



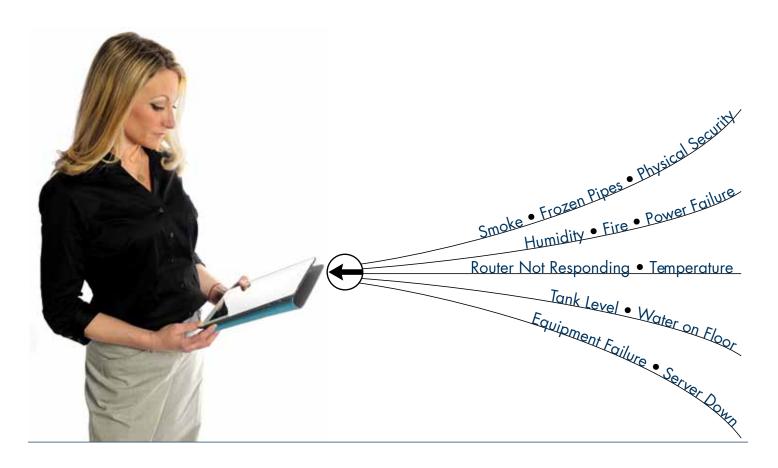


Your business is our business

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.

Family owned and made in the USA since 1985

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 even 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 here in 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 Applications



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 Applications



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 Applications



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 Applications



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 Applications



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.

Oil & Natural Gas Applications



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.

Sensaphone Monitoring Systems



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.

- 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 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 Express II pg 34

- \bullet Expand inputs and outputs to 40.
- · Voice guided keypad interface.



Sensaphone SCADA 3000 pq 36

- 16 inputs, 8 outputs standard with expansion available.
- Free HMI software.



Sensaphone 400/800 pg 28

- Convenient telephone calls for alarms and status.
- Best way to monitor a vacation home without a monthly fee.



Sensaphone Monitoring Sensors & Accessories

| Temperature Sensors | Security Sensors |
|-------------------------------|---------------------------|
| Humidity Sensors | Air Quality Sensors pg 47 |
| Water Detection Sensors pg 44 | Accessories |
| Power Sensors | Wireless Sensors |

Sensaphone IMS Monitoring Systems





• Effective infrastructure monitoring and alarm notification for a single location.



Sensaphone IMS Monitoring Expansion, Sensors & Accessories

 IMS-4000 Node
 ...
 .pg 58
 IMS Sensors & Accessories
 ...
 .pg 60

 IMS-4000 Dual Relay Output Module
 ...
 .pg 59
 IMS-4000 Wireless Node
 ...
 .pg 66

 IMS-4000 Dry Contact Node
 ...
 .pg 59
 IMS-4000 Wireless Node Sensors
 ...
 .pg 67

Product Comparison

| | CELL682 | SAT4D | WEB600 | WSG-30 | 400 | 800 | 1400 |
|------------------------|----------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Inputs | 14 | 4 | 6 | Up to 30 | 4 | 8 | 4 |
| Outputs | 2 | 0 | 1 | 0 | 1 | 1 | 1 |
| Input Type | | | | | | | |
| Dry Contact | Ø | Ø | Ø | (3) | Ø | ⊘ | Ø |
| Thermistor | Ø | | Ø | (3) | Ø | Ø | Ø |
| Temp Sensing Range | -100° to 124°F | | -109° to 168°F | -109° to 115°F | -20° to 150°F | -20° to 150°F | -109° to 168°F |
| 4-20mA | Ø | | Ø | (3) | | | • |
| Wireless Sensors | | | | Ø | | | |
| IMS Sensors | | | | | | | |
| I/o Expansion | | | | Ø | | | |
| Sound Level Monitoring | | | | | Ø | Ø | Ø |
| Remote Programming | Ø | | Ø | Ø | Ø | Ø | • |
| Ladder Program/PID | | | | | | | |
| Pump Control | (| | | | | | |
| Alarm Notifications | 24 | 14 | 32 | 32 | 4 | 8 | 8 |
| Alarm Delivery | | | | | | | |
| Voice Phone Call | Ø | ⋖ | | | Ø | ⋖ | Ø |
| Numeric Pager | | | | | Ø | ⋖ | Ø |
| Alpha Pager | | | | | | | |
| Email | Ø | ⊘ | Ø | Ø | | | |
| SMS Text Message | Ø | Ø | Ø | ✓ | | | |
| Fax | | | | | | | |
| Internal Web Server | | | Ø | Ø | | | |
| Web Status | Ø | ✓ | Ø | Ø | | | |
| Datalogging | | Ø | Ø | Ø | | | |
| Communication | Cellular | Satellite | Ethernet | Ethernet | Phone Line | Phone Line | Phone Line |
| Enclosure | NEMA 4X | NEMA 4X | Plastic | Plastic | Plastic | Plastic | NEMA 4X |
| Mounting | Wall | Panel or Pole | Table or wall | Table or wall | Table or wall | Table or wall | Wall |
| Battery Backup | Ø | ⊘ | Opt | Ø | Requires 6 C Cells | Requires 6 C Cells | Ø |
| Monthly Fee | Yes | Yes | No | No | No | No | No |

| 1800 | 2800 | Express II | SCADA 3000 | IMS-1000 | IMS-4000 |
|----------------|----------------|---------------|----------------|------------------------------------|-------------------------|
| 8 | 4/4 (1) | 8-40 | 16-144 | 8 | 8-256 |
| 1 | 1 | 1-17 | 8-32 | 1 | Opt |
| | | | | | |
| Ø | Ø | Ø | Ø | (3) | (3) |
| ⋖ | | Ø | ⋖ | (3) | (3) |
| -109° to 168°F | -109° to 168°F | -85° to 300°F | -100° to 300°F | -122° to 140°F | -122° to 140°F |
| Ø | Ø | Ø | ⋖ | (3) | (3) |
| | | | | | Opt |
| | | | | Ø | |
| | | Ø | Ø | | Ø |
| ⊘ | ⋖ | Ø | | | Ø |
| ⊘ | ⋖ | Ø | ⊘ | Ø | Ø |
| | | | ⊘ | | |
| | | | ⊘ | | |
| 8 | 8 | 48 | 64 | 64 | 512 |
| | | | | | |
| Ø | ⊘ | Ø | Ø | Opt | V |
| Ø | Ø | Ø | Ø | Opt | V |
| ⊘ | | | ⊘ | Opt | Ø |
| | | | | Ø | V |
| | | | | Ø | ✓ |
| | | | Ø | Opt | ⊘ |
| | | | | Ø | Ø |
| | | | (2) | Ø | Ø |
| | | | ⊘ | Ø | Ø |
| Phone Line | Phone Line | Phone Line | Phone Line | Ethernet w/ Optional Phone Line | Ethernet Plus Phone Lir |
| NEMA 4X | NEMA 4X | NEMA 4X | Metal | Metal | Metal |
| Wall | Wall | Wall | Wall | Rackmount or Tabletop | Rackmount or Tabletop |
| Ø | Ø | Ø | Opt | Ø | ⋖ |
| No | No | No | No | No | No |

