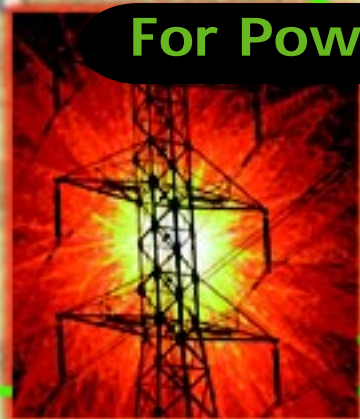


# An Intelligent RTU and Software System For Powerful, Low Cost SCADA Solutions



**Sensaphone® SCADA 3000**

HOW DID YOU MANAGE WITHOUT IT?

**Already an industry pioneer, Phonetics takes SCADA technology into the 21st century with the Sensaphone SCADA 3000.**

**WHAT MAKES THE SENSAPHONE® SCADA 3000 SYSTEM SO UNIQUE?**

*Phonetics is taking a bold new approach to traditional SCADA solutions. A typical SCADA system used to involve multiple software packages and hardware systems.*

*It required purchasing one software package to program your RTUs or PLCs,*



*another to poll and manage, and sometimes even more packages to alarm and evaluate data. Programming and integrating these systems generated numerous support headaches and ended up costing a small fortune. With the Sensaphone SCADA 3000, your hardware comes complete with all the software you'll need. Your entire system is easier to set up, easier to program, and much more cost-effective!*

# Sensaphone® SCADA 3000

## **FLEXIBLE COMMUNICATION**

Other SCADA systems limit you to only one method of communications. Your Sensaphone SCADA 3000 RTU's are designed to communicate with the host PC by standard data radio, ordinary phone lines, or a mix of both. Even cellular phone communications are possible with an adapter.

## **BUILT-IN ALARM NOTIFICATION**

Effectively managing industrial environments means immediate notification in case of problems. Delays and down time can cost millions of dollars.

However, with most control systems, the alarming functions require you to purchase third party hardware and/or software, where various incompatibilities may not be obvious until it's too late. The Sensaphone SCADA 3000 includes a complete set of communications options and capabilities.

Whether you are using phone lines or radios, the Sensaphone SCADA 3000 system can report alarms using custom voice, numeric pagers, alphanumeric pagers, fax, and even e-mail.

## **POWERFUL I/O WITH EXPANSION**

Standard on each Sensaphone SCADA 3000 are 16 universal inputs and 8 relay outputs. The inputs can accept contact closures, 4-20mA transducers, 0-5 Volt sensors, and even thermistors.

As you grow and bring new machinery or facilities on-line, the Sensaphone SCADA 3000 can expand to meet your needs. Expansion modules are available to add specialized inputs such as thermocouples or high speed pulse counters, or even 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. With the wide variety of I/O types available to be used directly with the RTU, buying costly signal conditioners is a thing of the past!

## **BUILT-IN DATA LOGGING**

Fully programmable time-stamped data is not only standard, but it includes several unique options. Sensaphone SCADA 3000 not only internally logs and stores data, it produces reports via phone modem directly to your main computer or even a fax machine.

Radio network applications will have data logging performed from within the main computer's free software.

## **POWERFUL PROGRAMMING FEATURES**

### **Ladder Programming**

Ladder Logic is the most easily understood and usable control language in use today. The Sensaphone SCADA 3000 makes it even easier. A full set of standard ladder instructions are built in along with counters, timers, and even analog capability.

There is no additional programming software to buy. The free software package comes complete with a Windows®-based drag-and-drop ladder editor that significantly reduces your set up time.

### **C-Programming**

The Sensaphone SCADA 3000 has built-in C-programming to handle any control algorithms, which may be too complex for Ladder Logic. Though the C-program can run independently of ladder programs, we have built-in the capability of both programs to share and pass information back and forth for ultimate control.

Of course, the necessary software to develop C-programs is included in our free software package!

