AS300 COMMUNICATOR ALARM & MONITORING SYSTEM

Monitor and Protect

Irreplaceable Samples / Valuable Assets

SIMPLE INSTALLATION
It's easy to install the AS300 system. Fit the temperature probes into the equipment from the AS200TX transmitters and set required alarm values. Then program the settings into the AS300 Communicator from a mobile phone.
No phone line or line rental is required as the system uses a mobile network of your choice.

MULTIPLE SITES
Multiple linked sites can be alarmed and monitored across the country as the system uses a GSM network. There's no limit to distance or location.

SETUP AND CHANGE SETTINGS FROM A MOBILE PHONE ON THE AS300 COMMUNICATOR, ALL PASSWORD PROTECTED.

Including

- Contact Telephone Numbers, Five Telephone Numbers.
- Outgoing Message.

ACKNOWLEDGE ALARM FROM A MOBILE PHONE

Including

- Alarm text must be acknowledged from mobile phone, if no acknowledgement is received the AS300RX will repeatedly until acknowledged.
- Once acknowledged, recipient's who have received an alarm text will be sent a message giving telephone details of the acknowledger.

Mobile Phone

QUERY UNIT FROM A MOBILE PHONE

Including

- Alarm Status of AS200TX Transmitters.
- Real Time Values of Input 1, 2 & 3 and Power.
- Contact Telephone Numbers and Alarm Log.
- Network Signal Strength.

INPUT DATA & ALARM LOG SENT TO WEB SERVER

Including

- Data logged from the AS200TX transmitter can be sent to the web.
- Alarm log of input alarms and telephone calls made in the event of an alarm. (Note this feature is an option)

Make an informed decision on what action to take based on instant readings from the equipment monitored. This can be sent at any time to your mobile telephone. This is particularly useful if an alarm occurs when the person is on call or out of the workplace. With no need for a dedicated telephone line or line rental the AS300 Communicator is exceptionally easy to install.

Web Data Analysis & Alarm Log

Mobile Phone

Local Computer Monitoring Software

AS300 Communicator

AS200TX

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Features

The AS300 system is a new generation of monitoring and alarm systems using the Global System for Mobile Communications (GSM) and wireless technology. The monitoring and data logging system allows laboratory and hospital equipment to be protected. The system ensures the safety and continued effectiveness of medicine produce, blood products and samples at specific refrigeration and freezer temperatures. Due to the high value of many of these goods, Quality Assurance programs increasingly require that storage temperatures are to be verified several times per day and that records be maintained. The AS300 System will meet the alarm, monitoring and logging requirements.

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AS300 Communicator

The AS300 Communicator will accept up to quantity 100 AS200TX transmitters. The system uses the GSM network for communications, this allows the Communicators to be located anywhere a network signal is present. This is particularly useful if customers equipment is distributed on several sites or different parts of the country. The distance between the AS300 Communicator and AS200TX transmitter's are 200m, this distance will be greater or less, dependant on the building the equipment is installed in.

Five telephone numbers can be allocated in the AS300 Communicator, this allows personnel who are responsible for the equipment to be contacted immediately in case of an alarm.

- Compact size. 170H x 85W x 35W (mm)
- Simple to use.
- 100 Transmitter channels, one transmitter per channel.
- Three menus available giving information on the system.
- Last 10 alarms stored.
- All alarms are time and date stamped.
- Acknowledged by mobile phone.
- Up to five telephone numbers can be allocated to the Communicator.
- Add and remove transmitters by a simple password protected text.
- Audible alarm.
- Power failure alarm.
- Rechargeable battery backup.

AS200TX Transmitter

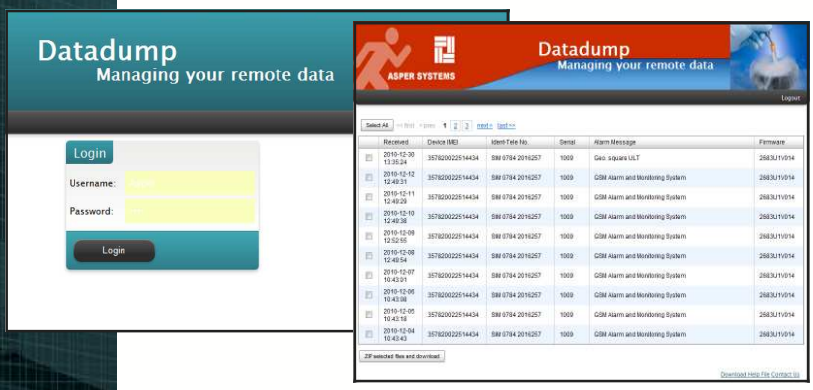
The AS200TX transmitters will in the event of equipment failure, alarm and send data to the AS300 Communicator. The AS200TX transmitter will also display the alarm input and an audible alarm will be activated. The AS300 Communicator will displays the unit number and input of the activated transmitter. The alarm menu in the Communicator will log the alarm time and date stamp it. Up to five telephone numbers will be texted giving details of the transmitter alarming and current temperature. The AS300 Communicator can be texted at any time to get details of current values in the AS200TX transmitter.

