local devices on/off based on alarm activity
- Machine-to-machine control among CELL682 units and pump control
- Activation of a wireless messaging plan required. Choose between Verizon, AT&T and Rogers

Antennas

An external antenna (FGD-CELL-ANT) allows you to place your CELL682 in a location that would normally have reduced signal contact such as in a metal cabinet. A high gain antenna (FGD-CELL-HGANT) is available to increase cell signal strength.

Enclosure Options

The Sensaphone CELL682 comes in sealed, weatherproof, lockable enclosures making it suitable for harsh or corrosive environments. It is available with a clear door (as shown) or a solid door.

What's in the box

- ✓ CELL682
- ✓ Screwdriver
- ✓ Mounting Hardware
- ✓ User's Manual CD Rom

Included Features

- ✓ Internal rechargeable battery-backup system provides 12 hours of continuous monitoring and alerts
- ✓ Power failure monitoring

Product Name	Part Number
Sensaphone CELL682	See page 21 for options

No Land Lines Required

Since the CELL682 requires no phone lines, it can be placed in remote locations that can be inconvenient or difficult to gain access to phone or internet service.

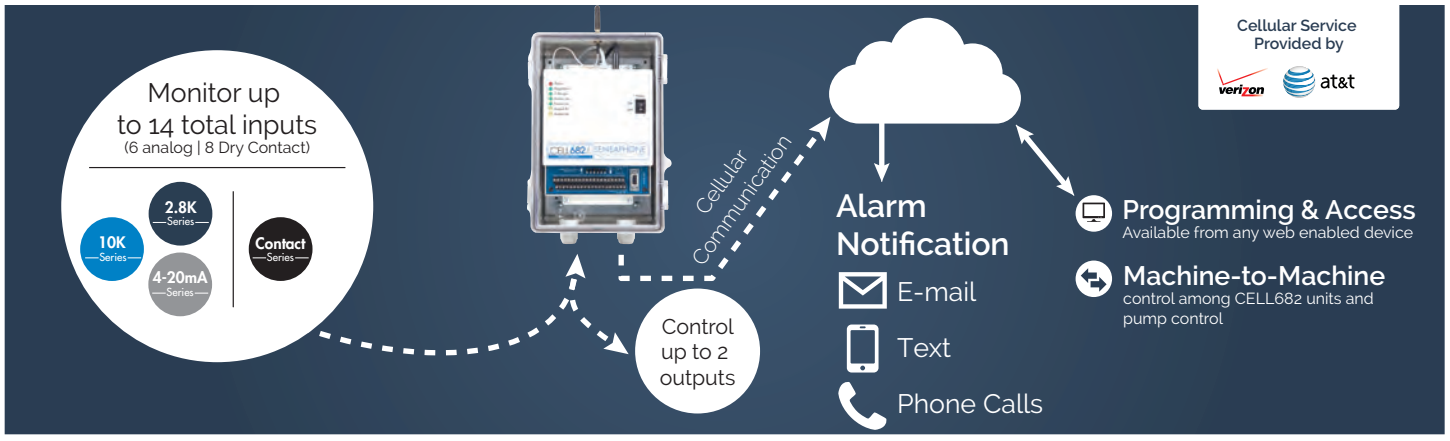
Web Interface

The CELL682 provides status, history, alarm response programming, and manual output control.

Versatile Control

It can perform simplex or duplex alternating pump control using a level transducer or float switches. The unit can also perform machine-to-machine control among multiple Cell682 devices.

How it works



Features & Specifications

Communication Method: Cellular

Number of Inputs: 14 Total: 6 Analog (Temperature & 4-20mA), 8 Dry Contact and Run time

Input Types: Contact, 2.8K, 10K, 4-20mA

Remote Access: Website to access status and programming

Local Access: LEDs to show alarm status, registration, wireless signal, battery backup status, power status, and output states

Alarm Notification: 24 alarm destinations - any combination of e-mail, text message, or custom voice phone calls

Physical: 12 x 8 x 6" | 305 x 203 x 152mm
8lbs | 2.7kg

Operating Conditions: -22° to 140°F | -30° to 60°Ct

Part Numbers:
FGD-C682-3GATCD - AT&T cellular service and a clear door
FGD-C682-3GATSD - AT&T cellular service and a solid door
FGD-C682-3GRWCD - Rogers cellular service and a clear door
FGD-C682-3GRWSD - Rogers cellular service and a clear door
FGD-C682-VZWCD - Verizon cellular service and a clear door
FGD-C682-VZWSD - Verizon cellular service and a solid door

Warranty: 2 Years

Sensaphone SAT4D

Remote Monitoring via Satellite

SAT4D Details

- Ideal for remote facilities where no other communications are available
- No power supply required – runs on battery power for up to three years
- Receive voice alerts and email alarm notifications through direct satellite uplink
- Program as many as eight telephone numbers or six e-mail alert notifications
- Monitors up to four total dry-contact inputs
- Operating temperature range from -22° to 140°F | -30° to 60°C
- Alarm notifications are sent by satellite to a user accessible website
- Rugged, weatherproof, locking NEMA-4X enclosure protects from harsh environments and vandalism

Mounting Options

To make mounting the SAT4D easier a pole mount kit is available. The kit includes an aluminum pole and mounting hardware that allows you to install the device anywhere, as long as you can drive the pole three feet into the ground.

What's in the box

- ✓ SAT4D
- ✓ Screwdriver
- ✓ 4 AA 1.5V Lithium Battery
- ✓ 1 AA 3.6 Lithium Batteries
- ✓ User's Manual and Documentation

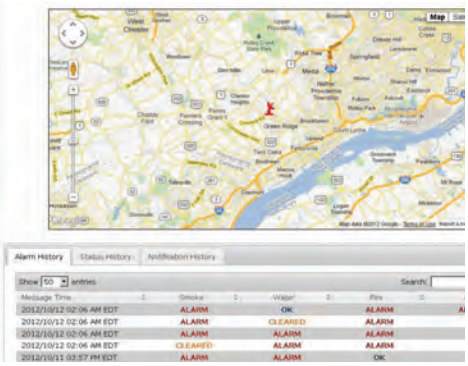
Included Features

- ✓ Replaceable batteries power unit for up to three years
- ✓ GPS locator technology lets you see exactly where mobile assets are located

Product Name	Part Number
Sensaphone SAT4D	FGD-SAT4D
Sensaphone SAT4D Pole Mount Kit	FGD-SAT4D-PKIT

No Power Required

Since the SAT4D is self powered and requires no phone lines or cell signal, it can be placed in very remote locations that can be inconvenient or difficult to access.



Web Interface

All communications from the SAT4D go through the SAT4D server. You can check the latest status, check previous alarm events, or make programming changes.

Automatic Status Updates

The SAT4D will automatically send two status reports per day to the website. These 12 hour snapshots remain available on the SAT4D server for future reference.

How it works

Features & Specifications

Communication Method: Satellite

Number of Inputs: 4

Input Types: Contact

Remote Access: Website to access status and programming

Alarm Notification: 6 e-mails or text messages, 8 phone calls

Physical: 11.3 x 13.3 x 5.8" | 287 x 337 x 142mm
7.4lbs | 3.3kg

Standards: UL913 Class I, Div I

Power Supply:

Satellite transmitter battery:
4 AA lithium batteries
3 year battery life

Input module battery:
1 AA lithium battery
7 year battery life

Operating Conditions: -22° to 140°F | -30° to 60°C
-40° to 176°F | -40° to 80°C with battery life impact

Warranty: 1 Year

Sensaphone WEB600

Low Cost Web Based Monitoring

WEB600 Details

- Easy, cost-effective, web-based monitoring for any application
- Data-logging records up to 100,000 samples including data, date, and time
- Receive alarm notifications through a standard Internet connection
- Notifies up to thirty-two contacts by e-mail, text message or SNMP in the event of an alarm
- Up to six external sensors monitor temperature, humidity, water, and more
- Included relay output can switch local devices on/off either manually or based on alarm activity
- Temperature-sensing range of -109° to 168°F | -85° to 76°C
- Make programming changes and access status conditions online

Battery Backup

The Sensaphone Battery Backup provides uninterrupted backup power for two hours when main power fails. The module includes a rechargeable battery that maintains a full charge.

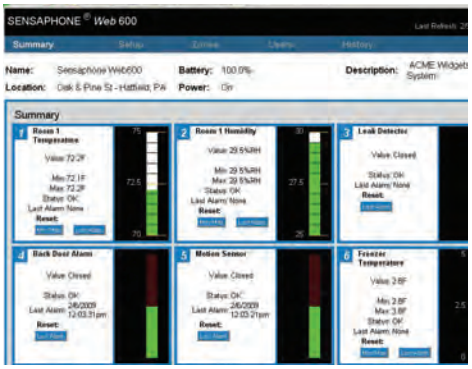
What's in the box

- ✓ WEB600
- ✓ AC Power Adapter
- ✓ Screwdriver
- ✓ 7' CAT5 Cable
- ✓ Mounting hardware
- ✓ User's Manual and Documentation

Included Features

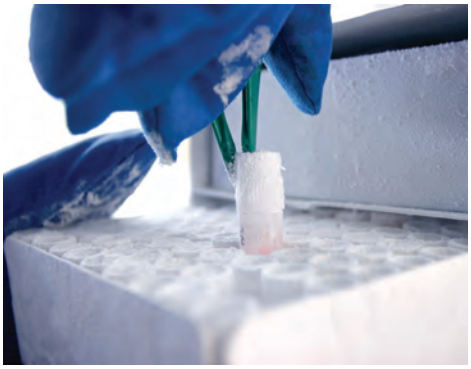
- ✓ Power failure monitoring
- ✓ No monthly fees

Product Name	Part Number
Sensaphone WEB600	FGD-W600
Sensaphone WEB600 Battery Backup	FGD-W610-B



Convenience & Simplicity

The Sensaphone WEB600 is the easiest and most cost effective web based product we offer. It's also the least expensive product that includes data logging.



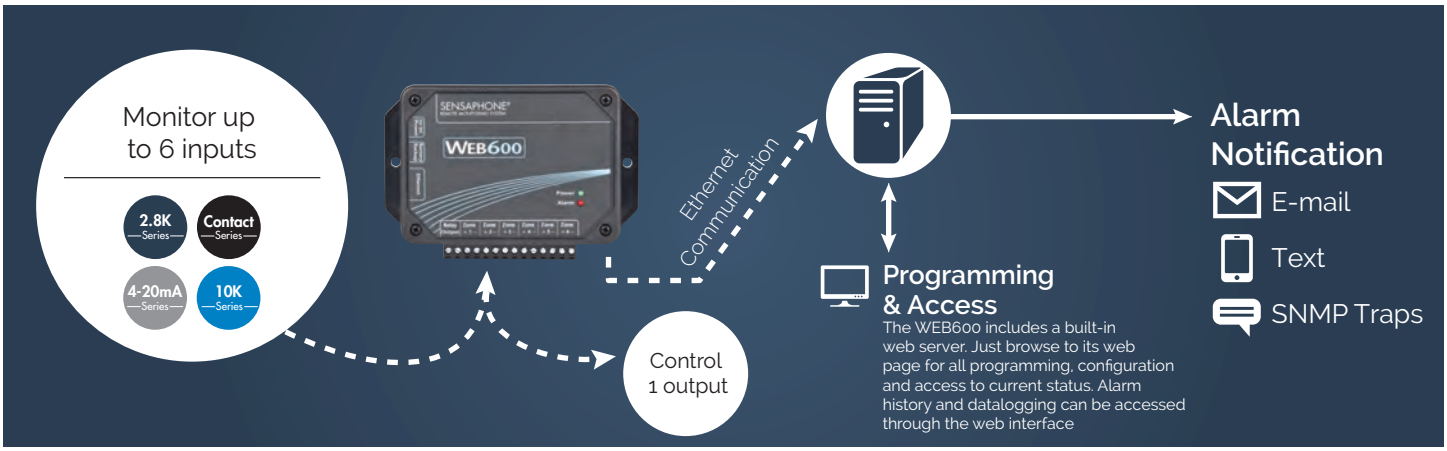
Low Temperature Monitoring

With the ability to monitor temperatures down to -85°C, the Sensaphone WEB600 is a great choice for many ultra low cold storage applications.

4-20mA Transducer Support

Read more than just simple on/off or open/closed type sensors. The WEB600 includes full analog capability so real world values can be monitored.

How it works



Features & Specifications

Communication Method:	Ethernet
Number of Inputs:	6
Input Types:	Contact, 2.8K, 10K, 4-20mA
Temperature Sensing Range:	-109° to 168°F | -85° to 76°C
Output Relay:	1 Low voltage NO/NC relay output Manual or automatic alarm switching
Remote Access:	Website to access status and programming
Local Access:	LEDs for Alarm Status, Power Status, and Ethernet link

Alarm Notification:	32 alarm destinations - any combination of e-mail, text message, or SNMP traps 8 alarm escalation levels with comprehensive scheduling per input profile and alarm destination
Data Logging:	100,000 samples (include data, date and time)
Physical:	5.5 x 3.25 x 1.25" | 140 x 83 x 32mm .5lbs | .22kg
Warranty:	1 Year

Sensaphone WSG30

Web Based Monitoring with Wireless Sensors

WSG30 Details

- An easy solution to web-based monitoring ideal for applications where running wires can be difficult
- Connect up to 30 wireless sensors sensors wherever you need
- Receive alarm notifications through a standard Ethernet connection
- Notifies up to 32 people by e-mail, text message, SNMP , or Modbus in the event of an alarm
- Up to 30 external wireless sensors monitor temperature, humidity, water, and more
- Data-logging records up to 67,000 samples; including data, date, and time
- Make programming changes and access status conditions online

Add WiFi

Add the ability to have your WSG30 communicate over Wi-Fi. The Sensaphone Wi-Fi adapter is a high-speed, long-range outdoor Wireless Bridge that is an ideal solution for adding Wi-Fi connectivity to the WSG30. This is a perfect cost effective solution when faced with running communication cable or trenching long runs of wire.