### **PID Functions**

Not only does Sensaphone SCADA 3000 build in ladder and C-programming, we complete your control needs with built-in Proportional Integral Derivative control functions.

Any analog input and output channel pair can be associated with up to 8 PID algorithms. Each algorithm will have its own set of fill-in-the-blank parameters.

### **Remote Programming Access**

The Sensaphone SCADA 3000 has another unique function that sets it apart from other RTUs and PLCs: total programming is possible from local or remote locations! There are no chips to "burn" and programming remains safe in case of power loss. You are in constant communication with your "remotes," allowing you to program new control or alarm parameters 24 hours a day! Updating Ladder and C- programs can also be done remotely, allowing for maximum flexibility in communication and control.

## **FLEXIBLE POWER SOURCE**

Sensaphone SCADA 3000 power systems include the latest technology in intelligent battery charging: current monitoring, safe battery cut off and built-in support for solar power. Power supplies are available for both 110 and 220 volt operation and with a variety of international safety approvals.



**OUR FREE SOFTWARE: 21st CENTURY SCADA TECHNOLOGY**

Any SCADA system stands or falls on the software: its ease of installation, use and cost! Sensaphone SCADA 3000 comes with free software, a significant cost benefit, as no high cost third party software must be purchased and installed. Sensaphone SCADA 3000's powerful 32-bit software is installable by your own personnel. Developmental tools are built into the software and much of the set-up is already done for you!

Custom modules for programming, system configuration, polling and alarming are important features of our innovative software package. This package offers a simple point and click user interface for all of its functions and full compatibility with Windows® (95/98, and NT). User friendly menus allow quick and easy access to such important features as...

**Ladder Editor**

Complete ladder development, using a simple drag and drop editing environment, is included in the free software package.

**C-Program Editor**

Full C-programming is already built-in, saving you thousands of dollars in add-on development systems. Editing is done on and off line, then compiling and downloading data is easily and quickly done with the point and click user interface.

**Alarm Functions**

With a voice and fax enabled modem in your PC, this software will generate alarm notifications using custom voice messages, fax, numeric and alphanumeric pagers, and even e-mail. This total PC alarming feature comes standard with the free software package and is compatible with most PCs.

**Real Time Screen Builder**

To operate your real-time SCADA host, Sensaphone SCADA 3000's free software includes a custom screen editor. With this valuable tool, you can add a professional look to your user interface on specific applications. Multiple custom screens for different views, or different users are easily accomplished with this built-in software feature.

**Data Logging**

For maximum efficiency, the software package allows data to be sampled from both the RTU and PC, with built-in functions to retrieve, analyze and store all sampled data.

**Communications Manager**

The Sensaphone SCADA 3000 software is powerful enough to allow use of both

phone modem and radio modem communications simultaneously. The software has the ability to manage up to four communications paths that can be radio or phone modems.

**COMPLETE WARRANTY AND TECHNICAL SUPPORT**

All Sensaphone products are completely manufactured in the United States so Sensaphone can stand behind the SCADA 3000 with a 3-year comprehensive warranty and unlimited technical support. When help is needed, support is available at 610-558-2700 or our website at [www.sensaphone.com](http://www.sensaphone.com) or e-mail at [support@sensaphone.com](mailto:support@sensaphone.com).

Of course, all Sensaphone SCADA 3000 software and hardware components are 100% year 2000 compliant.



HOW DID YOU MANAGE WITHOUT IT?