^{(1) 4} Hard Wired / 4 Wireless Sensors (2) Requires dedicated PC connected to device (3) Requires correct sensor

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





STARTER SOLUTION

Sensaphone WEB600



With six universal inputs, the Sensaphone Web6oo can be configured to watch your most critical conditions in a small computer room. This is a

web-based product so current status, programming, and previous history can all be accessed quickly and conveniently through a web page. If any conditions deviate from normal, the WEB600 will immediately send e-mail alarms, text messages, and SNMP traps.

Sensaphone WEB600 Battery Backup



Provides uninterrupted power to the WEB600 for approximately two hours in the event of a power loss. WEB600 can be configured to monitor the battery

backup and send an alarm when the battery becomes low.





ADVANCED SENSAPHONE SOLUTIONS

Sensaphone IMS-1000



The IMS-1000 is similar to the WEB600 in that it is a web-based monitoring solution, but it provides much more. Instead of monitoring up to six sensors, it can monitor up to eight. The IMS-1000 also has the option of a phone line connection in addition to the Ethernet computer network connection. Even if your computer network is not working, the IMS-1000 can still use a standard phone line to notify of a problem. In addition to monitoring for physical problems, the IMS-1000 adds the ability to monitor server availability and alarm on a lack of response from any network device.

| 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. The Nodes can be in a different room as the Host, or a different building, or even a different country. If running wires is too inconvenient there is a Node that utilizes wireless sensors.

| IMS-4001 | | | | | | | | | | | | | | | | .pg | 56 | |
|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----|----|--|
| IMS-4002 | | | | | | | | | | | | | | | | .pg | 58 | |
| IMS-4200 | | | | | | | | | | | | | | | | .pa | 58 | |

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.

Power Failure

Turbidity

Security









STARTER SOLUTION

Sensaphone 1400



Most basic alarm dialer needs can be met with the Sensaphone 1400. It has four universal inputs that can monitor from any dry contact status device, or any 4-20mA analog transducer. When using analog devices, the 1400

can even scale the input range so you will be measuring each condition in real engineering units. The sealed Nema-4X enclosure is well suited for outdoor environments. Alarm notification is performed with phone calls using custom voice messages.

Sensaphone 1800



When the 1400's four inputs aren't enough, the Sensaphone 1800 includes eight inputs.



OTHER SENSAPHONE SOLUTIONS

Sensaphone Express II



- Provides eight inputs to start, expandable to 40.
- A local LCD for easy access to status and programming.
- Up to 48 people notified for alarms using custom voice phone calls.

FGD-6700.....pg 34

Sensaphone SCADA 3000



- Great choice for multiple remote sites being viewed through one central computer.
- Data logging and modular expansion on both inputs and outputs.
- High level decision making through Ladder Logic, or C programming.
- Capable of simple pump control, or complex calculations and control.

Sensaphone CELL682



- Wireless access to the site for alarm monitoring and pump control.
- Provides the convenience of webpage access for all status and programming.
- Monitors six temperature sensors or 4-20mA analog transducers, eight contact sensors, and two relay outputs for control.

Sensaphone SAT4D



- Communicates via satellite.
- Up to four conditions can be monitored and alarm notification is delivered by voice phone calls or e-mails.
- Operates for three years on 4AA Lithium batteries.

FGD-SAT4D.....pg 22

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





Smoke & Fire





Power Failure

STARTER SOLUTIONS

Sensaphone 400



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.

FGD-0400.....pg 28

Sensaphone 800



When the 400's four inputs aren't enough, the Sensaphone 800 includes eight inputs.



OTHER SENSAPHONE SOLUTIONS

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.

Sensaphone WEB600 Battery Backup

Provides uninterrupted power to the WEB600 for approximately two hours in the event of a power loss. The WEB600 can be configured to monitor the battery backup and send an alarm when the battery becomes low.

RECOMMENDED ACCESSORIES

| 2.8K Temperature Sensors | 40 |
|--------------------------------|----|
| Water Detection Sensors | 44 |
| Humidity Sensors | 43 |
| Dual Setback Thermostat | 28 |
| Power Failure Switch | 45 |
| Door / Window Switch | 46 |
| Motion Detection Sensor | 46 |
| Smoke Detector | 46 |
| Bluetooth Cell Phone Interface | 48 |

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.











Security

STARTER SOLUTION

Sensaphone WEB600



This cold storage starter solution uses the Sensaphone WEB600 to monitor and notify. The WEB600 provides a web-based interface that includes time

stamped data logging. Up to 100,000 data samples can be stored internally that can be viewed live or downloaded into a spreadsheet. And whenever temperatures are not within the specified range, the WEB600 will immediately transmit up to 32 alarm notifications as e-mail messages or text messages

Sensaphone WEB600 Battery Backup

Provides uninterrupted power to the WEB600 for approximately two hours in the event of a power loss. The WEB600 can be configured to monitor the battery backup and send an alarm when the battery becomes low.

FGD-W610-Bpg 24



OTHER SENSAPHONE SOLUTIONS

Sensaphone 400



The 400 is a good alternative to the WEB600 when a phone line is available, but no computer network connection. The 400 can monitor up to four

temperatures or other sensors, and notify up to four people. The alarm notifications are in the form of voice phone calls with customized voice messages.

FGD-0400.....pg 28

Sensaphone 2800



When you can't get wires to your sensors, the Sensaphone 2800 is the best choice. The 2800 can monitor up to four hard wired sensors and four wireless sensors. A variety of wireless sensors are available including ultra low temperature measurement.