What's in the box

- ✓ WSG30
- ✓ AC Power Adapter
- ✓ 7'CAT5 Cable
- ✓ Mounting hardware
- ✓ User's Manual and Documentation

Included Features

- ✓ Internal rechargeable battery-backup system provides 2 hours of continuous monitoring and alerts
- ✓ No monthly fees

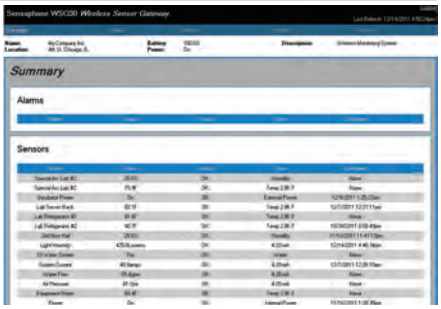
Product Name	Part Number
Sensaphone WSG30	FGD-WSG30
Sensaphone WiFi Adapter	FGD-0250

Wireless Sensors

The WSG30 works exclusively with its own wireless sensor line to monitor temperature, power failure, humidity, and water detection. In addition, a 4-20mA and dry contact interface are also available. Learn more p 51.

Low Temperature Monitoring

The Sensaphone WSG30 is a great choice for many cold storage applications. Paired with a Sensaphone Ultra Low Temperature Sensor, the WSG30 has the ability to monitor temperatures down to -85°C.



Web Interface

The WSG30's built-in web server provides programming, configuration, and access to current status. Even alarm history and data logging can be easily accessed.

How it works

Features & Specifications

Communication Method:	Ethernet
Number of Inputs:	30 wireless sensors
Input Types:	WSG30 Wireless (Temperature, Humidity, Dry Contact, 4-20mA, Water Detection, Power Failure)
Temperature Sensing Range:	-109° to 115°F | -85° to 57°C
Remote Access:	Website to access status and programming
Local Access:	4 line LCD display and keypad
Alarm Notification:	32 e-mail and/or text messages, SNMP trap, Modbus
Data Logging:	67,000 time stamped records
Physical:	7.36 x 5.1 x 2" | 190 x 130 x 50mm 2.5lbs | 1.3kg
Warranty:	1 Year

Sensaphone 400 & 800

Basic Phone Notification

400 & 800 Details

- Simple, convenient, cost-effective remote monitoring for small businesses and property managers
- Record custom voice alerts and receive alarm messages in your own voice
- Receive voice alerts and alarm notifications over standard telephone lines
- Notifies up to four (400) or eight (800) people by voice phone call in the event of an alarm
- Up to four (400) or eight (800) external sensors monitor temperature, humidity, water, and more
- Included relay output can switch local devices on/off based on alarm activity

No phone line? No problem.

The XLink allows your Sensaphone to dial and receive calls using any cell phone with Bluetooth technology. It provides telephone service to a Sensaphone by placing a cell phone next to the device. The XLink will send all incoming calls to the Sensaphone and when the Sensaphone needs to dial out, the call will be completed through the cell phone.

What's in the box

- ✓ 400 | 800
- ✓ AC Power Adapter
- ✓ Telephone Cable
- ✓ User's Manual and Documentation
- ✓ 2.8K Temperature Probe
- ✓ Screwdriver
- ✓ Mounting hardware

Included Features

- ✓ Battery-backup system provides 24 hours of continuous monitoring and alerts (6 C batteries required)
- ✓ Microphone for sound level monitoring
- ✓ No monthly fees

Product Name	Part Number
Sensaphone 400	FGD-0400
Sensaphone 800	FGD-0800

Convenience & Simplicity

The Sensaphone 400 is the easiest and most cost effective product we offer. And it offers the convenience of voice telephone calls for alarms and programming.

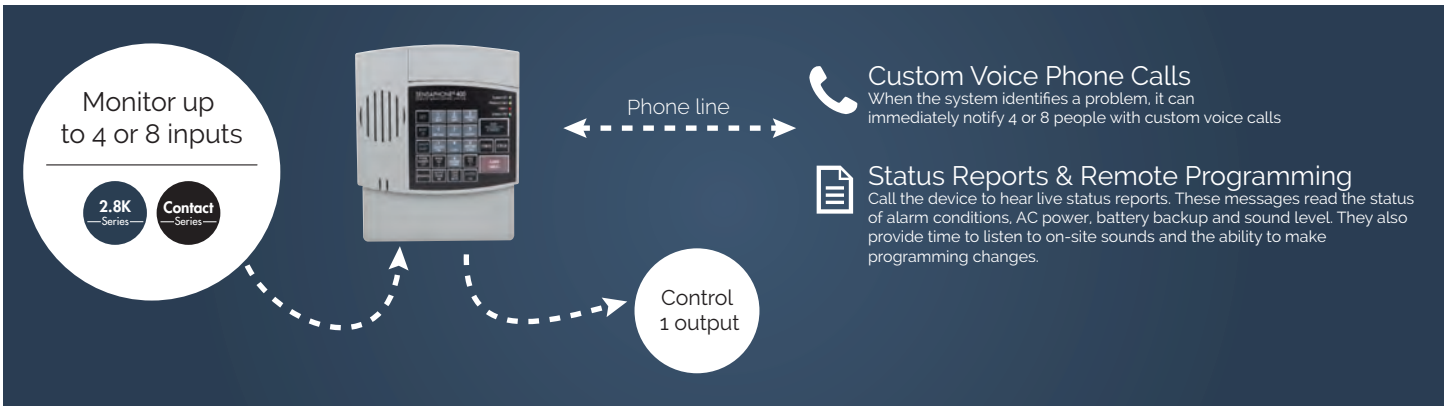
No Monthly Fee

The Sensaphone 400 and 800 are the best way to monitor a vacation home with no monthly fees. Monitor everything from climate conditions to security and more.

Remote Thermostat Control

Use a dual setback thermostat in conjunction with the 400 or 800's output relay to control the temperature between two set points.

How it works



Features & Specifications

Communication Method:	Phone Line
Number of Inputs:	4 / 8
Input Types:	Contact, 2.8K
Temperature Sensing Range:	-20° to 150°F | -30° to 65°C
Output Relay:	1 Low voltage NO/NC relay output Manual or automatic alarm switching
Remote Access:	Call in to check status and make programming changes, microphone for listen in status
Local Access:	Keypad and speaker for local programming, easy voice prompted programming, keypad lock, and LEDs
Alarm Notification:	4 or 8 custom voice phone calls
Physical:	2.1 x 7.8 x 8.8" | 53 x 198 x 223mm 2lbs | .9kg
Warranty:	1 Year

Sensaphone 1400 & 1800

Rugged Professional Phone Notification

1400 & 1800 Details

- Simple, convenient, cost-effective remote monitoring ideal for greenhouse and agriculture applications
- Rugged, weatherproof NEMA-4X enclosure protects from harsh environments
- Receive voice alert alarm notifications over standard telephone lines
- Notifies up to eight people by voice phone call in the event of an alarm
- Up to four (1400) or eight (1800) external sensors monitor temperature, humidity, water and more
- Included relay output can switch local devices on/off based on alarm activity
- Record custom voice alerts and receive alarm messages in your own voice

Enclosure Options

The Sensaphone 1400 and 1800 comes in sealed, weatherproof, lockable enclosures making them suitable for harsh or corrosive environments. They are available with a clear door (as shown) or a solid door. Please specify when ordering.

What's in the box

- ✓ 1400 | 1800
- ✓ AC Power Adapter
- ✓ Telephone Cable
- ✓ User's Manual
- ✓ 2.8K Temperature Probe
- ✓ 14 AWG Grounding Cable
- ✓ Mounting hardware
- ✓ Screwdriver

Included Features

- ✓ Internal battery-backup system provides 16 hours of continuous monitoring and alerts
- ✓ Microphone for on-site listen-in (w/optional external mic)

Product Name	Part Number
Sensaphone 1400	FGD-1400
Sensaphone 1800	FGD-1800

Rugged & Weatherproof

The Sensaphone 1400 and 1800 are suitable for harsh, corrosive environments such as greenhouses or agricultural applications.

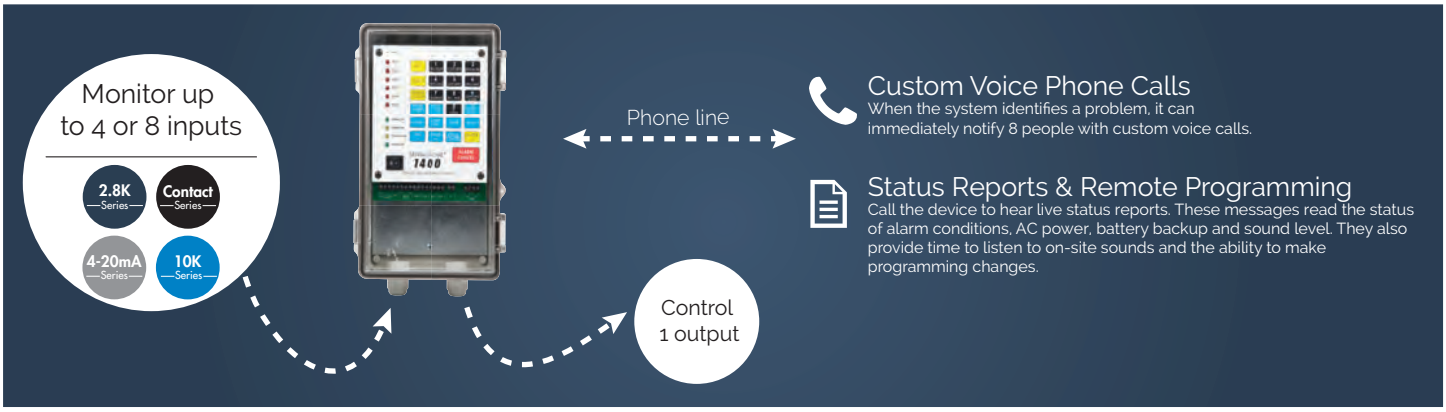
Low Temperature Monitoring

With the ability to monitor temperatures down to -85°C, the Sensaphone 1400 is a great choice for many cold storage applications.

Support 4-20mA Transducers

Read more than just simple on/off or open/ closed type sensors. The 1400 and 1800 include full analog capability so real world values can be monitored.

How it works



Features & Specifications

Communication Method: Phone Line

Number of Inputs: 4 / 8

Input Types: Contact, 2.8K, 10K , 4-20mA

Temperature Sensing Range: -109° to 168°F | -85° to 76°C

Output Relay: One universal output relay
Manual or automatic alarm switching

Remote Access: Call in to check status and make programming changes, microphone for listen in status

Local Access: Keypad and speaker for local program ming, easy voice prompted programming, keypad lock, recent alarm history playback, and LEDs

Alarm Notification: 4 or 8 custom voice phone calls

Physical: 1400: 12.1 x 7.3 x 4.5" | 53 x 198 x 223mm
5lbs | 2.2kg
1800: 12.1 x 8 x 5.5" | 53 x 203 x 140
8lbs | 3.6kg

Warranty: 1400 - 2 Years | 1800 - 3 Years

Sensaphone 2800

Phone Notification with Wireless Sensors

2800 Details

- Easy, cost effective, wireless monitoring ideal for applications where running wires can be difficult
- Connect up to eight external sensors (four hard-wired, four wireless sensors)
- Receive voice alert alarm notifications over standard telephone lines
- Notifies up to eight people by voice phone call in the event of an alarm
- Included relay output can switch local devices on/off based on alarm activity
- Wireless sensor network monitors its own status and battery conditions

Enclosure Options

The Sensaphone 2800 comes in a sealed, weatherproof, lockable enclosure making it suitable for harsh or corrosive environments. They are available with a clear door (as shown) or a solid door.

What's in the box

- ✓ 2800
- ✓ AC Power Adapter
- ✓ Telephone Cable
- ✓ User's Manual
- ✓ 2.8K Temperature Probe
- ✓ 14 AWG Grounding Cable
- ✓ Mounting hardware
- ✓ Screwdriver

Included Features

- ✓ Internal battery-backup system provides 16 hours of continuous monitoring and alerts
- ✓ Microphone for sound level monitoring
- ✓ No monthly fees

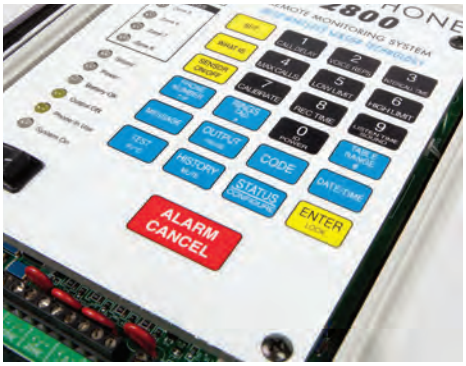
Product Name	Part Number
Sensaphone 2800	FGD-2800
Sensaphone 2800 Outdoor Weatherproof Antenna	FGD-2810

Wireless Sensors

The 2800 works exclusively with it's own wireless sensor line to monitor temperature, power failure, humidity, motion, and water detection. See page 50 for more information.

