

## ALPHASENSE MODEL AS100-08

AlphaSense model AS100-08 is a microprocessor-based unattended monitoring and information delivery/forwarding system that will automatically create and deliver information to wireless devices such as alpha pagers and/or other data equipment (may be unattended), such as PC's, printers or terminals. It may be used in a wide variety of applications. Model AS100-08 obtains information by scanning the status of 8 digital inputs, which may be connected to industry-standard sensors for monitoring environmental conditions such as temperature, smoke, water, fire, motion detection, unauthorized access, etc. Further, provisions to sense and report on external power failure and subsequent restoration is built-in. When a digital input is triggered, AlphaSense will formulate and deliver a user-specified informational message via its internal modem to user-specified "destination." These destinations may be a mix of any of the following: alphanumeric pagers, digital celphones, SMS-capable receptors, other wireless messaging platforms such as laptops, palmtops, PDA's, and more. AlphaSense can also be instructed to deliver its messages to fixed data devices - either wired or wireless, such as logging recorders, unattended PC's, remote printer stations, etc. Information or message delivery to multiple wireless device, or data destinations may be configured by the user. All incoming events are timestamped and stored in a memory log for user viewing or download.

Model AS100-08 contains eight separate inputs which are used to cause delivery of separate user-defined messages whenever the desired or watched-for conditions occur. These inputs feature individually definable polarity to provide maximum information from open/closed switch-type sensors. Also, model AS100-08 provides two additional self-contained sensing systems which report high-priority alarm messages for user-scheduled "Well-Check" reports, as well as External Power Lost and Power Restored reports. Well-Check reports are delivered either once or twice during each 24-hour period (or may be disabled). Message delivery may be done using an industry-standard error-correction method for data delivery, and uses the appropriate error-management routines for wireless message delivery, as needed for the system it is delivering to.

The Well-Check feature is extremely valuable for the following reason: If an unattended monitoring device is getting no alarms from its input source, it never has to report out. So, what if the monitoring device itself fails? The user will never know, and blindly carries on thinking everything is problem-free at the monitored site. Worse, if an alarm does occur, it will not get reported, due to the monitoring devices failure. The AlphaSense scheduled self-test and Well-Check report eliminates all of this uncertainty with a simple assurance message delivered to wherever the user specifies.

When its external power fails, AlphaSense is capable of continued operation for a minimum of 24 hours, assuming two message deliveries are performed every hour. In less demanding applications, AlphaSense can operate for several days using its own internal rechargeable power. Also, additional state-of-the-art internal power backup provides complete memory and data storage protection for up to 5 years. Compuquest believes that security is an important aspect of modern communications products. AlphaSense is password-protected with advanced encryption processing for security against any unauthorized access. AlphaSense supports total data security: All messages, telephone numbers, system access information, and other data entered during user programming, as well as any stored data from the inputs or serial port are internally encrypted, and are IMPOSSIBLE to unscramble or extract by an unauthorized user. Any equipment which the user connects to the serial port of AlphaSense is also protected from unauthorized access once passwords are set.

Installation and software setup of AlphaSense is simple and quick. Following the physical installation of AlphaSense at the desired location, all further setups and instructions may be done from nearly anywhere using a PC or terminal with a modem, and any communications software. This advanced "remote re-configuration" is a powerful feature and allows for the re-definition and re-instruction of AlphaSense at any time after it is installed. The powerful flexibility of AlphaSense enables it to perform

valuable tasks unattended, and provide information only when required. AlphaSense is an efficient time and resource saver. For all its advanced capabilities, AlphaSense has been designed with the user in mind. Once password access is achieved by the user, simple, easy-to-follow menus prompt the user for the required information, and then AlphaSense performs the complex internal configurations automatically. User entries may be changed at any time, and AlphaSense screens the user's inputs to prevent errors.

## **ALPHASENSE MODEL AS100-08 DETAILED SYSTEM DESCRIPTION**

AlphaSense contains advanced microprocessor-based electronics which oversee all functions of the system. These include scanning and monitoring the eight separate inputs, automatic sensing of external power loss/restoration, 5-year crashproof data retention, and data encryption/decryption. The AlphaSense internal master clock provides time and date stamping of input occurrences and report deliveries, and is also used in conjunction with the user-scheduled reports such as the Well-Check. AlphaSense uses a real-time operating system which features interrupt-driven detection so that each input can respond and validate conditions in about 1/4 second. This validation time is needed so that noise glitches do not cause false triggering. AlphaSense can recognize and process any activity on the digital inputs even while a user is connected to AlphaSense and programming it, or while it is calling out to deliver a message, report, or alarm.

AlphaSense model AS100-08 circuitry uses a power input of 12-18 VDC at 200 Ma. for its external power, and comes equipped with a U.L. approved power supply module that connects to a standard 120 V.A.C. outlet. Telephone line connection is made via back-panel RJ-11C connector. This connection is usually made to a standard dialup telephone line, but may also be connected to a PBX extension line, key system, virtual PBX, or cellular phone interface in applications where desirable.

Model AS100-08 includes its own internal "Un-interruptable Power Supply", which provides for continued AlphaSense operation when external power fails. In the event of complete power loss, including a dead or damaged battery, AlphaSense can retain all its internal data for up to 5 years. When power is again connected, it will restart precisely where it left off when the damage occurred! AlphaSense's self-contained power monitor immediately delivers an alarm message whenever AlphaSense loses its externally-supplied power, and a different message when power is restored.

The eight inputs on model AS100-08 accept standard 2-wire "switch closure" type sensors or connection from contact open/closure, Form-C relay, or any TTL-compatible device. The user may define each input for either normally-open or normally-closed activation. Input #1 is internally jumpered to an "External Power Restored" signal and may optionally be used for regular input sensing by removing a jumper. Each sensor input has a corresponding user-defined 80 character ASCII text message, and is assigned up to two destinations for message delivery, designated primary and secondary. Messages are prefaced with a user-defined "Site-ID" text, so that if multiple units are reporting identical alarms, it is easy to confirm the exact origination. All input messages and numbers are completely user-programmable and may be changed at any time.

For alarm and message delivery, AlphaSense features intelligent delivery detection, with up to 9 retries on both primary and secondary destinations to help ensure delivery. When dialing out, AlphaSense employs advanced dialing routines and will sense dial tone and second dial tone, and allow mixed pulse dialing and tone dialing in telephone numbers. Sophisticated call-progress detection and processing sorts out line noise, "busy" and "circuits busy", and will detect a voice answer at the called number. All such cases would be processed for re-delivery, as would errors, faults or validation failures at the wireless messaging provider's system equipment.

Model AS100-08 is upgradeable to other models in the AlphaSense product line.

**First-time Purchasers**

TRY ALPHASENSE FOR 30 DAYS. IF YOU ARE NOT COMPLETELY SATISFIED  
YOU MAY RETURN IT FOR A FULL REFUND OF THE PURCHASE PRICE!!

For more info, or to order, call, fax, or e-mail now:

Orders: 1-800-722-2353

Compuquest, Inc.  
366 S. Main St.  
Bartlett, IL 60103-4423

Phone: 630-830-2700  
Fax: 630-830-0877  
Internet: <http://www.compuquestinc.com>

email: [sales@compuquestinc.com](mailto:sales@compuquestinc.com)