Sensaphone IMS-1000



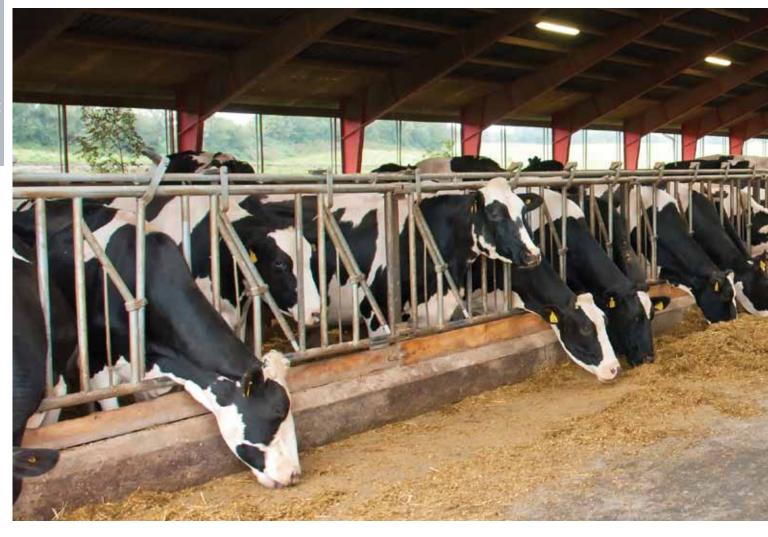
The IMS-1000 is a also a web-based monitoring solution, that monitors eight sensors. An optional a phone line connection notifies of a problem even if the network is down.



Sensaphone IMS-4000

The IMS-4000 is similar to the IMS-1000 with both the Ethernet connection and a phone line connection, but expandable. The system includes one Host and up to 31 Nodes which can monitor eight sensors each and be monitored from one common interface. The IMS-4000 provides a very modular and expandable remote monitoring solution.

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.













STARTER SOLUTION



Sensaphone 1400

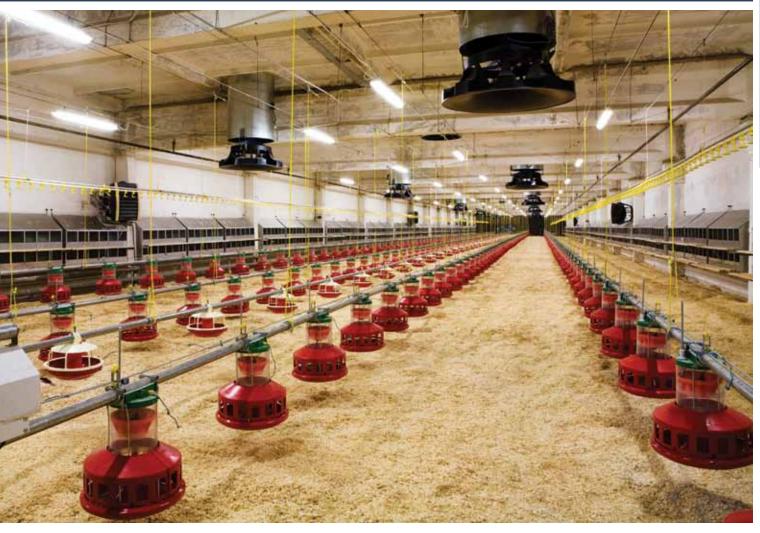
Housed in a sealed Nema-4X enclosure, the Sensaphone Model 1400 is designed to handle the harsh livestock environment. It can monitor up to four sensors plus power failure. The sensor inputs on the 1400 are enhanced to handle analog 4-20mA

transducers in addition to temperature sensors and dry contact sensors. It can deliver alarm notifications to 8 people using customized voice messages.



Sensaphone 1800

The Sensaphone 1800 provides everything that the $\,$ 1400 does, except that it can accept eight sensors.



OTHER SENSAPHONE SOLUTIONS

Sensaphone 2800

Upgrading to the Sensaphone 2800 provides everything that the 1800 has with the addition of wireless sensors. The 2800 can monitor four hard wired sensors plus four

wireless sensors.

Sensaphone 2800 Sensors

| Wireless Temperature Sensor | 50 |
|---------------------------------|----|
| Wireless Humidity Sensor | 50 |
| Wireless 4-20 mA Bridge | 50 |
| Wireless Dry Contact Bridgepg 5 | 50 |

Recommended Accessories

| 2.8K Temperature Sensors |
|--------------------------|
| Water Detection Sensors |
| Humidity Sensors |
| Carbon Dioxide Sensor |
| Carbon Monoxide Sensor |
| Air Quality Sensor |
| Power Failure Switch |
| Door / Window Switch |
| Motion Detection Sensor |
| Smoke Detector |

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



Furbidity



Pump Status



Security



Equipment Failure

OIL & GAS MONITORING SOLUTIONS



Sensaphone SAT4D

SAT4D is perfect for monitoring very remote equipment. It communicates via satellite and can be used anywhere in the US. Up to four conditions can be monitored and alarm notification is delivered

by voice phone calls or e-mails. The SAT4D runs for three years on its internal batteries.

FGD-SAT4Dpg 22



Sensaphone CELL682

The CELL682 works perfect if the site is in an area with cell phone coverage. Wireless access to the site for both alarm monitoring and control is provided with easy webpage access for all status and programming. The

CELL682 provides monitoring for up to six temperature sensors or 4-20mA analog transducers, eight contact sensors, and two relay outputs for remote manual control.

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.





Outside Temperature





Power Failure



Security

SENSAPHONE GREENHOUSE SOLUTIONS



The Sensaphone 1400 has four flexible sensor inputs, allowing for temperature sensors or analog 4-20mA transducers, like the Carbon Dioxide sensor. The 1400

is also packaged in a NEMA 4-X sealed weatherproof enclosure with built-in battery backup in case main power fails.



Sensaphone 2800

Upgrading to the Sensaphone 2800 allows the use of four wireless sensors in addition to four hard-wired sensors. The 2800 will accept the same hard-wired sensors as the

1400 and comes in the same weatherproof enclosure. Also included is a battery backup in case main power fails.

Sensaphone CELL682

Remote Monitoring via Cellular

The CELL682 uses standard cellular technology to communicate with the Sensaphone servers. If a telephone line is not already in place, the cellular communications in the Sensaphone CELL682 can provide a convenient, reliable, and cost effective method to monitor a remote facility.

The Sensaphone CELL682 provides an assortment of sensor input options to handle many different types of sensors and conditions to monitor. Two relay outputs are also included in the Cell682 for local control. Enclosed in a sealed, weatherproof, lockable enclosure, the CELL682 is suitable for use in harsh or corrosive

environments. LED's on the face of the unit afford local indication of alarm and status conditions.