Low Temperature Monitoring

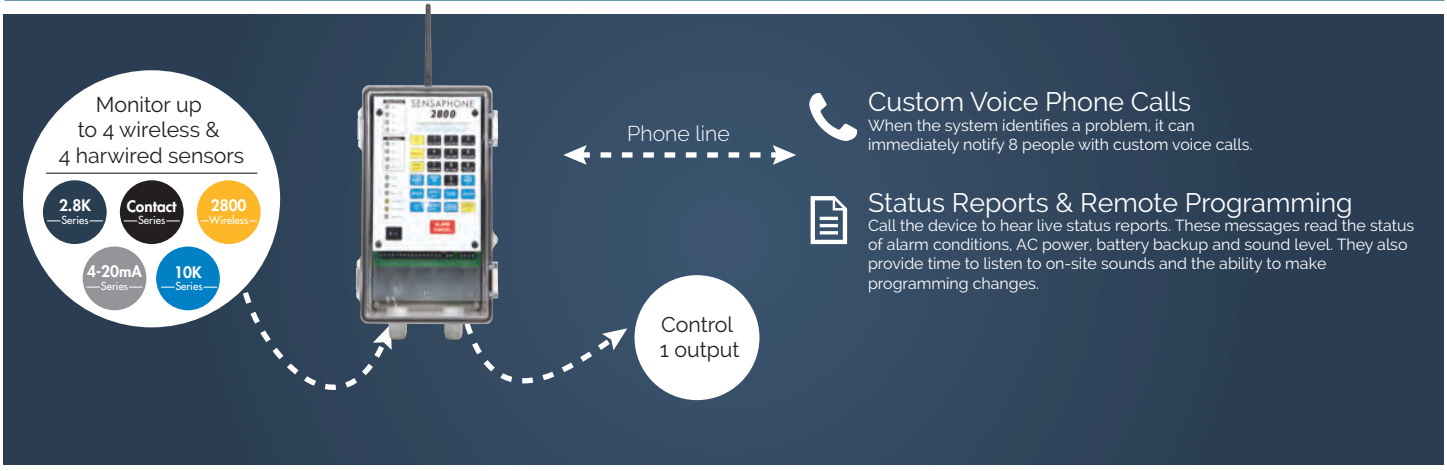
With the ability to monitor temperatures down to -85°C, the Sensaphone 2800 is a great choice for many cold storage applications.



4-20mA Transducer Support

Read more than just simple on/off or open/closed type sensors. The 2800 includes full analog capability so real world values can be monitored.

How it works



Features & Specifications

Communication Method:	Phone Line
Number of Inputs:	4 hard–wired sensors / 4 wireless sensors
Input Types:	Contact, 2.8K, 10K , 4-20mA, 2800 Wireless
Temperature Sensing Range:	-109° to 168°F | -85° to 76°C
Output Relay:	One universal output relay Manual or automatic alarm switching
Remote Access:	Call in to check status and make programming changes, microphone for listen in status
Local Access:	Keypad and speaker for local program ming, easy voice prompted programming, keypad lock, recent alarm history playback, LEDs
Alarm Notification:	8 custom voice phone calls
Physical:	12.1 x 7.3 x 4.5" | 53 x 198 x 223mm 5lbs | 2.2kg
Warranty:	3 Years

Sensaphone Express II

Phone Notification with Future Expansion

Express II Details

- Ideal for monitoring facilities with expanding needs
- Allows for future expansion with up to 40 total inputs and up to 16 output zones
- Receive voice alerts and alarm notifications over standard telephone lines
- Notifies up to 48 people by voice phone call in the event of an alarm
- Increase monitoring capability with easy-to-install expansion input and output cards
- Included relay output can switch local devices on/off based on alarm activity
- Record custom voice alerts and receive alarm messages in your own voice
- Rugged, weatherproof NEMA-4X enclosure protects from harsh environments

Expansion Options

The Sensaphone Express II comes standard with eight inputs and one relay output. Easy to install expansion cards increase monitoring capacity by an additional 32 inputs (on four cards), 16 outputs (on two cards).

What's in the box

- ✓ Express II
- ✓ AC Power Adapter
- ✓ Mounting hardware
- ✓ User's Manual and Documentation
- ✓ Screwdriver
- ✓ Telephone Cable

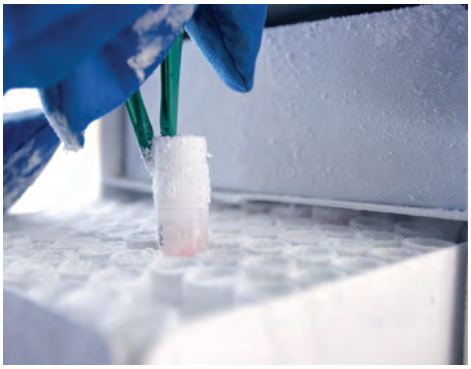
Included Features

- ✓ Internal rechargeable battery-backup system provides 12 hours of continuous monitoring and alerts
- ✓ Microphone for sound level monitoring
- ✓ No monthly fees

Product Name	Part Number
Sensaphone Express II	FGD-6700

Rugged & Weatherproof

The Sensaphone Express II comes in a lockable, NEMA 4X enclosure that is suitable for harsh, corrosive environments such as greenhouses or agricultural applications.



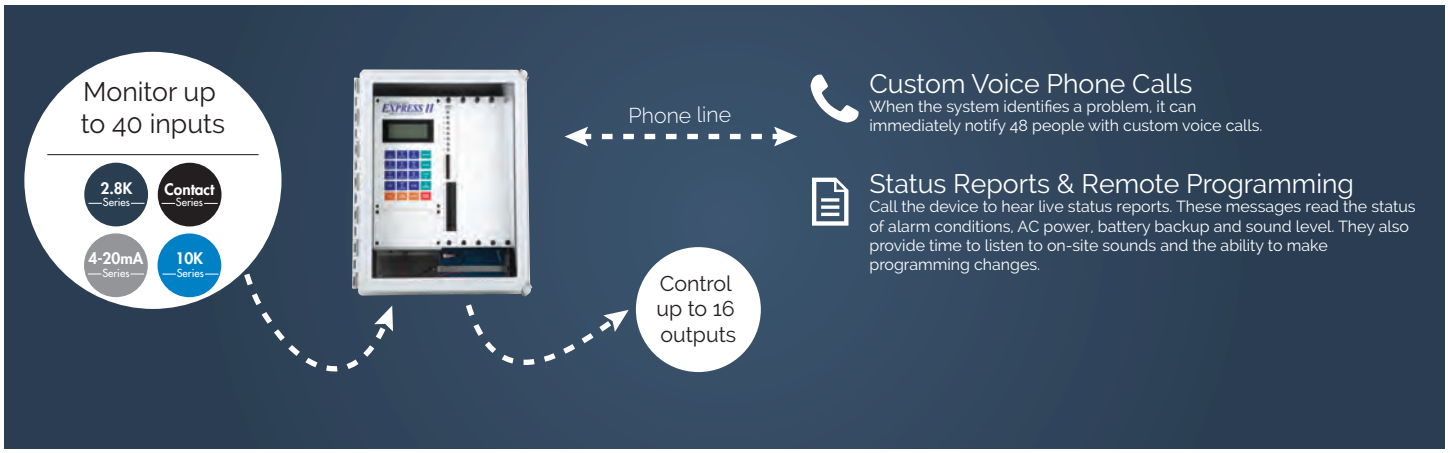
Low Temperature Monitoring

With the ability to monitor temperatures down to -65°C, the Sensaphone Express II is a great choice for many cold storage applications.

4-20mA Transducer Support

Read more than just simple on/off or open/closed type sensors. The Express II includes full analog capability so real world values can be monitored.

How it works



* Requires subscription

Features & Specifications

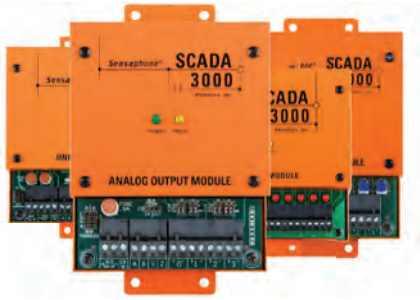
Communication Method:	Phone Line
Number of Inputs:	8 standard, expandable to 40
Input Types:	Contact, 2.8K, 10K , 4-20mA
Temperature Sensing Range:	-85° to 300°F | -65° to 149°C
Output Relay:	One output relay standard, expandable to 17 total
Remote Access:	Call in to check status and make programming changes
Local Access:	Keypad for viewing status, four line LCD display, LEDs
Alarm Notification:	48 custom voice phone calls
Physical:	14.5 x 13 x 8.3" | 368 x 330 x 210mm 18lbs | 8.1kg
Warranty:	1 Year

Sensaphone SCADA 3000

Industrial Monitoring

SCADA3000 Details

- Ideal for monitoring facilities with expanding needs
- Windows® software with integrated Ladder/C compilers and real-time HMI design
- Expansion modules include relay/analog output, universal input, and pulse count
- Communicates through RS-232, radio, and phone lines
- Notifies up to 64 contacts by phone, e-mail, text, fax, or pager
- Control, monitoring, and data collection in a single system
- Generate automatic custom reports daily to your e-mail or fax
- Expandable up to 144 I/O points with control logic
- Data-logging capability allows for up to 50,000 time-stamped records



Expansion Options

Expansion modules are available to add specialized inputs such as high speed pulse counters, or simply additional universal inputs. Outputs can be expanded to add more relay channels, or 4-20mA analog output channels. You can add modules to the Sensaphone SCADA 3000 and keep expanding up to a total of 144 I/O points. For more information see page 49.

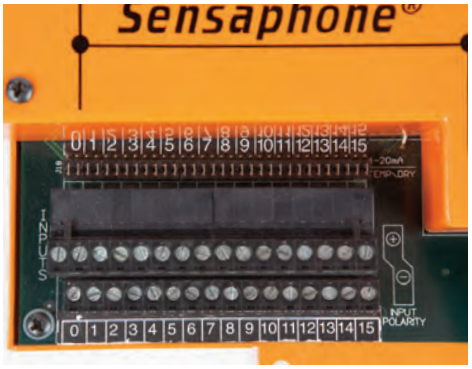
What's in the box

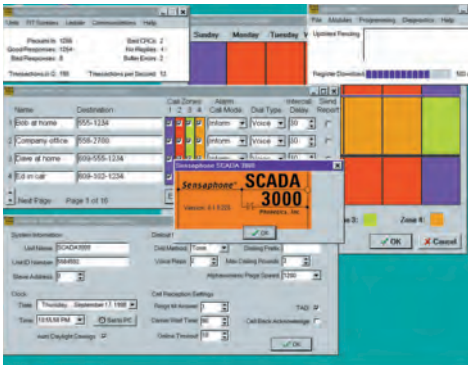
- ✓ SCADA3000
- ✓ Screwdriver
- ✓ Serial Cable
- ✓ Telephone Cable
- ✓ Software CD
- ✓ Mounting hardware
- ✓ User's Manual and Documentation

Included Features

- ✓ 16 input channels as standard, expandable to 136 in total
- ✓ Eight output channels as standard, expandable to 128 in total
- ✓ Power failure monitoring
- ✓ No monthly fees

Product Name	Part Number
Sensaphone SCADA 3000	FGD-3000





16 Inputs, 8 Outputs Standard

The 16 universal inputs and eight relay outputs come standard. The inputs can accept contact type sensors, 4-20mA transducers, 0-5 Volt sensors, and any 10K type sensor.

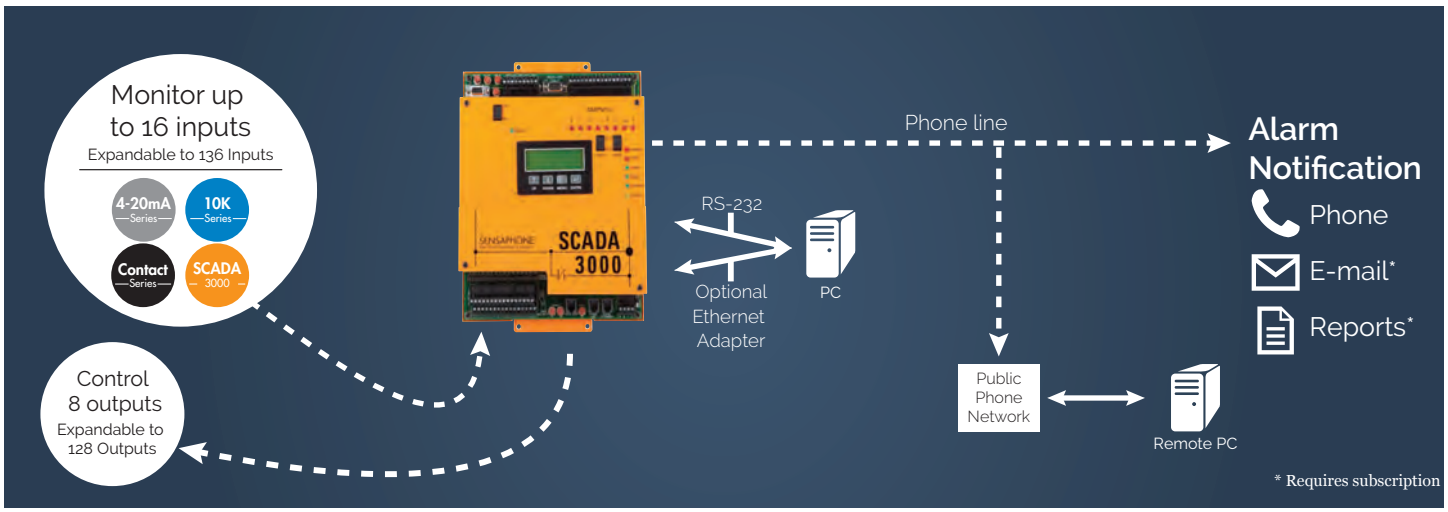
Free HMI Software

The SCADA 3000 comes with free software, a significant cost benefit, as no high cost third party software must be purchased and installed.