# Sensaphone® SCADA 3000



## **INTELLIGENT SCADA SYSTEMS.**

*In the past, manufacturers boasted of their highly advanced Supervisory Control and Data Acquisition systems. Supposedly, these are full-featured systems, but their cost rivals the space shuttle...and that's just the beginning!*

*To turn their SCADAs into the premiere system you thought you already paid for, you must buy expensive third party software and hardware.*

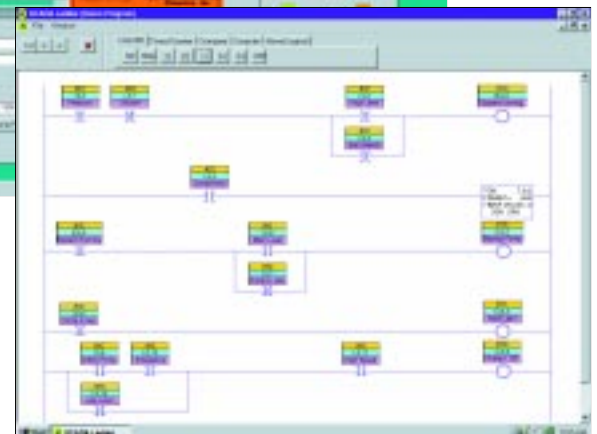
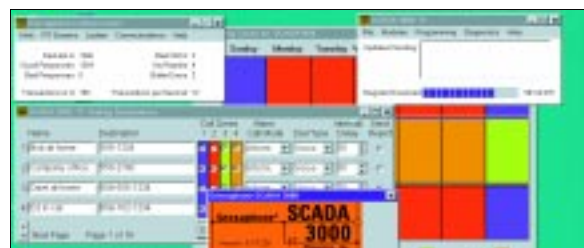
*When you're finished, you've paid for a space shuttle...and the rocket fuel!*

*Until now, these non-integrated SCADA systems were the only systems available. Because of their inflated costs, small to mid-size users were denied the benefits of an advanced SCADA system to run their remote facilities.*

### **Not any more!**

*Phonetics presents Sensaphone SCADA 3000, the fully integrated control system you need to run all your remote facilities. It's a complete SCADA system, where your only surprise is how little it costs...to do so much!*

*With the unequalled Sensaphone SCADA 3000, the high cost of SCADA is now history!*





## Sensaphone® SCADA 3000

### **HARDWARE CONFIGURATION**

#### **16 Universal Inputs:**

- Contact closures
- Thermistors
- 4-20mA Analog
- 0-5 Volt Analog
- Run time accumulation

#### **8 Outputs:**

- Latching 2 amp relays
- LED status indication

#### **2 RS232 ports:**

- Local programming
- Data radio communications

RJ11 Phone interface for optional voice and data communications

#### **LCD:**

- 4 by 20 character scrolling display
- User customized content for local viewing

### **FEATURES:**

#### **Data Logging:**

Fully user programmable built-in data storage for logging I/O points or calculated variables

#### **Event Logging:**

Internal tracking of all significant alarms and events

#### **Ladder Logic Programming:**

Standard ladder programming included for true PLC-type control

Visual ladder editor is part of free software package

#### **C-Programming:**

Built-in C-compiler, allowing complex calculations  
C-program is capable of running on a schedule, independent of ladder program

#### **PID:**

Eight PID loops are built-into internal programming Any I/O points are selectable to function in PID calculations

### **Options:**

Input/Output Options (expandable to 144 points):

- Universal inputs (same as 16 already built-in)
- High Speed pulse count inputs, up to 10kHz
- Thermocouple inputs: Types J,K,R,S,T and E
- Relay Outputs
- Analog Outputs (4-20mA)
- Annunciator Panel

Communication Options:

- Phone modem – allows modem, fax, and pager communications
- Voice module – allows custom voice messages over standard phone lines

Power Supply Options:

- Hard-wired power supply for 110 or 220 VAC operation
- Plug-in power supply for 110 or 220 VAC operation
- Standard battery backup
- Extended battery backup

### **SOFTWARE:**

Included in the purchase price, it provides the capability to program units, develop ladder programs, develop C-programs, retrieve and analyze the data and event loggers plus print all necessary reports.

- Automatically polls for data using phone lines or radio modems.
- Performs all standard SCADA functions with customized on-screen graphics
- True 32-bit code for Windows® 95 or Windows® NT

**Phonetics, Inc.**