When an input channel detects an alarm there is an immediate communication from the CELL682 to the Sensaphone servers to process the alarm. The appropriate people are then contacted immediately via e-mail, text messages, or custom voice phone calls.

A website is provided for status, history, alarm response programming, and manual output control.

14 INPUTS

6 analog inputs, 8 dry contact inputs









2 OUTPUTS



Cellular Communication

▶ WEB SERVER

WEB STATUS
WEB HISTORY

VOICE PHONE CALLS E-MAILS TEXT MESSAGES

Up to 24 total

◆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.



◆Antennas

The antenna 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 is also available to help increase cell signal strength.







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

The CELL682 provides multiple analog 4-20mA inputs, output control and also remote peer to peer control.

Features & Specifications

| Communication Method | Cellular |
|----------------------|--|
| Number of Inputs | 14 Total 6 Analog (Temperature & 4-20mA) 8 Dry Contact Run time accumulation |
| 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 |
| Power Supply | Plug in power supply also monitors for power failures Built in battery backup |
| Physical | 12 x 8 x 6" 305 x 203 x 152mm 8lbs 2.7kg |
| Operating Conditions | -22° to 140°F -30° to 60°C -40° to 185°F -40° to 85°C with battery life impact |
| Other | Communication service required for operation |
| Warranty | 2 Years |

Popular Applications



Oil & Gas

Don't wait to find out about equipment failure until the morning. The Sensaphone CELL682 will call or e-mail as soon as an alarm condition exists.



Water & Wastewater

Use your Sensaphone CELL682 to monitor pumps, power failure, and other conditions in water and wastewater applications.

Sensaphone SAT4D

Remote Monitoring via Satellite

Watching over a remote site can be a challenge when the location is very remote. The Sensaphone SAT4D is designed to monitor remote sites no matter where they are located. Instead of relying on phone lines or cell phone services which are not always available, the SAT4D uses direct satellite communications. The result is 100% communication coverage across the United States as well as many other countries. No need to worry about cell phone coverage maps, which carriers are in the area, or analog vs. digital support. It works everywhere, plain and simple.

Not only does the SAT4D make your communication easy, but it also takes away your power source worries, too. The SAT4D remote monitoring system requires no power at all! Mount it, connect your dry contact sensors, and walk away. The SAT4D has an internal battery that will operate for 3 years without power. Place it anywhere, and only come back every three years to change the battery.

The Sensaphone SAT4D can monitor up to 4 dry contact inputs for alarms. When an alarm occurs, programmable messages are sent to selected personnel by voice phone call or e-mail message.

4 INPUTS





Satellite Communication

▶ WEB SERVER WEB STATUS WEB HISTORY

6 E-MAILS ◀ 8 VOICE PHONE CALLS



◆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.



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.

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Web Interface

All communications to and 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.

Features & Specifications

| Communication Method | Satellite |
|----------------------|---|
| Number of Inputs | 4 |
| Input Types | Contact Type |
| Remote Access | Website to access status and programming |
| Alarm Notification | 6 e-mails 8 phone calls |
| Power Supply | Satellite transmitter battery: 4 AA lithium batteries 3 year battery life Input module battery: 1 AA lithium battery 7 year battery life |
| Physical | 10.8 x 13.5 x 5.6" 270 x 340 x 140mm 7.4lbs 3.3kg |
| Operating Conditions | -22° to 140°F -30° to 60°C -40° to 185°F -40° to 85°C with battery life impact |
| Other | GPS tracking Communication service required for operation |
| Warranty | 1 Year |

Popular Applications



Oil & Gas

Don't wait to find out about equipment failure until the morning. The Sensaphone SAT4D will call or e-mail as soon as an alarm condition exists.



Water & Wastewater

Use your Sensaphone SAT4D to monitor pumps, power failure and other conditions in water and wastewater applications.

Sensaphone WEB600

Low Cost Web Based Monitoring

The Sensaphone WEB600 is designed to be an easy, cost—effective, network—based monitoring system to notify you when equipment or conditions go awry. The internet browser—based programming makes the device easy to use from any computer on your network. Monitored conditions can include temperature, humidity levels, line voltage, leak detection, UPS systems, and more. The system allows multiple users to be notified immediately of any detected problems. Notification can occur via e—mail, text message, or SNMP trap. An optional battery backup system (FGD-W610-B) insures that the unit will continue to run if main power fails.

Connect up to six external sensors to monitor a variety of equipment and conditions. Each input zone can be connected to a temperature sensor, an analog transducer, or a dry contact switch. The WEB600 also includes a relay output that can be used to control a light, siren, or other low voltage device when an alarm occurs

Live status and history is only a webpage away. The WEB600's built in web server provides quick and easy information about your monitored conditions. Even time stamped history reports are readily available online.





◆ Battery Backup

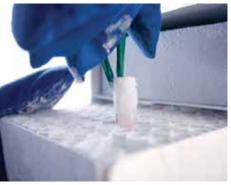
The Sensaphone Battery Backup provides uninterrupted backup power for two hours when main power fails. The module includes a rechargeable battery that maintains a full charge.

| 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.

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 |
| 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 |
| Power Supply | Plug in power supply also monitors for power failures Optional battery backup (required for power failure monitoring) |
| 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 |

Popular Applications



Residential

Know that the temperature, humidity, or other conditions in your home are in check while you're away.



Cold Storage

Don't find out that your freezer has stopped running until the next morning. The Sensaphone WEB600 will e-mail or text as soon as the temperature reaches a temperature you set.

Web Based Monitoring with Wireless Sensors

The WSG30 is a unique wireless sensor monitoring system that can be used in more than one way. As a standalone system, it can monitor a variety of conditions from the wireless sensors and directly notify personnel by sending e-mails and text messages. The convenience of having wireless sensors allows you to move your sensors around while tracking down heat problems within a data center. The WSG30 is perfect for monitoring refrigerators and freezers for food and medical applications where running wires may be inconvenient or costly.

The WSG30 can also be used within an existing industrial automation system and communicate directly with existing HMI software using the Modbus protocol. Information from sensors and transducers can be sent to the WSG30 main unit and then into your automation software.

The WSG30 is even smart enough to supply wireless sensor data to your existing automation software, and still independently send e-mail and text message alarm notifications on its own.