Powerful Programming

The included software lets you program units, develop ladder and C-programs, retrieve data, analyze event logs and print a variety of reports.

How it works



Features & Specifications

Communication Method:	Phone Line
Number of Inputs:	16 standard, expandable to 136
Input Types:	Contact, 10K, 4-20mA
Temperature Sensing Range:	-100° to 300°F | -65° to 150°C
Output Relay:	Eight output relays standard, expandable to 128 total
Remote Access:	Call in to check status and make program ming changes via dialup modem
Local Access:	Keypad for viewing status, four line LCD display, LEDs
Alarm Notification:	64 custom voice phone calls
Data Logging:	50,000 time stamped records
Physical:	9.4 x 12.2 x 2" | 239 x 310 x 51mm 3lbs | 1.3kg
Warranty:	3 Years

Sensaphone Sensors & Accessories

How to choose a compatible sensor

The Sensaphone product line includes many options for sensors and accessories. Not all sensors work with all Sensaphone units, but pairing a sensor with your Sensaphone has never been easier. Simply identify the colored circle icons that work with your product below. Then, when selecting a sensor make sure it displays the same icon. It's that easy.

Wireless Sensors

Sensaphone provides two main product options for wireless sensors; the Sensaphone 2800 and Sensaphone WSG30. They both have their own line of wireless sensors. Setup of the wireless sensors is simple and easy.

Sensaphone 2800 Wirless Sensors . . . . . pg 50
Sensaphone WSG30 Wireless Sensors . . . . . pg 51

Easy to use sensors

All of the hard wired sensors in this section are connected via the Sensaphone's terminal strip. Simply insert the sensor's wire into the terminal block and tighten it down. We even include the screwdriver.

Need more help?

Give us a call and our friendly sales team will work with you to find a solution that's customized to your needs. If you already have a Sensaphone, we offer free technical support.

Compatible Sensor Types

	SENTINEL	CELL682	SAT4D1	WEB600	WSG30	SENSAPHONE 400|800	SENSAPHONE® | SENSAPHONE® 1400 | 1800	SENSAPHONE® 2800	SENSAPHONE® EXPRESS II	SCADA 3000
Contact Series	✓	✓	✓	✓		✓	✓	✓	✓	✓
2.8K Series	✓	✓		✓		✓	✓	✓	✓	
10K Series	✓	✓		✓			✓	✓	✓	✓
4-20mA Series	✓	✓		✓			✓	✓	✓	✓
WSG Wireless					✓					
2800 Wireless								✓		
SCADA 3000										✓

Ethernet to WiFi Adapter

Add WiFi connectivity to any network based Sensaphone

The Ethernet to WiFi Adapter is a high-speed, long-range outdoor wireless bridge that is an ideal solution for adding Wi-Fi connectivity to any network based Sensaphone. This is a cost effective solution when faced with running communication cable or trenching long runs of alarm wire to the Sensaphone. The device also features a weatherproof housing that ensures continued operation in harsh outdoor environments or in climates of extreme cold, heat or continuous moisture.

TECH SPECS

Name	Ethernet to WiFi Adapter
Operating Temperature Range	-4° to 158°F | -20° to 70°C
Connection	Ethernet
Housing	IP65 rated weatherproof housing
Dimensions	3.9 x 7.3 x 1.14" | 99 x 185 x 29mm
Sensor Series	Accessory

Part Name — **Part Number**
Ethernet to WiFi Adapter FGD-0250

RTD Probe w/4-20mA Transmitter

Sensor Temperature Range	-328 to 399°F | -200° to 35° C
Sensor Series	4-20mA Series
Notes	Can be customized to any temperature range between -200° to 204°C

The RTD probe with 4-20mA transmitter can be used to measure the temperature in extreme environments. Part number FGD-0240 is calibrated to operate over the range -200° to 35°C. Part number FGD-0240-SPEC can be customized at time of order to operate over any range between -200° and 204°C.

Part Name — **Part Number**
Ethernet to WiFi Adapter (-200˚ to 35˚C). FGD-0240
Ethernet to WiFi Adapter with Custom Range FGD-0240-SPEC

Sensaphone Temperature Sensors

2.8K Room Temperature Sensor

Sensor Temperature Range	0° to 120°F | -17° to 49°C
Accuracy	± 1°F | ±.56°C
Sensor Series	2.8K Series
Notes	Not for outdoor use

This sensor will measure and report the exact temperature back to the Sensaphone. The Sensaphone can be programmed to trigger an alarm when conditions exceed the set high or low temperature limits. This model is recommended to be located in clean, dry environment. For outdoor use model FGD-0101 is recommended.

Part Name	Part Number
2.8K Type Room Temperature Sensor	FGD-0100

2.8K Weatherproof Temperature Sensor

Sensor Temperature Range	-20° to 176°F | -28° to 80°C
Accuracy	± 1°F | ±.56°C
Sensor Series	2.8K Series
Notes	Available with NIST Certification

This sensor will measure and report the exact temperature back to the Sensaphone. The Sensaphone can be programmed to trigger an alarm when conditions exceed the set high or low temperature limits. It is suitable for use in wet, dirty environments. Includes 12' | 3.6m of cable.

Part Name	Part Number
2.8K Type Weatherproof Temperature Sensor	FGD-0101
2.8K Type Weatherproof Temperature Sensor & NIST	FGD-0101 -NIST

2.8K Ultra Low Temperature Sensor

Sensor Temperature Range	-121° to 176°F | -85° to 140°C
Accuracy	± 1°F | ±.56°C
Sensor Series	2.8K Series
Notes	Available with NIST Certification

When monitored temperatures dip below -20°F all other temperature sensors simply won't suffice. This sensor offers reliable temperature monitoring down to -85°C. It's a perfect fit for many applications where traditional temperature sensors have failed. Includes 12' | 3.6m of cable.

Part Name	Part Number
2.8K Ultra Low Temperature Sensor	FGD-0101-TEF
2.8K Ultra Low Temperature Sensor & NIST	FGD-0101-TEF-NIST

2.8K Temperature Sensor in Glass Bead Vial

Sensor Temperature Range	-20° to 176°F | -28° to 80°C
Accuracy	± 1°F | ±.56°C
Sensor Series	2.8K Series
Notes	Available with NIST Certification

The glass bead filled vial will buffer any momentary fluctuations that may cause a preliminary alarm dial out, such as defrost cycles, opening of doors, and fans circulating air. The beads slow the response time allowing normal daily operations without having an alarm. Includes 12' | 3.6m of cable.

Part Name	Part Number
2.8K Type Ultra Low Temperature Sensor in Glass Bead Vial	FGD-0107
2.8K Type Ultra Low Temperature Sensor in Glass Bead Vial & NIST	FGD-0107-NIST

2.8K Ultra Low Temperature Sensor in Glass Bead Vial

Sensor Temperature Range	-121° to 176°F | -85° to 140°C
Accuracy	± 1°F | ±.56°C
Sensor Series	2.8K Series
Notes	Available with NIST Certification

This glass bead filled vial will buffer any momentary fluctuations that may cause a preliminary alarm dial out, such as defrost cycles, opening of doors, and fans circulating air. The glass beads will slow the response time of the sensor allowing normal daily operations to occur without having an alarm. The ultra low temperature sensor probe is able to monitor temperatures down to -85°C. Includes 12' | 3.6m of cable.

Part Name	Part Number
2.8K Ultra Low Temperature Sensor	FGD-0107-TEF
2.8K Ultra Low Temperature Sensor & NIST	FGD-0107-TEF-NIST

Temp Alert Temperature Switch

Sensor Temperature Range	-30° to 130°F | -34° to 54°C
Accuracy	± 3°F | ±1.7°C
Sensor Series	Contact Series
Dimensions	6.3 x 3.3 x 2" | 158 x 83 x 50mm

The Temp Alert Temperature Switch can be used with all Sensaphone models to monitor air temperature from -30° to 130°F. Simply set the acceptable temperature limits for your application and when the temperature exceeds that setting, the sensor triggers an alarm.

Part Name	Part Number
Contact Type Temp Alert Temperature Switch	FGD-0022

Sensaphone Temperature Sensors

10K Weatherproof Temperature Sensor

Sensor Temperature Range	-20° to 176°F | -28° to 80°C
Accuracy	± 1°F | ±.56°C
Sensor Series	10K Series
Dimensions	12' of wire | 3.5m

This sensor enables monitoring temperatures at a location away from a Sensaphone unit. It will measure and report the exact temperature back to the Sensaphone. The Sensaphone can be programmed to trigger an alarm when conditions exceed the set high or low temperature limits. It may be mounted anywhere air temperatures need to be measured and is suitable for use in wet, dirty environments. Includes 12' | 3.6m of cable.

Part Name — **Part Number**

10K Type Weatherproof Temperature Sensor FGD-0102

Indoor Decorator Zone Temperature Sensor

Sensor Temperature Range	35° to 140°F | 2° to 60°C
Accuracy	± .36°F | ±.2°C
Sensor Series	10K Series
Dimensions	6.3 x 3.3 x 2" | 158 x 83 x 50mm

The 10K indoor decorator zone temperature sensor offers precision room temperature sensing in an attractive wall–mounted enclosure. Accurate to 0.36°F (0.2°C) with a sensing range of 35° to 140°F. The indoor decorator comes in a beige plastic enclosure with a tan metal face plate. The sensor is designed to be wall–mounted indoors where appearance is important. Includes 8' | 2.4m of cable.

Part Name — **Part Number**

10K Type Indoor Decorator Zone Temperature Sensor FGD-0103

Outdoor Air Temperature Sensor

Sensor Temperature Range	-30° to 140°F | -34° to 60°C
Accuracy	± .36°F | ±.2°C
Sensor Series	10K Series
Dimensions	6.3 x 3.3 x 2" | 158 x 83 x 50mm

The 10K Outdoor Air Weatherproof Temperature sensor is a sensitive temperature element in a stainless steel tube sheathe. It is mounted inside a ventilated, treated, weather–resistant PVC shield to minimize radiant energy effects and mounted on a weatherproof outlet box for easy outdoor installation. Accurate to ± 0.36°F (0.2°C) with a sensing range of -30° to 140°F. 8' of 24AWG wire included.

Part Name — **Part Number**

10K Type Outdoor Air Temperature Sensor. FGD-0104

10K Series — Immersion Temperature Sensor

Sensor Temperature Range	10° to 230°F | -34° to 60°C
Accuracy	± .36°F | ±.2°C
Sensor Series	10K Series
Dimensions	Thermowell: 5.2" | 130mm

This sensor measures the temperature of fluids inside a pipe. It's constructed of brass WEL-B thermowell (which screws into a customer-supplied 0.5" NPT saddle or Thredolet® fitting in a pipe). It fits into a thermowell via a brass 0.125" NPT fitting. Includes 12' | 3.6m of cable.

Part Name — **Part Number**

10K Type Immersion Temperature Sensor FGD-0105

Sensaphone Humidity Sensors

Contact Series — Humidistat Humidity Switch

Operating Temperature Range	32° to 95°F | 0° to 35°C
Humidity	10 to 80%
Sensor Series	Contact Series
Dimensions	2.75 x 5.25 x 1.6" | 70 x 133 x 41mm

The Humidistat can be used to detect a high or low humidity level. The device will cause your Sensaphone to activate an alarm when the humidity level reaches a set threshold. With a range of 10% to 80% RH level, the sensor causes an alarm when the humidity exceeds or falls below the set limit.

Part Name — **Part Number**

Contact Type Humidistat Humidity Switch FGD-0027

4-20mA Series — Humidity Sensor

Operating Temperature Range	32° to 122°F | 0° to 50°C
Accuracy	± 3% from 10 to 95% RH
Sensor Series	4-20mA Series
Dimensions	2.8 x 4.5 x 1.2" | 70 x 114 x 29mm

This sensor is a space mount, low profile humidity transducer that transmits actual humidity levels to a Sensaphone for programmable high and low alarm limits. The device can be used with any Sensaphone that supports 4-20mA inputs. A 24V DC power supply (FGD-0053) is required unless used with the SCADA 3000.

Part Name — **Part Number**

4-20mA Humidity Sensor FGD-0052

Sensaphone Water Detection Sensors

Spot Water Detection Sensor

Connection	Hardwired
Housing	Black plastic
Sensor Series	Contact Series
Dimensions	2.2 x 1.3 x 3.6" | 57 x 28 x 92mm

This water detection sensor can be used with all Sensaphone models to detect the presence of water on a horizontal surface. It is powered by internal batteries which last for three to five years. When the batteries start to run down, the sensor will automatically cause an alarm when no water is present. Multiple sensors can be wired in series to a single input. Includes 25' | 7.6m of cable.

Part Name	Part Number
Contact Type Spot Water Detection Sensor	FGD-0013

Zone Water Detection Sensor

Connection	Hardwired
Housing	Black plastic
Sensor Series	Contact Series
Dimensions	5.5 x 3.3 x 1.4" | 140 x 83 x 33mm

The Sensaphone Zone Water Detector is for use in detecting the presence of water on a floor or in a false ceiling. It comes with 10' of WaterRope capable of covering a larger area than the FGD-0013 water sensor. Up to ten Water Ropes can be cascaded from a single sensor for even greater coverage. Works with all Sensaphone products and operates on two AA batteries.

Part Name	Part Number
Contact Type Zone Water Detection Sensor	FGD-0056
Water Rope Extension for Zone Water Detection Sensor	FGD-0063

Float Level Switch

Operating Temperature Range	-10° to 80°F | -23° to 26°C
Housing	Black plastic
Sensor Series	Contact Series
Dimensions	3.5 x 1.5" | 89 x 38mm

The FGD-0222 float switch is a plastic side mounted float switch. It is cost effective for level control applications in small tanks where it is more convenient to install a level switch through the sidewall of the tank. This style float switch can be rotated for Normally Open or Normally Closed operation. Combine two switches at different levels for high and low level or pump control or alarming.

Part Name	Part Number
Contact Type Float Level Switch	FGD-0222

24VDC Power Supply for 4-20mA Sensors with Battery Backup

Battery Backup Duration	Up to 8 hours
Power	24V / 40mA will power two devices
Sensor Series	Accessory Series
Dimensions	7.5 x 3.6 x 1.2" | 190 x 92 x 31mm

4-20mA transducers require power to operate. Some Sensaphone products provide 24VDC power specifically for this purpose. When using a 4-20mA transducer with a model that does not, an external power supply is required. This 4-20mA Power Supply provides up to eight hours of battery backup if main power fails.

Part Name — **Part Number**
24VDC Power Supply for 4-20mA Sensors w/ Battery Backup FGD-0070

24VDC Power Supply for 4-20mA Sensors

Power	24V / 250mA
Sensor Series	Accessory Series

4-20mA transducers require power to operate. Some Sensaphone products provide 24VDC power specifically for this purpose. When using a 4-20mA transducer with a model that does not, an external power supply is required.

Part Name — **Part Number**
24VDC Power Supply for 4-20mA Sensors FGD-0053

PowerOut Alert Power Failure Switch

Operating Temperature Range	40° to 100°F | 4° to 37°C
Time Delay	3 to 8 minutes
Contact Rating	.5 Amp @ 30V
Sensor Series	Contact Series
Dimensions	2.3 x 3 x 2" | 57 x 76 x 50mm

A compact power outage monitoring device to detect power failures. Easily plugs into any 110 VAC receptacle outlet for operation. Works with all Sensaphone products. Comes with 15 feet of wire.

Part Name — **Part Number**
Contact Type PowerOut Alert Power Failure Switch FGD-0054

Sensaphone Security Sensors

Smoke Detector for 110VAC

Sensor Temperature Range	40° to 100°F | 4° to 37°C
Connection	Hardwired
Sensor Series	Contact Series
Dimensions	6.5" diameter x 2.6" | 72mm x 40mm

The Smoke Detector with relay output is designed for use in commercial and residential applications. The device requires hardwired 120VAC 60Hz power (220VAC 50 Hz optional). Up to six devices can be connected together and a 90dBA audible horn is included. It incudes a standard battery backup. This smoke detector includes a relay output and can be used with all Sensaphone models.

Part Name	Part Number
Contact Type Smoke Detector for 110VAC w/ Battery Backup	FGD-0049-B
Contact Type Smoke Detector for 220VAC	FGD-0049-220V

Infrared Motion Detection Sensor

Range	Approximately 40'
Battery Life	3 to 5 years
Sensor Series	Contact Series
Dimensions	4 x 6 x 1.5" | 101 x 152 x 38mm

The Infrared Motion Detection sensor can be used with all Sensaphone models to monitor the movement of warm bodies in a specific area. It will cause an alarm if motion is detected. Its range of detection covers approximately forty feet of area. Multiple sensors can be wired in series to a single input.

Part Name	Part Number
Contact Type Infrared Motion Detection Sensor	FGD-0007

Magnetic Reed Door & Window Switch

Connection	Hardwired
Housing	Plastic
Sensor Series	Contact Series
Dimensions	2.5 x .75 x .5" | 63 x 19 x 13mm

The magnetic reed switch may be used with all Sensaphone Models to detect any unauthorized entry or intrusion. They are usually installed on doors or windows to detect their opening and closing. Several magnetic reed switches may be wired in series.

Part Name	Part Number
Contact Type Magnetic Reed Door & Window Switch	FGD-0006

Sensaphone Air Quality Sensors

4-20mA Series — Carbon Dioxide (CO_2) Sensor

Carbon Dioxide Range	0-2,000PPM
Accuracy	± 50PPM
Sensor Series	4-20mA Series
Dimensions	4.6 x 3.3 x 1.2" | 116 x 84 x 30mm

The Sensaphone Carbon Dioxide sensor will monitor levels of Carbon Dioxide from 0-2,000ppm with any Sensaphone that will accept a 4-20mA input signal. The sensor will need a 24VDC power supply to operate (Part # FGD-0053)

Part Name — **Part Number**

4-20mA Type Carbon Dioxide (CO_2) Sensor. FGD-0068

4-20mA Series — Carbon Monoxide (CO) Sensor

Carbon Monoxide Range	0-500PPM
Accuracy	± 5%PPM
Sensor Series	4-20mA Series
Dimensions	7.2 x 4.9 x 1.7" | 182 x 124 x 43mm

Carbon Monoxide is a highly toxic gas that has no color or odor. The Sensaphone Carbon Monoxide Sensor will allow you to monitor CO levels from 0-300 ppm with any Sensaphone that will accept a 4-20mA input signal. The 1" x .5" LCD displays the PPM and menu parameters. The sensor will require a 24VDC power supply to operate (Part # FGD-0053).

Part Name — **Part Number**

4-20mA Type Carbon Monoxide Sensor. FGD-0065

4-20mA Series — Air Quality Sensor

Measurement	Solid State TGD VOC Sensor
Sample Method	Flow Through
Sensor Series	4-20mA Series
Dimensions	2.8 x 4.7 x 1.3" | 71 x 119 x 32mm

The Sensaphone Indoor Air Quality Sensor will monitor levels of pollution from 0–100% with any Sensaphone that will accept a 4-20mA signal. Popular applications include schoolrooms, office buildings, and parking garages. Air contaminants can include cigarette smoke, cooking exhaust, automobile exhaust, solvents, and many others. The sensor will require a 24VDC power supply to operate. (Part # FGD-0053)

Part Name — **Part Number**

4-20mA Type Air Quality Sensor. FGD-0066

Sensaphone Accessories

Multi-Point Wireless I/O Accessory

The Multi-Point Wireless I/O System is ideal for connecting dry contacts and/or a 4-20mA transducer to a Sensaphone that is too far (or too expensive) to run cable. The system will replicate these sensors up to a distance of 600' indoors or up to four miles line of site (flat terrain, raised antennas). The system includes a matched 1 Watt 900MHz transmitter and receiver. Two 24V power supplies and omni-directional antennas are included.

Part Name	Part Number
Multi-Point Wireless I/O Accessory	FGD-0205

Dual Setback Thermostat

For use exclusively with the Sensaphone 400 and 800, this is a "setback" thermostat with an LCD readout. It lets you enter the desired setpoint for both your "away" and "home" temperatures. A control signal, sent from your Sensaphone, switches between these two settings. Requires 12V power supply (XFR-0024)

Part Name	Part Number
Dual Setback Thermostat	FGD-0064

Bluetooth Cell Phone Interface

The XLink allows your Sensaphone to dial and receive calls using any cell phone with Bluetooth technology. It provides telephone service to a Sensaphone by placing a cell phone next to the device. The XLink will send all incoming calls to the Sensaphone and when the Sensaphone needs to dial out, the call will be seamlessly completed through the cell phone.

Part Name	Part Number
Bluetooth Cell Phone Interface	FGD-0230

Surge Suppressor for Power & Phone

This surge suppressor offers complete AC and phone line surge suppression. The retractable plug prevents scratching of expensive portable electronics. A set of two RJ11 telephone line suppression jacks protect dialup and voice/modem lines. The suppressor offers two total outlets in a space saving direct plug-in format and diagnostic LEDs to warn of problems.

Part Name	Part Number
Surge Suppressor for Power & Phone	FGD-0067

Sensaphone SCADA 3000 Accessories

SCADA 3000 Universal Input Expansion Module

The SCADA 3000 Universal Input Module is an optional component for use with the SCADA 3000 system. The input channels are identical to those included on the SCADA 3000 main unit. The Universal Input Module features eight channels that can be configured to interface with several different types of sensors and transducers, including: Normally Open/Normally Closed dry contacts, digital logic, run time accumulation, 0–5V analog, 4–20mA analog and 10K thermistor (°C & °F).

Part Name	Part Number
SCADA 3000 Universal Input Expansion Module	FGD-3010

SCADA 3000 Pulse Count Module

The SCADA 3000 Pulse Count Module features four totalizing pulse count channels and four virtual channels that can be programmed to calculate various rates or to display count overflow. The four pulse count channels are capable of counting pulses at a rate of up to 10,000 pulses per second (10KHz). Each channel will totalize pulses up to one million and then reset to zero. The four virtual channels can be programmed to calculate the pulse as either pulses per second, pulses per minute, or pulses per hour.

Part Name	Part Number
SCADA 3000 Pulse Count Module	FGD-3020

SCADA 3000 Relay Output Module

The SCADA 3000 Relay Output Module is an optional component for use with the SCADA 3000 system. The output channels are identical to those included on the SCADA 3000 main unit. The Relay Output Module features eight latching relay outputs that can be used to switch equipment on and off. The relays are rated at 2 Amps at 125VAC and have integral contact protection. They may be controlled manually or automatically via a ladder program or C-program. In addition, a microprocessor watchdog circuit is integrated to maintain system reliability. LED indicators are provided to show system power and module operation via a blinking pulse LED.

Part Name	Part Number
SCADA 3000 Relay Output Module.	FGD-3040

SCADA 3000 Analog Output Module

The SCADA 3000 Analog Output Module features four analog output signals that can be configured as 4–20mA, 0–20mA, or 0–10V. The outputs can be used to control equipment, drive digital displays, or provide information to other computer devices. The individual outputs are capable of driving up to 1000 Ohms. They may be controlled automatically via a ladder program or C-program. The module also features a microprocessor watchdog circuit to maintain system reliability. LED indicators are provided to show system power and module operation via a blinking pulse LED.

Part Name	Part Number
SCADA 3000 Analog Output Module.	FGD-3050

Sensaphone 2800 Wireless Sensors

Now you can monitor critical conditions at remote locations without running wires. Based on proven Sensaphone remote monitoring methods, the 2800 adds the ability to read sensor status from wireless sensors, and not just simple on/off status or open/closed conditions. The wireless technology includes full analog capability so real world values can be monitored like actual temperatures, real tank levels, and flow rates.

The Sensaphone 2800 can accept up to four wireless sensors. A variety of wireless sensor types are available to choose from in addition to two wireless interface modules. The interface modules allow you to connect to existing equipment and transmit their status back to the 2800.

The 2800 Wireless Sensors all include a built in radio transmitter and run on AA or AAA batteries which will power the sensors for up to three years. An optional plug-in power supply is also available. The batteries become a backup if main AC power fails. The wireless sensors can be placed up to 300' | 91m away from the 2800 or even farther with the use of a repeater.

Temperature Sensor

Includes a temperature element for monitoring temperatures wherever the device is installed. The internal element can be replaced with a remote temperature probe so that measurements can be made inside a harsh environment such as a refrigerator or freezer.

2800 Wireless Temperature Sensor WSR-0100

Dry Contact Bridge

Includes input terminals for connecting to any normally-open or normally-closed output. Use of this device with solid state outputs is not recommended.

2800 Wireless Dry Contact Bridge WSR-0101

Power Failure Sensor

Includes a wall plug in power supply that will detect the loss of power at the outlet where the power supply is attached. Three AAA batteries will power the sensor and allow it to transmit alarms in the event of a power outage.

2800 Wireless Power Failure Sensor. WSR-0102

Humidity Sensor

Includes a humidity sensor element for monitoring humidity from 0 to 95% wherever the device is installed.

2800 Wireless Humidity Sensor. WSR-0103

4-20mA Bridge

Includes a 4-20mA input and 24V loop power supply. The sensor can be used to monitor the output of any 4-20mA transducer. Comes with plug in power supply.

2800 Wireless 4-20mA Bridge. WSR-0104

Motion Detection Sensor

This sensor detects motion of heat sources using infrared sensing technology.