Ethernet







► E-MAILTEXT MESSAGESSNMP TRAPS

√WEB PAGE

MODBUS

◆BUILT-IN

Built-in power failure monitoring, battery backup, and data log.







Wireless Sensors

The WSG30 works exclusively with it's 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.



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.

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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.

WSG Wireless—

WSG30 Wireless Sensors & Accessories pg 51

Temperature Sensor. FGD-WSG30-TMP

Temperature Sensor w/
External Probe FGD-WSG30-TEX

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

Humidity Sensor. FGD-WSG30-HUM

Dry Contact Interface FGD-WSG30-DRY

Power Failure Sensor FGD-WSG30-PWR

4-20mA Interface FGD-WSG30-4-20

Spot Water

Detection Sensor FGD-WSG30-SPOT

Zone Water

Detection Sensor FGD-WSG30-ZONE

Power Supply for WSG Sensors . . . XFR-0041 $\,$

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 |
| Power Supply | Plug in power supply also monitors for power failures • Internal battery backup |
| Physical | 736 x 5.1 x 2" 190 x 130 x 50mm • 2.5lbs 1.3kg |
| Warranty | 1 Year |

Sensaphone 400 & 800

Basic Phone Notification

The Sensaphone 400 is a fully—programmable, remote monitoring system for small businesses, private homes, farms, greenhouses, computer rooms, and other facilities. Designed for desktop or wall mounting, the 400 is simple to install, program and operate; no changes to standard electrical or telephone service are required. When connected to a telephone line, it will respond to an alarm by dialing up to four separate telephone numbers. When the call is answered, an "Alert Condition" message is delivered in a user recordable voice.

The 400 also includes nonvolatile memory and a 24-hour battery backup with 6 "C" user installed batteries. The built in relay output can be used to control a dual setback thermostat, allowing you to call your vacation home before you arrive and change the temperature.

When the 400's four inputs or phone call out destinations isn't enough, the Sensaphone 800 provides eight inputs and phone call destinations.

*Comes with temperature sensor already installed on the first input.







1 OUTPUT •



Phone Line

4 OR 8 VOICE

PHONE CALLS

→ CHECK STATUS

◆BUILT-IN

Built-in power failure monitoring, sound level, and one pre-installed temperature sensor.





| 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 in we offer. And it offers the convenience of voice telephone calls for alarms and programming.



No Monthly Fee

The Sensaphone 400 is the best way to monitor a vacation home with no monthly fee. Monitoring everything from climate conditions to security and more.



Remote Thermostat Control

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

Features & Specifications

| . 33,13,133 3, 3,33 | |
|---------------------------|---|
| 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 Recent alarm history playback LEDs |
| Alarm Notification | 4 or 8 custom voice phone calls |
| Power Supply | Plug in power supply also monitors for power failures Internal battery backup |
| Physical | 2.1 x 7.8 x 8.8" 53 x 198 x 223mm 2lbs .9kg |
| Warranty | 1 Year |

Popular Applications



Residential

Know that the temperature, humidity, or other conditions in your home are in check while you're away, or use the Sensaphone 400 to raise the temperature before you get there.



Cold Storage

Don't find out that your freezer has stopped running until the next morning. The Sensaphone 400 will call as soon as the temperature reaches a temperature you set.

Sensaphone 1400 & 1800

Rugged Professional Phone Notification

Like the 400, the 1400's voice phone calls are customized so that users can hear each alarm described in detail and in their own voice. The 1400 is perfect for ultra-low freezer monitoring all the way down to -85°C. Also, a built in system identifies who responds to any alarm phone call and tracks respondents with a history log.

The 1400 includes an output relay so that a local device can be switched on when an alarm occurs, as well as a line-seizure feature. LEDs on the face of the units afford local indication of alarm and status conditions. And an additional input type, 4–20mA, not supported in the 400, is available in the 1400 and 1800 units.

When the 1400's four inputs aren't enough, the Sensaphone 1800 includes eight inputs. The 1800 is also capable of alphanumeric paging.

4 OR 8 INPUTS









1 OUTPUT



→ CHECK STATUS

◆BUILT-IN

Built-in power failure monitoring, and one included temperature sensor.



◆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.

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



Rugged & Weatherproof

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

Features & Specifications

Remote Access



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 includes full analog capability so real world values can be monitored.

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

Local Access Keypad and speaker for local programming Easy voice prompted programming

Call in to check status and make programming changes

Alarm Notification 4 or 8 custom voice phone calls

Recent alarm history playback

Keypad Lock

Power Supply | Plug in power supply also monitors for power failures | Internal battery backup |

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

Popular Applications



Agricultural

Know that the temperature, humidity, or other critical conditions where plants or animals live are in check while you're away.



Cold Storage

Don't find out that your freezer has stopped running until the next morning. The Sensaphone 1400 will call as soon as the temperature reaches a temperature you set.

Phone Notification with Wireless Sensors

The Sensaphone 2800 adds the ability to read sensor status from wireless sensors and not just simple on/off status, or open/closed conditions. You can use up to four Sensaphone wireless sensors with the 2800. A variety of wireless sensor types are available to choose from, including temperature, humidity, power failure, motion and water detection.

In addition to the wireless sensors, there are also two Wireless Interface modules. A Dry Contact Wireless Module and a 4-20mA

Wireless Module allow a connection to existing equipment or sensors and transmit their status back to the 2800.

The 2800 uses the reliability of a standard phone line to make phone calls to the appropriate personnel to announce alarm conditions. Each monitoring condition, both wired and wireless, can have a custom voice message attached to it. Each message is recorded in your own voice for easy alarm identification. Alarm notification will report out to eight people until acknowledged.

4 HARDWIRED INPUTS









4 WIRELESS
INPUTS



1 OUTPUT



> → CHECK STATUS

◆BUILT-IN

Built-in power failure monitoring, and one included hard wired temperature sensor.



◆Enclosure Options

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

Product NamePart NumberSensaphone 2800FGD-2800



Wireless Sensors

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



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.

2800 – Wireless –

2800 Wireless Sensors & Accessories pg 50

| Temperature Sensor | ٠ | . WSR-0100 |
|-----------------------|-------|------------|
| Dry Contact Interface | | . WSR-0101 |
| Power Failure Sensor | | . WSR-0102 |
| Humidity Sensor | | . WSR-0103 |

| 4-20mA Interface WSR-0104 | 1 |
|--------------------------------------|---|
| Motion Detection Sensor WSR-0108 | 5 |
| Spot Water Detection Sensor WSR-0106 | ó |
| Zone Water Detection Sensor WSR-010 | 7 |

| Power Supply for Wireless Sensors | WSR-0190 |
|-----------------------------------|----------|
| Repeater | WSR-0199 |
| Weatherproof Antenna | FGD-2810 |

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 input 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 programming • Easy voice prompted programming. • Keypad Lock Recent alarm history playback • LEDs |
| Alarm Notification | 8 custom voice phone calls |
| Power Supply | Plug in power supply also monitors for power failures • Internal battery backup |
| 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

The Express II is a powerful environmental and process monitoring system. It handles your current monitoring, alarm and control needs, and is able to grow when your application grows.

Express II comes standard with 8 universal input channels and one built-in relay output. Input capacity is expandable up to 40 channels (on 5 cards). Output capacity may be expanded up to 16 channels (on two cards), in which case input is limited to 24 channels (3 cards).

Express II can call up to 48 phone contacts, using Touch-Tone dialing. Dialing schedules and phone contact list features enable you to create a priority dialing list depending on which input is alarm-activated, the time of day, and day of week. Call progress detection ensures that no time is wasted on busy signals and no-answers during the dialout sequence.

8 INPUTS

Expandable to 40 inputs









1 OUTPUT

Expandable to 17 outputs



Phone Line ▶ 48 VOICE PHONE CALLS

◆CHECK STATUS

◆BUILT-IN

Built-in power failure monitoring and sound level



◆Expansion Options

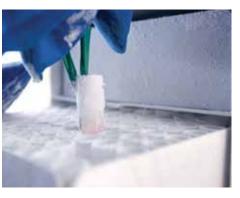
The Sensaphone Express II comes standard with eight inputs and one relay output. Easy to install expansion cards increase monitoring capacity by an additional 32 inputs (on four cards), 16 outputs (on two cards).

Product Name Part Number 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.



values can be monitored.

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 universal output relay standard, expandable to 17 total Manual or automatic alarm switching |
| Remote Access | Call in to check status and make programming changes |
| Local Access | Keypad and speaker for local programming Easy voice prompted programming Keypad Lock Recent alarm history playback LEDs |
| Alarm Notification | 48 custom voice phone calls |
| Power Supply | Plug in power supply also monitors for power failures Internal battery backup |
| Physical | 14.5 x 13 x 8.3" 368 x 330 x 210mm • 18lbs 8.1kg |
| Warranty | 1 Year |

Popular Applications



Agricultural

Know that the temperature, humidity, or other critical conditions where plants or animals live are in check while you're away.



Cold Storage

Don't find out that your freezer has stopped running until the next morning. The Sensaphone Express II will call as soon as the temperature reaches a temperature you set.

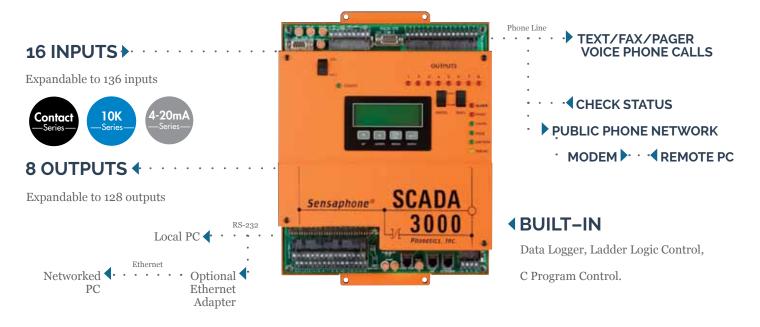
Sensaphone SCADA 3000

Industrial Monitoring

The Sensaphone SCADA 3000 is a very advanced and unique system. Flexible communication options allow communication with a host PC through standard RS232 serial, standard data radio, ordinary telephone lines, or a mix of both. The unit will call you using your own pre-recorded voice messages, or contact you via fax, pager, e-mail, or by creating web pages of data. Each SCADA 3000 includes 16 inputs and 8 relay outputs. The system can grow with your needs—expanding to 144 I/O points by adding expansion modules.

Standard with each SCADA 3000 is a powerful 32-bit software system complete with a real-time screen builder, program editors, alarm functions, and a communications manager. This versatile software lets you program units, develop ladder and C-programs, retrieve data, analyze event logs, and print a variety of reports.

The SCADA 3000 offers the widest variety of methods for viewing data, reports, and alarm information. Receive customized alarm messages that you record, receive polled data reports, view changing data live on a real-time screen, or even have the SCADA 3000 prepare and upload pages of data to your internet or intranet web site.

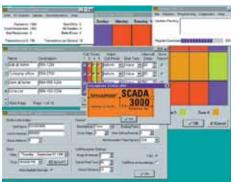




◆Expansion Options

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.





16 Inputs, 8 Outputs Standard

The 16 universal inputs and 8 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.

Features & Specifications

| Communication Method | Phone line |
|---------------------------|---|
| 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 universal output relays standard, expandable to 128 total |
| Remote Access | Call in to check status and make programming changes |
| Local Access | Keypad for viewing status Easy voice prompted programming Four line LCD display LEDs |
| Alarm Notification | 64 custom voice phone calls |
| Data Logging | 50,000 time stamped records |
| Power Supply | Hard wired, optional battery backup |
| Physical | 9.4 x 12.2 x 2" 239 x 310 x 51mm • 3lbs 1.3kg |
| Warranty | 3 Years |

Popular Applications



Water & Wastewater

Use your Sensaphone SCADA 3000 to monitor tank levels, flow rates and other conditions in water and wastewater applications.



Industrial & Manufacturing

Know that the temperature, humidity, or other conditions in your shop or factory are okay while you're away.

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 on the page to the right. Then, when selecting a sensor make sure the sensor 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 eas | sy. |
|--|-----|
| Sensaphone 2800 Wirless Sensorspg | 50 |
| Sensaphone WSG30 Wireless Sensorspg | 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. And if you already have a Sensaphone, we offer free technical support.

Sensor Series Icons



2.8K Series

Resistive temperature signal used exclusively on select Sensaphone products. Provides a constant, real-time, analog temperature reading. Capable of very low temperature sensing ranges.



4-20mA Series

An industry standard for analog sensor readings. Third party sensors are available in this format for almost any type of condition to be monitored.



WSG30 Series

The Sensaphone WSG30 uses its own set of unique wireless sensors utilizing a mesh network technology. All WSG Wireless sensors are exclusive to the WSG30 product. A variety of sensor types and two interface modules are available.