2800 Wireless Motion Detection Sensor WSR-0105

Water Detection Sensors

Includes water sensing probes for monitoring the presence of water at a particular location. The Zone Water Detection Sensor comes with ten feet of water sensing cable. Additional lengths can be added to increase monitored area.

2800 Wireless Spot Water Detection Sensor WSR-0106
2800 Wireless Zone Water Detection Sensor WSR-0107

Wireless Repeater

Allows greater distances between wireless sensors and the Sensaphone 2800. A more powerful radio transceiver can transmit up to 300' indoors and up to 4,000' (line-of-sight). Only one repeater can be used per Sensaphone 2800.

2800 Wireless Repeater. WSR-0199

Sensaphone WSG30 Wireless Sensors

The Sensaphone WSG30 also offers monitoring critical conditions at remote locations without running wires. Based on proven Sensaphone remote monitoring methods, the WSG30 has the ability to read sensor status from wireless sensors. And not just simple on/off status or open/closed conditions. The wireless technology includes full analog capability so real world values can be monitored like actual temperatures, real tank levels, and flow rates.

The Sensaphone WSG30 can accept up to thirty wireless sensors. A variety of wireless sensor types are available to choose from in addition to two wireless interface modules. The interface modules allow you to connect to existing equipment and transmit their status back to the WSG30.

The WSG30 Wireless Sensors all include a built in radio transmitter and run on AA batteries which will power the sensors for up to two years. An optional plug-in power supply is also available if one isn't supplied with the sensor. The batteries become a backup if main AC power fails. The wireless sensors can be placed up to 300' | 91m away from the WSG30 or much farther with a line of sight. The sensors also can create a mesh network that would expand the wireless sensor range.

Temperature Sensor

Includes a temperature element for monitoring temperatures wherever the device is installed. This sensor will monitor temperatures from 32° to 115°F | 0° to 46°C.

WSG Wireless Temperature Sensor FGD-WSG30-TMP

Temperature Sensor w/ Probe

Includes a temperature probe for monitoring in a harsh environment such as a refrigerator or freezer. The sensor will monitor temperature from -109° to 115°F | -85° to 46°C. In temperatures below -20°F use part number FGD-WSG30-TEX85. Also available with NIST Certification.

WSG Wireless Temperature Sensor w/External Probe FGD-WSG30-TEX

WSG Wireless Ultra Low Temperature Sensor w/External Probe FGD-WSG30-TEX85

WSG Wireless Ultra Low Temperature Sensor in Glass Bead Vial FGD-WSG30-GBV

Dry Contact Bridge

Includes input terminals for connecting to any normally-open or normally-closed output.

WSG Wireless Dry Contact Bridge FGD-WSG30-DRY

Humidity Sensor

Includes a humidity sensor element for monitoring humidity from 0 to 95% wherever the device is installed.

WSG Wireless Humidity Sensor. FGD-WSG30-HUM

Power Failure Sensor

Includes a wall plug in power supply that will detect the loss of power at the outlet where the power supply is attached. Two AA batteries will power the sensor and allow it to transmit alarms in the event of a power outage.

WSG Wireless Power Failure Sensor. . . . FGD-WSG30-PWR

4-20mA Bridge

Includes a 4-20mA input and 24V loop power supply. The sensor can be used to monitor the output of any 4-20mA transducer. Comes with plug in power supply.

WSG Wireless 4-20mA Bridge. FGD-WSG30-4-20

Spot Water Detection Sensor

Includes water sensing probes for monitoring the presence of water at a particular location.

WSG Wireless Spot Water Detection Sensor FGD-WSG30-SPOT

Zone Water Detection Sensor

Includes 10' of water sensing cable for monitoring for the presence of water in a particular area. Additional lengths can be added to increase the monitored area.

WSG Wireless Zone Water Detection Sensor FGD-WSG30-ZONE

Sensaphone IMS - Infrastructure Monitoring Solutions

The Sensaphone IMS family allows monitoring of potential environmental threats in many of the same ways as traditional Sensaphone products. They can monitor for conditions such as temperature and humidity range, the presence of water, power failure, and physical security with both hard–wired and wireless sensors.

The IMS solutions are designed with many features that go beyond the traditional line of Sensaphone products. One of the biggest advantages is the ability to provide web based monitoring while still offering a traditional phone line. Users can monitor a single room or multiple rooms spread out over a campus, city, state, country, or continents with the same software and still be assured they will receive alarms even if the network connection is lost. The IMS solution is built to be expandable up to 32 units – with eight sensors monitored by each unit, up to 256 inputs can be monitored from one computer. If that's not enough, multiple networks can be managed within the same software.

A full line of IMS specific sensors provide monitoring for a full range of environmental conditions. The sensors require no tools to install, simply plug them in using a standard RJ-45 connection and the IMS unit begins monitoring. With the addition of a Wireless Node, sensors can be monitored without running cables. Simply turn the wireless sensor on and place it in the location it will be monitoring.

At the center of any IMS solution is the software. All units come with the ConsoleView software which allows IMS users to program and manage their network. It allows users to achieve maximum potential from their system by setting detailed parameters for sensors, alarms and more. A multi–site, multi–user software license is included with the purchase so there is no worry about additional licensing costs.

In addition to all of the other advanced features, the IMS solutions offer features specific to monitoring a data center or computer room. The solution provides integrated monitoring of network connectivity and server operation, provides a full event–history and trending, and the units can be mounted directly into a server rack.

Even though the IMS solution was designed with the IT professional in mind, it is finding useful applications in many medical, pharmaceutical, and food industries that have a need for monitoring several locations using one simple solution.

✔ Reliability

- **Supervised Sensors**
  All of the IMS sensors are continuously monitored by the IMS parent unit. If they become disconnected an alert will be sent.
- **Powered Sensors**
  All IMS sensors are powered through their connection to the IMS parent unit.
- **Redundant communication paths with "out of band" alarm notification.**
  Receive alarm notification via several different channels; e-mail, text message, phone, and fax.

✔ Ease of Use

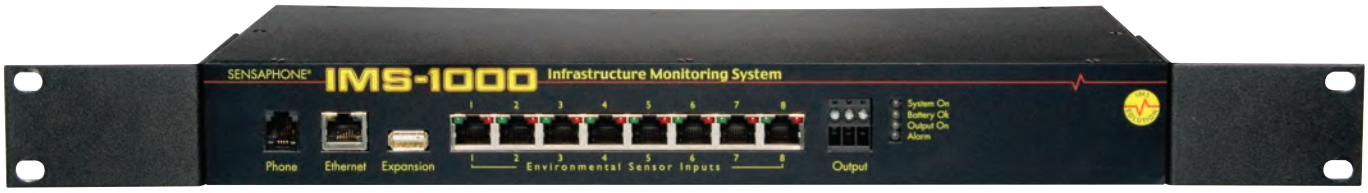
- **Integrated Web Server**
- **Plug and play sensors with automatic identification and setup**
  All IMS sensors are connected using standard Cat–5 cables. As soon as they're plugged in, they become active and start working.
- **Convenient Cat–5 cabling for sensors**
  The use of Cat–5 jacks for sensor inputs allows the use of existing structured cabling to connect remote sensors.

✔ Powerful Features

- **Data Logging**
  All IMS systems gather a time–stamped collection of input values that can be used to view and graph information.
- **Detailed Event History**
  The eventlog contains time–stamped messages that describe activities performed by the unit such as alarm detection, user logins, telephone calls, and alarm acknowledgement.
- **Network Management Integration**
  The IMS system helps maintain, monitor, expedite, and control conditions that effect both large and small networks.
- **Video integration with alarm triggering image capture**
  Alarms can be sent with an image of the condition that tripped that alarm.

Sensaphone IMS-1000

Single Room Monitoring Solution



IMS-1000 Details

With the rack-mountable Sensaphone IMS-1000 Single Room Monitoring Solution a built-in web server lets users view status, make changes, and review history while the included relay output can switch local devices on/off based on alarm activity. Receive alarm notifications through e-mail, text messaging, and SNMP. The available phone-line option (IMS-1002) adds voice alerts and call-in status. Each sensor input features LEDs to indicate status while alarm LEDs show when power, IP, or battery alarms have been triggered.

- Web-based monitor for servers and other applications
- Built-in web server lets you to view status, make changes and review history
- Receive alarm notifications through a standard Ethernet connection
- Alarm notifications through e-mail, text messaging, and SNMP
- Up to eight plug-and-play CAT5 sensors monitor temperature, humidity, smoke, fire, break-in
- Included relay output can switch local devices on/off based on alarm activity
- Available phone-line option (IMS-1002) adds voice alerts and call-in status updates

Add a WiFi Option

Add the ability to have your IMS-1000 communicate over Wi-Fi. The Sensaphone Wi-Fi adapter is a high-speed, long-range outdoor Wireless Bridge that is an ideal solution for adding Wi-Fi connectivity to the IMS-1000. This is the perfect cost effective solution when faced with running long runs of communication cable.

What's in the box

- ✓ IMS-1000
- ✓ Power Supply
- ✓ Telephone Cord (Optional)
- ✓ CD Rom
- ✓ Mounting hardware
- ✓ User's Manual and Documentation

Included Features

- ✓ Internal battery-backup system provides 3.5 hours of continuous monitoring and alerts
- ✓ Power failure monitoring
- ✓ No monthly fees

Product Name	Part Number
Sensaphone IMS-1000 Single Room Monitoring Solution	IMS-1001
Sensaphone IMS-1000 Single Room Monitoring Solution w/ Voice Modem	IMS-1002

Easy to use sensors

Eight plug and play sensor inputs monitor environmental conditions and/or alarm contacts. All sensors use CAT5 cabling and are active and supervised as soon as they're plugged in.

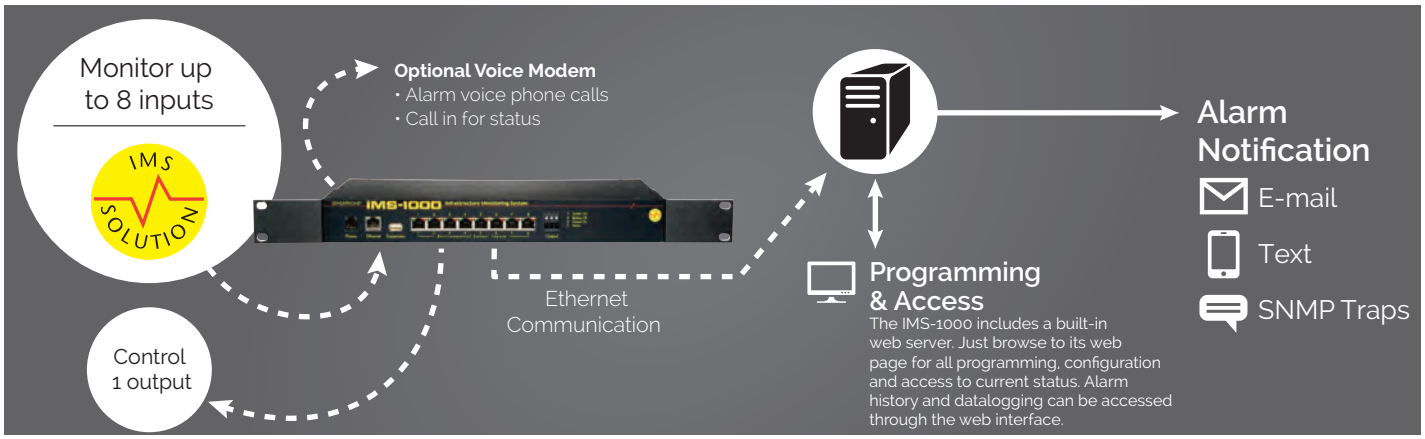
Web Interface

Effortlessly check the latest status, check previous alarm events, or make programming changes to your IMS-1000 through the built-in webpage.

Redundancy

The custom voice phone calls provide an alarm delivery path independent of the computer network. The built in battery backup will keep the IMS-1000 monitoring when the power goes out too.

How it works



Features & Specifications

Communication Method: Ethernet standard, Phone line optional

Number of Inputs: 8

Input Types: IMS Solution

Output Relay: Manual or automatic control

Remote Access: Website to access status and programming

Local Access: LEDs for System On, Battery Status, Output Status, and Alarm Status

Physical: 14 x 1.75 x 7" • 3.75lbs
355 x 44 x 178mm • 1.7kg

Alarm Notification: 16 User profiles with 4 contacts per profile - any combination of e-mail, text message, SNMP trap or voice phone calls (optional)

IP Monitoring: Up to 16 network devices or servers, specific TCP port services can be monitored for connectivity and response

Data Logging: 100,000 samples (include data, date, and time), 1 second to 1 month sampling rates, all sensors, battery and power

Warranty: 3 Years

Sensaphone IMS-4000

Expandable Web Based Monitoring

The Infrastructure Monitoring System (IMS-4000) is the perfect solution to oversee critical environmental conditions in multiple locations across your entire infrastructure. The system is designed to be a comprehensive method of ensuring 100% up-time of your computer systems. By monitoring all aspects of your computer room, including environmental conditions and network equipment, the system will keep you informed of the status of your infrastructure. Monitored conditions can include temperature levels, humidity levels, line voltage, leak detection, server response, UPS systems, and more. The system allows appropriate personnel to be notified immediately of any detected problems. Notification can occur via voice telephone call, pager, e-mail, or fax. An internal battery backup system insures that the unit will continue to run if main power fails. The system also includes the ability to remotely perform diagnostic tests via Touch-Tone commands or e-mail.