Contact Series

Provides a simple open or closed circuit to represent the alarm status of the sensor.



10K Series Sensors

Industry standard temperature sensor used by many third party sensor manufacturers. Provides a constant, real-time, analog temperature reading. Best for higher temperature ranges.

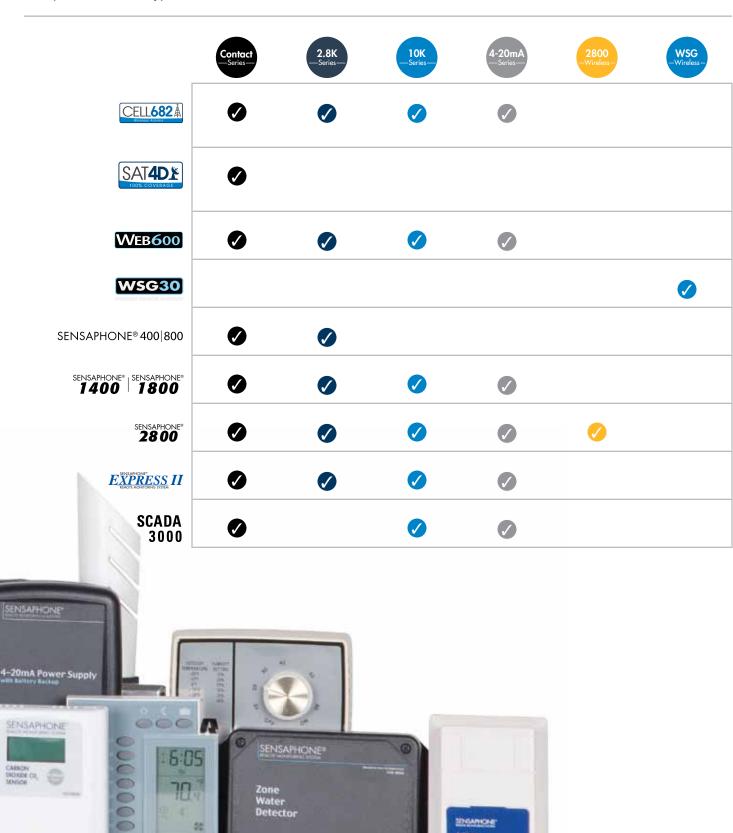


2800 Series

A full lineup of wireless sensors that work exclusively with the Sensaphone 2800. A variety of sensor types and two interface modules are available.

SENSAPHONE
SPOT Water Detector

Compatible Sensor Types



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.



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.

Part NamePart Number2.8K Type Weatherproof Temperature SensorFGD-01012.8K Type Weatherproof Temperature Sensor & NISTFGD-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. The Ultra Low Temperature Sensor offers reliable temperature monitoring down to -85°C. It's a perfect fit for many applications where traditional temperature sensors have failed.

| Part Name Pa | art Number |
|--|------------|
| 2.8K Ultra Low Temperature Sensor | D-0101-TEF |
| 2.8K Ultra Low Temperature Sensor & NIST | 1-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 |

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.



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.

Part NamePart Number2.8K Ultra Low Temperature SensorFGD-0107-TEF2.8K Ultra Low Temperature Sensor & NISTFGD-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 | |

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.



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 $0.36^{\circ}F$ ($0.2^{\circ}C$) with a sensing range of 35° to $140^{\circ}F$. 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.

 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 \pm 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 |

The 10K Immersion temperature 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.

 Part Name
 Part Number

 10K Type Immersion Temperature Sensor
 FGD-0105

Sensaphone Humidity Sensors



Humidistat Humidity Switch



| Operating Temperature Range | 32° to 95°F 0° to 35°C |
|-----------------------------|----------------------------------|
| Humidity | 10 to 60% |
| Sensor Series | Contact Series |
| Dimensions | 4.5 x 3 x 1.7" 114 x 76 x 43mm |

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 60% 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



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. The 24V DC power supply is required unless used with the SCADA 3000.

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 3 to 5 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.



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.



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.

Sensaphone Power Sensors



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 8 hours of battery backup if main power fails.



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.



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 is designed for use in commercial and residential applications. The device requires hardwired 120VAC 60Hz power (220VAC 50 Hz optional). Up to 6 devices can be connected together and a 90dBA audible horn is included. It is also available with optional battery backup or in 220V. This smoke detector can be used with all Sensaphone models.

| Part Name | Part Number |
|--|---------------|
| Contact Type Smoke Detector for 110VAC | FGD-0049 |
| 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 output.



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. | |

Sensaphone Air Quality Sensors



Carbon Dioxide (CO₂) 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 o-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)



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 o-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 NamePart Number4-20mA Type Carbon Monoxide Sensor.FGD-0065



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 o-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 4 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 NamePart NumberMulti-Point Wireless I/O AccessoryFGD-0205



J Type Thermocouple / 4-20mA Converter



The thermocouple to 4-20mA converter is useful when you need to monitor very high or very low temperatures that can not be monitored with a standard Sensaphone temperature sensor. Thermocouples are available in a variety of packages that may be perfectly suited to your measuring application. The device can be used with any Sensaphone that supports 4-20mA inputs. Thermocouple sold separate.



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.



Surge Suppresor 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 NamePart NumberSurge Suppressor for Power & PhoneFGD-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, o-5V analog, 4-20mA analog and 10K thermistor (${}^{\circ}C \otimes {}^{\circ}F$).



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.



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.



SCADA 3000 Analog Output Module



The SCADA 3000 Analog Output Module features four analog output signals that can be configured as 4–20mA, 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 NamePart NumberSCADA 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.



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.



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.

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.

WSG -Wireless-

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.



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.

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 SensorFGD-WSG30-HUM

WSG -Wireless-

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

WSG -Wireless

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

WSG -Wireless-

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

WSG -Wireless-

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

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



Sensaphone IMS-1000

Single Room Monitoring Solution

The IMS-1000 system provides effective infrastructure monitoring and alarm notification for a single location. Up to eight external sensors can be connected to the IMS-1000. TCP/IP port service monitoring is also provided for up to 16 network devices or port services. An alarm condition is generated whenever any environmental sensor goes out of range, or when any network port service stops responding. The IMS-1000 will then initiate its alarm notification process following the programmed list of personnel to be notified. E-mails are sent describing the alarm condition. If network cameras are installed, the e-mails will contain one or more attached images captured from the video camera. SNMP traps can be sent to network management systems.