Each IMS-4000 host unit can support as many as eight environmental sensors – including temperature, humidity, smoke, sound-level, motion, water, break-in, air flow, and power outage – as well as IP-device monitoring to ensure component availability across your network. As many as 31 expansion nodes can be added. The expansion nodes offer the ability to monitor hard wired or wireless sensors. The IMS-4000 can monitor computer-room activity through motion sensors or reed switches, alerting you when there is activity outside of normal working hours.

Features: Receive infrastructure status update information from any location at any time using it's built-in webserver. The ConsoleView software allow you to view status, make program changes and review data history.

Alerts: Receive timely alarm notifications through the Ethernet port and standard telephone interface. Whenever a problem occurs anywhere within your network environment, customizable voice alerts, e-mails, and text messaging notify you. Across Wide-Area Networks, you can select alerts from certain locations to go only to the nearest personnel.

What's in the box

- ✓ IMS-4000
- ✓ DB9 Serial Cable
- ✓ Mounting Hardware
- ✓ User's Manual and Documentation
- ✓ Power Cord
- ✓ Telephone Cord
- ✓ CD Rom

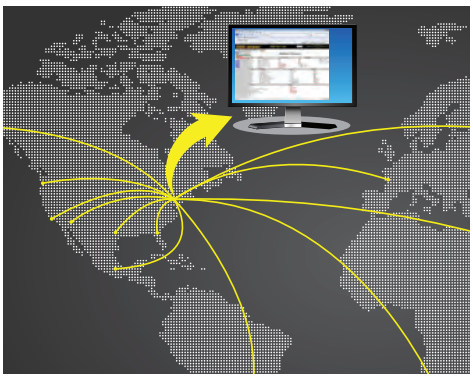
Included Features

- ✓ Internal rechargeable battery-backup system provides 3.5 hours of continuous monitoring and alerts
- ✓ Power failure monitoring
- ✓ No monthly fees

Product Name	Part Number
Sensaphone IMS-4000 Enterprise Host Unit	IMS-4001

Easy to use sensors

Eight plug and play sensors monitor environmental conditions and/or alarm contacts per host and node. All sensors use CAT5 cabling and are active and supervised as soon as they're plugged in.



Console View Software

Effortlessly manage several units, check the latest status, previous alarm events, or make programming changes to your IMS-4000 system with the included Console View software.

Expandable

The IMS-4000 Enterprise System is made to be expanded. With the ability to accept 31 Node units the IMS system can be spread out across a building, state, or country.

Features & Specifications

Communication Method	Ethernet & Phone line
Number of Inputs	8, expandable to 256
Input Types	IMS Solution
Remote Access	Console View Software and or website to access status and programming
Local Access	LEDs to show ethernet connectivity, and power alarms
Alarm Notification	64 User profiles with 4 contacts per profile - any combination of e-mail, text message, SNMP trap, or voice phone calls.
IP Monitoring	Up to 64 network devices or servers per host or node, 2,048 total
Data Logging	62,500 samples (include data, date, and time), 1 second to 1 month sampling rates, all sensors, battery and power
Supported Protocols	Web page - HTTP, PDA, WAP, and XML SNMP - MIB with traps, GET, GETNEXT, and SET
Power Supply	Plug in power supply also monitors for power failures Built in battery backup
Physical	19 x 1.75 x 9.5" | 482 x 44 x 241mm 7.4lbs | 3.3kg
Warranty	3 Years

Popular Applications

Data Center

Computer downtime is no longer acceptable in our fast paced world, so keeping your systems up and running should be a high priority. The IMS-4000 can call, text or email as soon as a problem arises.

Cold Storage

Don't find out that your freezer has stopped running until the next morning. The IMS-4000 will alert you as soon as the temperature reaches a temperature you set.

Sensaphone IMS-4000 Expansion

IMS -4000 Node

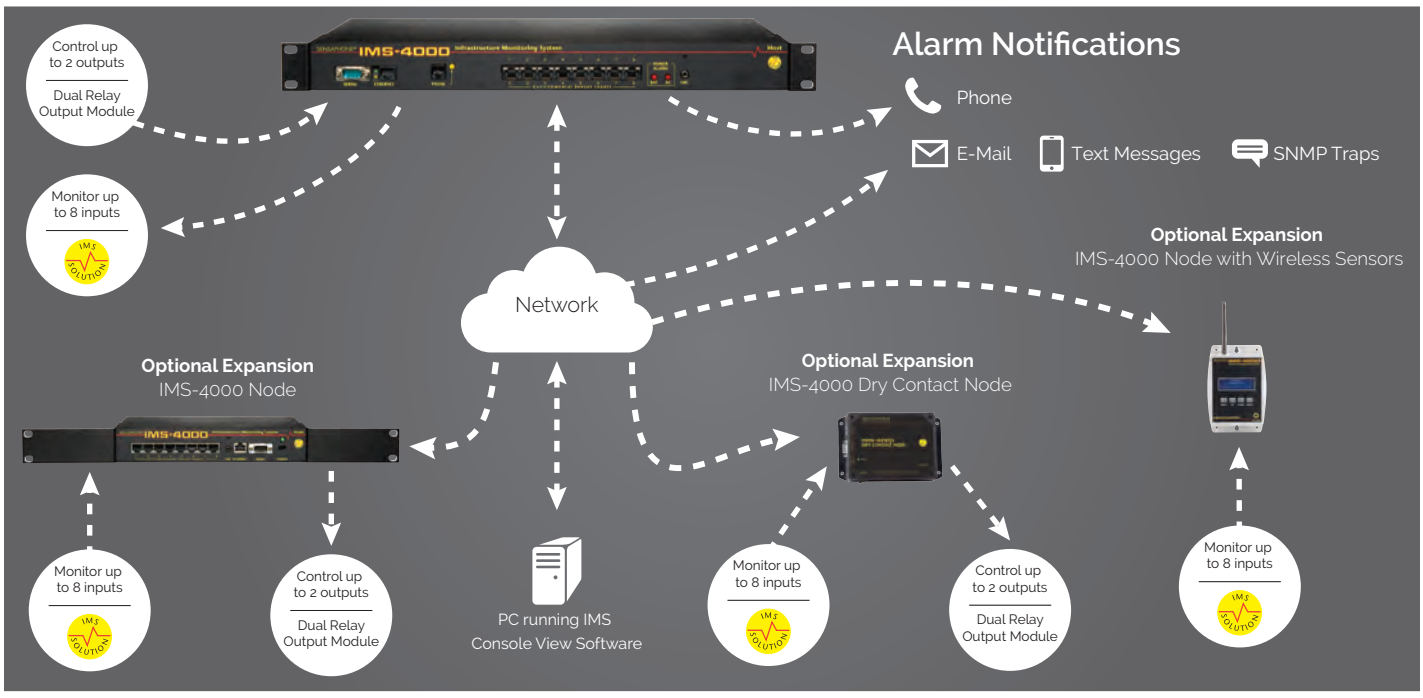
The IMS-4000 Node allows IMS-4000 users to expand their infrastructure and monitor additional inputs in locations away from the IMS-4000 Host. Up to thirty–one Nodes can be used with each IMS-4000 Host. Much like the Host, the Node can monitor eight inputs for environmental conditions and or alarm contacts from other computer equipment such as UPS systems. The Node connects to the Host via a RJ-45 10/100BASE-T Ethernet and is monitored via the ConsoleView software included with the Host.

Number of Inputs	8
Input Types	IMS Solution
Remote Access	Console View Software and or website to access status and programming
Local Access	LEDs to show ethernet connectivity, and power alarms. RS-232 serial port for local configuration
Power Supply	Plug in power supply also monitors for power failures. Built in battery backup
Physical	9.6 x 1.75 x 7" | 482 x 44 x 241mm 7.4lbs | 3.3kg
Warranty	3 Years

Product Name **Part Number**

Sensaphone IMS-4000 Enterprise Monitoring Node Expansion Unit IMS-4002

How it works



IMS Accessories

IMS-4000 Dual Relay Output Module

The IMS-4310 Dual Relay Output Module allows you to control two devices from any IMS-4000 Host or Node. Each output may be controlled either manually or automatically. Each output has the option of providing either a dry relay contact or 12VDC power. Two switches located inside the device select the output type.

Part Name	Part Number
IMS-4000 Dual Relay Output Module	IMS-4310

IMS-4000 Dry Contact Node

Number of Inputs	8
Input Types	Dry Contact, Normally Open or Normally Closed
Internal Monitoring	AC Power, Backup Battery
Local Access	Power LED, Ethernet LEDs
Operating Temperature	32°to 122°F | 0° to 50°C
Power Supply	Plug in power supply Built in battery backup
Physical	7.3 x 5.5 x 1.5" | 185 x 140 x 381mm 2lbs | .9kg
Power Consumption	2.5W

The IMS-4000 Dry Contact Node provides eight dry contact inputs (normally open/normally closed) and works in conjunction with the IMS Host. The device communicates with the IMS-4000 Host via its Ethernet connection. The Dry Contact Node is a cost-effective solution when your application only requires monitoring of dry contacts. With this device you do not need to use Dry Contact Bridges, thus reducing cost, installation time, and space. This device includes four AA rechargeable NiMH batteries for power backup in the event of a power failure. Both main power and battery charge are monitored and can be programmed to trip alarms as well. The unit comes in a black plastic enclosure with tabs for wall mounting. Rubber feet are also included for placement on a shelf/desktop.

Part Name	Part Number
IMS-4000 Dry Contact Node	IMS-4010

Sensaphone IMS Temperature Sensors

IMS Room Temperature Sensor

Sensor Temperature Range	5° to 122°F | -15° to 50°C
Accuracy	± 3°F | ±1.7°C
Sensor Series	IMS Solution
Dimensions	4.5 x 2.8 x 1.3" | 110 x 70 x 30mm

The IMS-4810 temperature sensor is designed to connect to the Sensaphone IMS series product line and monitor indoor temperatures. The electrical connection between the sensor and IMS unit is made via RJ-45 patch cable.

Part Name	Part Number
IMS Solution Room Temperature Sensor	IMS-4810

IMS Room Temperature Sensor w/ Display

Sensor Temperature Range	32° to 95°F | 0° to 35°C
Accuracy	± 3°F | ±1.7°C
Sensor Series	IMS Solution
Dimensions	4.8 x 2.9 x 1.9" | 120 x 73 x 47mm
Notes	Available in °F, or °C. See below for appropriate part number

The IMS-4811 temperature sensor is designed to connect to the Sensaphone IMS series product line and monitor indoor temperatures. The electrical connection between the sensor and IMS unit is made via RJ-45 patch cable (not included). The sensor includes a LCD display for local readings.

Part Name	Part Number
IMS Solution Room Temperature Sensor w/ Display (˚F)	IMS-4811
IMS Solution Room Temperature Sensor w/ Display (˚C)	IMS-4813

IMS Mini Temperature Sensor

Sensor Temperature Range	5° to 140°F | -15° to 60°C
Accuracy	± 3°F | ±1.7°C
Sensor Series	IMS Solution
Dimensions	2.1 x .6 x 1.4" | 54 x 15 x 35mm

The IMS-4812 Mini Temperature Sensor is designed to connect to the Sensaphone IMS series product line and monitor temperatures in tight locations (for example, inside equipment racks). The electrical connection between the sensor and IMS unit is made via the attached 7' RJ-45 patch cable.

Part Name	Part Number
IMS Solution Mini Temperature Sensor (˚F)	IMS-4812
IMS Solution Mini Temperature Sensor (˚C)	IMS-4812-C

IMS Ultra Low Temperature Sensor

Sensor Temperature Range	-122° to 53°F | -86° to 12°C
Accuracy	± 3°F | ±1.7°C
Sensor Series	IMS Solution
Notes	Available with NIST Certification

This sensor is designed to monitor temperatures in refrigerators or freezers. The connection between the sensor and IMS unit is made via the attached 7' RJ-45 patch cable. The sensor probe can reliably monitor temperatures as low as -122°F (-86°C). The temperature probe comes with 12' of cable.

Part Name	Part Number
IMS Solution Ultra Low Temperature Sensor	IMS-4814
IMS Solution Ultra Low Temperature Sensor & NIST	IMS-4814-NIST

IMS Ultra Low Temperature Sensor in Glass Bead Vial

Sensor Temperature Range	-122° to 53°F | -86° to 12°C
Accuracy	± 3°F | ±1.7°C
Sensor Series	IMS Solution
Notes	Available with NIST Certification

This glass bead filled vial will buffer any momentary fluctuations that may cause a preliminary alarm dial out, such as defrost cycles, opening of doors, and fans circulating air. The glass beads will slow the response time of the sensor allowing normal daily operations to occur without having an alarm. The connection between the sensor and IMS unit is made via the attached 7' RJ-45 patch cable. The temperature probe comes with 12' of cable.

Part Name	Part Number
IMS Solution Ultra Low Temperature Sensor in Glass Bead Vial	IMS-4815
IMS Solution Ultra Low Temperature Sensor in Glass Bead Vial	IMS-4815-NIST

IMS Temperature Sensor w/ External Probe

Sensor Temperature Range	32° to 176°F | 0° to 80°C
Accuracy	± 3°F | ±1.7°C
Sensor Series	IMS Solution
Dimensions	2.8" x 1.6" | 72mm x 40mm

This sensor is designed to connect to the Sensaphone IMS product line and monitor temperatures in areas where a traditional sensor won't fit. The electrical connection between the sensor and IMS unit is made via the attached 7' RJ-45 patch cable. The sensor probe may be secured inside equipment using the included clamp or it may be hung using tie wraps. The temperature probe comes with 12' of cable.

Part Name	Part Number
IMS Solution Temperature Sensor w/ External Probe	IMS-4816

Sensaphone IMS Sensors

IMS Room Humidity Sensor

Operating Temperature	32° to 122°F | -28° to 80°C
Humidity	0 to 100%
Sensor Series	IMS Solution
Dimensions	4.5 x 2.8 x 1.3" | 114 x 70 x 32mm

The IMS-4820 humidity sensor is designed to connect to the Sensaphone IMS series product line and monitor indoor humidity levels. The electrical connection between the sensor and IMS unit is made via RJ-45 patch cable (not included). The sensor may be mounted either on a wall or to a single-gang electrical box.

Part Name	Part Number
IMS Solution Room Humidity Sensor	IMS-4820

IMS Room Humidity Sensor w/ Display

Operating Temperature	32° to 158°F | 0° to 70°C
Humidity	5 to 95%
Sensor Series	IMS Solution
Dimensions	4.8 x 2.9 x 1.9" | 120 x 73 x 47mm

The IMS-4821 humidity sensor is designed to connect to the Sensaphone IMS series product line and monitor indoor humidity. The electrical connection between the sensor and IMS unit is made via RJ-45 patch cable (not included). The sensor may be mounted either on a wall or to a single-gang electrical box. The IMS-4821 includes a LCD display for local readings.

Part Name	Part Number
IMS Solution Room Humidity Sensor w/ Display	IMS-4821

IMS Water Detection Sensor

Sensor Temperature Range	32° to 140°F | 0° to 60°C
Housing	Plastic
Sensor Series	IMS Series
Dimensions	5.5 x 3.3 x 1.4" | 140 x 83 x 33mm

The IMS-4830 Water Detection Sensor protects your server and equipment from damaging water leaks from malfunctioning HVAC systems, cafeteria accidents, or any general plumbing failures in your facilities. The IMS-4830 is powered directly by the IMS unit when connected with the included 7' RJ-45 patch cable. 10' of water sensing rope is also included.

Part Name	Part Number
IMS Solution Water Detection Sensor	IMS-4830
Water Rope Extension for Zone Water Detection Sensors	IMS-4831

Current Sensors

Operating Range	5° to 104°F | -15° to 40°C
Accuracy	± 2%
Power Connection	15 Amp: IEC320-C14 inlet | IEC320-C13 outlet 20 Amp: IEC320-C20 inlet | IEC320-C19 outlet
Dimensions	7.3 x 2.1 x 3.6’’’ | 184 x 54 x 92mm

These sensors monitor current consumption of a particular device or circuit. It reports the actual current flow in the circuit, allowing you to know the current draw from devices. Any failed generator starts are reported to you immediately. These units can monitor a voltage range from 0–250VAC 50/60Hz.

Part Name	Part Number
IMS Solution 15 Amp Current Sensor	IMS-4841
IMS Solution 20 Amp Current Sensor	IMS-4842

External Power Failure Sensor

Range	0 to 250 VAC, 50/60 Hz
Accuracy	± 2%
Power Connection	Universal IEC-320 power inlet
Dimensions	5 x 2.5 x 1.6” | 127 x 63 x 41mm

The IMS-4840 External Power Failure Sensor lets you monitor power anywhere within your infrastructure. It reports any loss of power and measures the current voltage in the circuit, allowing you to know the status of each server rack and even of your remote UPS. Any failed generator starts are reported to you immediately. The IMS-4840 can monitor voltage from 0–250VAC 50/60Hz

Part Name	Part Number
IMS Solution External Power Failure Sensor	IMS-4840

Axis IP Camera

Operating Temperature	32° to 122°F | 0° to 50°C
Viewing Angle	47° horizontal
Resolution	640 x 480
Dimensions	2.3 x 3.7 x 1.4” | 59 x 95 x 34mm

The Axis IP Camera is a small network camera ideal for monitoring your small business property, data center, or residence. The camera can be used in combination with the IMS-1000 or IMS-4000 systems to send camera snapshots via e-mail when alarms are detected.

Part Name	Part Number
Axis IP Camera	IMS-4423

Sensaphone IMS Sensors

IMS Dry Contact Bridge

Operating Range	32° to 122°F | 0° to 50°C
Input	Normally Open or Normally Closed Dry Contact
Source/Sense Voltage	14VDC
Dimensions	4.2 x 3.3 x 1.3" | 106 x 84 x 33mm

The IMS-4850 Dry Contact Bridge allows you to connect a dry contact alarm from any device to your IMS. The Dry Contact Bridge is compatible with Normally Open and Normally Closed contacts. The electrical connection between the sensor and IMS is made via RJ-45 patch cable (not included). The sensor may be mounted either on a wall or rest on the floor.

Part Name	Part Number
IMS Solution Dry Contact Bridge	IMS-4850

IMS 4-20mA Bridge

Current Limit	50mA
Accuracy	± .25%
Sensor Series	IMS Solution
Dimensions	4.2 x 3.3 x 1.3" | 106 x 84 x 33mm

The 4–20mA Bridge allows you to connect a 4–20mA transducer to your Sensaphone IMS unit. The 4–20mA Bridge features optical isolation between the input and the IMS unit, which ensures trouble-free operation and safety. The electrical connection between the bridge and IMS is made via RJ-45 patch cable (not included). The bridge may be mounted either on a wall or rest on the floor.

Part Name	Part Number
IMS Solution 4-20mA Bridge	IMS-4851

IMS Magnetic Reed Door & Window Switch

Sensor Temperature Range	32° to 122°F | 0° to 50°C
Bridge Input	Normally Open or Normally Closed Dry Contact
Source/Sense Voltage	14VDC
Sensor Series	IMS Solution

The IMS-4860 Magnetic Reed Switch with bridge enables your IMS unit to detect if any unauthorized entry or intrusion has occurred. The bridge may be mounted either on a wall or rest on the floor. The switch is mounted to doors or windows you wish to monitor. The electrical connection between the bridge and IMS unit is made via 7' RJ-45 patch cable.

Part Name	Part Number
IMS Solution Magnetic Reed Door & Window Switch	IMS-4860

IMS Infrared Motion Detection Sensor

Operating Range	-4° to 140°F | -20° to 60°C
Connection	RJ45
Sensor Series	IMS Solution
Dimensions	3.8 x 1.8 x 2.5" | 97 x 63 x 47mm

The IMS-4861 Passive Infrared Detection Sensor is a dual-element passive infrared intrusion detector for use in electronic security systems. It reduces false alarms by eliminating background noises and nuisance stimuli. The IMS-4861 employs variable pulse-count adjustment, thus making it adaptable for use both inside and outside of server/equipment rooms.

Part Name	Part Number
IMS Solution Infrared Motion Detection Sensor	IMS-4861

Smoke Detection Sensor

Sensor Temperature Range	40° to 100°F | 4° to 37°C
Connection	RJ45
Sensor Series	IMS Solution
Dimensions	6.5 diameter x 2.6" | 165 x 66mm

The IMS-4862 Smoke Detector Sensor is designed to connect to the IMS Host or Node and monitor for smoke in indoor environments. The electrical connection between the sensor and IMS is made via the attached RJ-45 patch cable. The sensor may be secured to a wall or ceiling (hardware not included).

Part Name	Part Number
IMS Solution Smoke Detection Sensor	IMS-4862

IMS Airflow Sensor

Operating Range	32° to 80° F | 0° to 27°C
Sensing Range	Approximately 0 to 2,000 fpm
Sensor Series	IMS Solution
Dimensions	4.2 x 1.6 x 0.9" | 106 x 40 x 23mm

The Airflow sensor is designed to monitor for the presence or absence of cool moving air. This is especially useful for monitoring air conditioning systems. The sensor can provide relative air flow as a percentage from 0 to 100. The sensor is compatible with both the IMS-1000 and IMS-4000 devices.

Part Name	Part Number
IMS Solution Airflow Sensor	IMS-4863

Sensaphone IMS-4000 Node for Wireless Sensors

IMS Wireless Expansion

The IMS-4000 Receiver Node for Wireless Sensors extends the environmental monitoring capability of your IMS-4000 system by implementing Wireless Sensor technology. The Receiver Node can work with up to eight wireless sensors. The unit will wirelessly communicate with the sensors, then transmit their status back to your IMS-4000 host via its Ethernet connection. Wireless sensors are available to monitor Temperature, Humidity, Water on the Floor, Power, Dry Contacts, and 4-20mA signals. The sensors use mesh networking technology to create multiple communication paths between the sensors and the Receiver Node to ensure reliable communications. Sensors can also be battery powered for those installations where an outlet may not be available. A LCD is provided to show the status of all wireless sensors. The unit is powered by a plug-in adapter and has a 6V 1.3 AH rechargeable backup battery located inside the enclosure. Circuitry in the unit will maintain precise charging of the battery system.

Features & Specifications

Number of Wireless Inputs	8
Input Types	IMS Wireless Solution
Operating Temperature Range	32° to 122°F | 0° to 50°C
Wireless Range	Up to 250' | 72m indoor
Wireless Sensor Frequency	ISM 2.4GHz
Transmit Power Output	100mW (20dBm)
Internal Monitoring	AC power, battery backup
Local Access	80 character backlit LCD display
Power Supply	Plug in power supply also monitors for power failures Internal battery backup
Physical	7.6 x 5.1 x 2" | 190 x 130 x 50mm • 1.75lbs | .8kg
Warranty	3 Years

Wireless Sensors

The Sensaphone IMS Wireless Sensors sensors communicate with the Wireless Node via an integrated 2.4GHz wireless radio. The devices can transmit a signal up to 250' | 75m indoors and even greater distances line of site. The sensors come with 3AA batteries which will power the sensors for 2 years. An optional power supply is also available, in which case batteries function as backup power.

Product Name	Part Number
Sensaphone IMS-4000 Receiver Node for Wireless Sensors	IMS-4200

Wireless Temperature Sensor

Sensor Temperature Range	32° to 115°F | 0° to 57°C
Accuracy	± 1°F | ±.56°C

This wireless temperature sensor measures ambient air temperatures from 32° to 115° | 0° to 57°C.

IMS Wireless Temperature Sensor IMS-4210

Wireless Ultra Low Temperature Sensor

Temperature Range	-109° to 122°F | 85° to 50°C
Accuracy	± 1.8°F | ±1°C

Includes an external temperature probe and is intended for monitoring temperatures in refrigerators and freezers.

IMS Wireless Ultra Low Temperature Sensor with External Probe. IMS-4210-E

Wireless Humidity Sensor

Humidity Range	5 to 90%RH
Accuracy	3%

Transmits actual humidity levels to the IMS unit for programmable high and low alarm limits.

IMS Wireless Humidity Sensor. IMS-4211

Wireless Power Failure Sensor

Operating Range	32° to 115°F | 0° to 57°C
Range	Up to 250' | 76m

Includes a plug in power supply that monitors for loss of power. Runs on batteries if power does go out.

IMS Wireless Power Failure Sensor. IMS-4213

Wireless Dry Contact Bridge

Input Characteristics	3MΩ to 3V
Operating Range	32° to 115°F | 0° to 57°C

The Wireless Dry Contact Bridge provides remote contact monitoring without running wires.

IMS Wireless Dry Contact Bridge IMS-4212

Wireless 4-20mA Bridge

Input Load	260 Ohms
Loop Current	20mA Max

The sensor provides monitoring of 4-20mA transducers. A 24V DC supply is built in to power the current loop.

IMS Wireless 4-20mA Bridge. IMS-4214

Wireless Spot Water Detection Sensor

Operating Humidity Range	5–90%
Operating Range	32° to 115°F | 0° to 57°C

This sensor has four probes on the bottom of the enclosure which will trigger an alarm when any adjacent pair get wet.

IMS Wireless Spot Water Detection Sensor . . IMS-4215

Wireless Zone Water Detection Sensor

Water Rope Length	10' | 3m
Water Rope Expansion	Up to 10 ropes

This sensor comes with 10' of leak detection cable which triggers an alarm when it gets wet.

IMS Wireless Zone Water Detection Sensor . . IMS-4216

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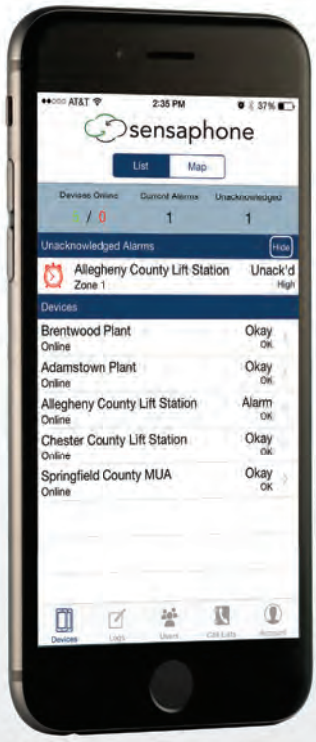

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