An optional internal telephone modem provides additional options for alarm delivery. Custom messages can be recorded and stored in the 1000, and voice phone calls can be made to announce alarm conditions. The phone modem also provides an alarm delivery path independent of the computer network.

The IMS-1000 is designed for high reliability with no moving parts. It is completely standalone with its own internal battery backup system. All programming and status information are available through its internal web server. In addition to the web server, the IMS-1000 is fully SNMP manageable. The IMS-1000 solution can effectively monitor the most critical conditions in any server room or data center.



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



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.

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 |
| 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 |
| 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 | 14 x 1.75 x 7" 355 x 44 x 178mm • 3.75lbs 1.7kg |
| 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-1000 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-1000 will alert you as soon as the temperature reaches a temperature you set.

Sensaphone IMS-4000

Expandable Web Based Monitoring

For larger monitoring requirements with multiple locations, the IMS-4000 Enterprise Solution can expand and grow. The key to this distributed monitoring is the addition of IMS-4000 Nodes. Each Node can monitor up to 8 external IMS sensors, but it reports back to a Host through the network. Up to 31 IMS Nodes can report back to a single IMS Host. The IMS-4000 ConsoleView software package is included with each Host providing an enterprise view of up to 32 locations per Host. If there are more than 32 locations, multiple Host networks can be managed within the same Console View software package.

All environmental and IP alarms can be scheduled so that they are only monitored for alarms during certain hours, or certain days of the week. The alarm notification is more powerful with the phone modem and custom voice messages being standard features on the 4000. More

notification flexibility comes with the addition of time scheduling for users, and even alarm grouping for different groups of users.

Using the optional PowerGate products, outlets can be switched on or off by the network of Hosts and Nodes. Outlets can be controlled either manually, or even automatically in response to specific alarm conditions. Users can automatically reboot network equipment when it stops responding.

Up to 128 network cameras can be integrated into the IMS-4000 system. Multiple images can be viewed from the Console View software, and snapshots can be sent attached to e-mails when alarms occur. The IMS-4000 solution provides comprehensive monitoring for your complete enterprise.





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

IMS Outlet Switching



IMS-4000 PowerGate & PowerGate2



The IMS-4000 PowerGate units allow you to manually or automatically switch up to 8 electrical outlets from the IMS-4000 ConsoleView Software or the IMS-4000 web page. This gives you the ability to remotely turn-on, turn-off, or cycle power

to remote equipment. You can also program the system to automatically control the power to a device based on an alarm condition. The PowerGate has eight LEDs on the front panel to indicate outlet status and a 15 Amp circuit breaker for safety. It can switch a total of up to 12 amps of current at 120VAC 60Hz (all outlets combined). The PowerGate2 features individual power input circuits for each outlet thus giving you the ability to distribute the power load across multiple circuits. Two of the outlets can switch up to 10 amps (120VAC 60Hz) and the other six can switch up to 4 Amps.

| Part Name | Part Number |
|---------------------|-------------|
| IMS-4000 PowerGate | IMS-4301 |
| IMS-4000 PowerGate2 | |

Sensaphone IMS-4000 Expansion

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.

SOLUTIOS VMS

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.

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.



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 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 connect to the Sensaphone IMS product line and monitor temperatures in refrigerators or freezers. The connection between the sensor and IMS unit is made via the attached RJ-45 patch cable. The sensor probe can reliably monitor temperatures as low as -122°F (-86°C).



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.



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 RJ-45 patch cable. The sensor probe may be secured inside equipment using the included clamp or it may be hung using tie wraps.

| Part Name | Part | Number |
|------------------------------------|----------------|---------|
| IMS Solution Temperature Sensor w/ | External Probe | MS-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.



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.



IMS Water Detection Sensor



| Sensor Temperature Range | 32° to 140°F 0° to 60°C |
|--------------------------|----------------------------------|
| Accuracy | ±.36°F ±.2°C |
| Sensor Series | Contact Series |
| Dimensions | 6.3 x 3.3 x 2" 158 x 83 x 50mm |

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.

| Part Name | Part Number |
|---|-------------|
| IMS Solution Water Detection Sensor | |
| Water Rope Extension for Zone Water Detection 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 o-250VAC 50/60Hz.

Part NamePart NumberIMS Solution 15 Amp Current Sensor.IMS-4841IMS Solution 20 Amp Current SensorIMS-4842



External Power Failure Sensor



| Range | o to 250 VAC, 50/60 Hz |
|------------------|----------------------------------|
| Accuracy | $\pm2\%$ |
| 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 o-250VAC50/60Hz



Panasonic IP Camera



Axis IP Camera



Ideal for monitoring a small business property, data center, or residence, this camera can be used with IMS systems to send camera snapshots via e-mail when alarms are detected. The camera features a 3x digital zoom function in addition to remote pan and tilt controls.

| Part Name | | | | | | | I | 2 | ar | t Number |
|----------------------|--|--|--|--|--|--|---|---|----|----------|
| Panasonic IP Camera. | | | | | | | | | | IMS-4421 |



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 | | | | | | | | | 2 | ar | t 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.



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.



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 RJ-45 patch cable.



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 Number Part Name



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 | |

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 8 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 .



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.

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 Temperature Sensor IMS-4210

IMS Wireless Ultra Low Temperature



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 IMS Wireless Power Failure Sensor. IMS-4213



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.



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.



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 Spot Water Detection Sensor . . IMS-4215 IMS Wireless Zone Water Detection Sensor . . IMS-4216

Popular Products

Sensaphone 400

Basic Phone Notification

Designed for desktop or wall
mounting, the Sensaphone 400
is simple to install, program, and
operate; no changes to standard



electrical or telephone service are required. When connected to a telephone line, it will respond to an alarm by dialing up to four separate telephone numbers.

Sensaphone WEB600

Web Based Monitoring

The Sensaphone

WEB600 is designed to

be an easy, cost-effective,



network—based monitoring system to notify you when equipment or conditions go awry. The internet browser—based programming makes the device easy to use from any computer on your network.

At Sensaphone we're always asking - What if?



What if we re-imagined remote
environmental monitoring?

Perhaps with intuitive, web-based
management tools, and apps
compatible with your mobile devices.

With the potential to connect lots of
sensors, with unlimited data storage,
numerous notification methods,
and built-in battery backup. Plus an
online system that could support an
unlimited number of devices for easy
expansion and unlimited monitoring
capacity.

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