Up to three inputs are available on the transmitter. A common configuration would be to use input 1 to monitor the air temperature of the equipment, input 2 to monitor the sample temperature and input 3 to monitor the door open / closed condition. This configuration of the inputs will give maximum protection. All data will be recorded if web logging is employed on the system.

- Compact size. 110H x 65W x 27D (mm)
- Simple to use.
- Inputs available : Temperature, and Volt Free Contact.
- Temperature range –200°C to +100°C.
- Temperature transmitter resolution 0.1°C.
- Temperature transmitter accuracy better than 0.1°C across the full range.
- Front panel display of I/P1, temperature , time delay, unit number ID and alarm parameters.
- Temperature high and low alarms.
- Audible and visual indication of an alarm.
- Adjustable time delay for temperature alarm. (0 to 90 minutes)
- Mains power failure alarm.
- Alarm information sent to the receiver AS300RX, giving details of transmitter unit and fault.
- Status and alarm indication on transmitter.
- Temperature, high & low alarms and delay time data transmitted every 15 minutes. This increases to every 10 minutes when in alarm..
- System self test.
- Rechargeable battery backup.
- Easy calibration procedure / Auto calibration reminder customer set. Settings ; None, 6 months or 1 year.
- Designed bracket for easy installation and positioning.

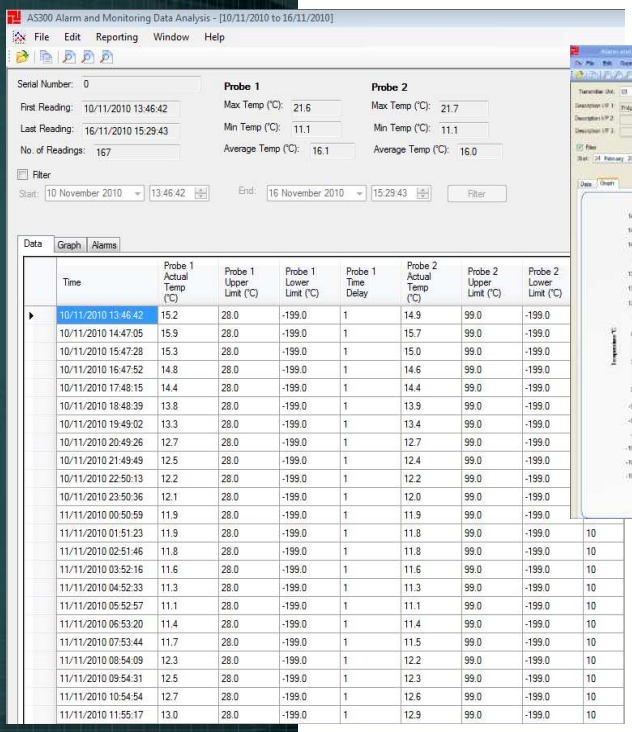
Data Logging & Alarm Log for the AS300RX Receiver

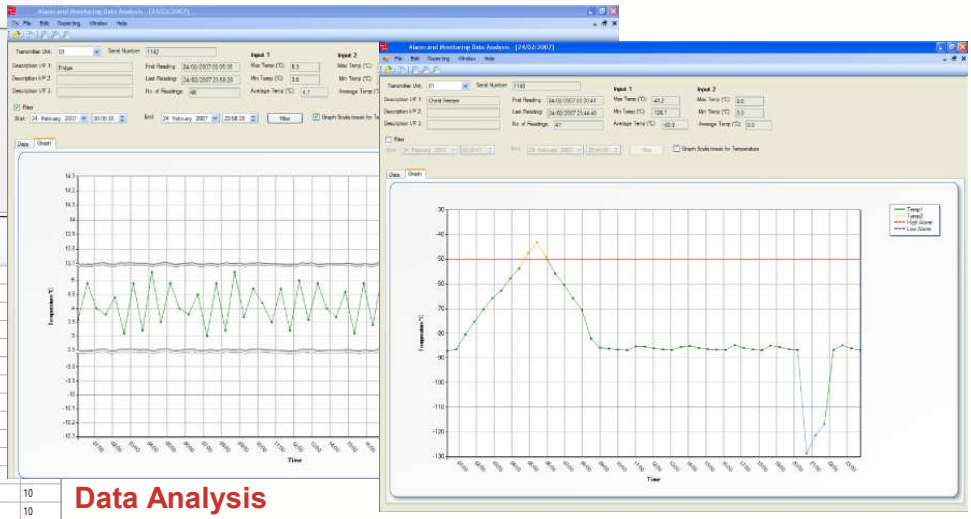
The AS300 Communicator can log data which can be sent to a server, this data can be down loaded to a computer and stored. The data collected can be analysed using our data analysis software. The data interval stored will be every 15 minutes this is the interval that the AS200TX transmits its data to the AS300 Communicator. An alarm log is also kept giving details of all telephone calls to contact and acknowledgement personal, which are time and date stamped.



Data Dump

Data from the AS300 Communicator will be sent to the server once every 24 hours. The data can also be sent on demand by the user. To access the data a username and password is required. The data is organised into zip files and can be downloaded to the customers computer.



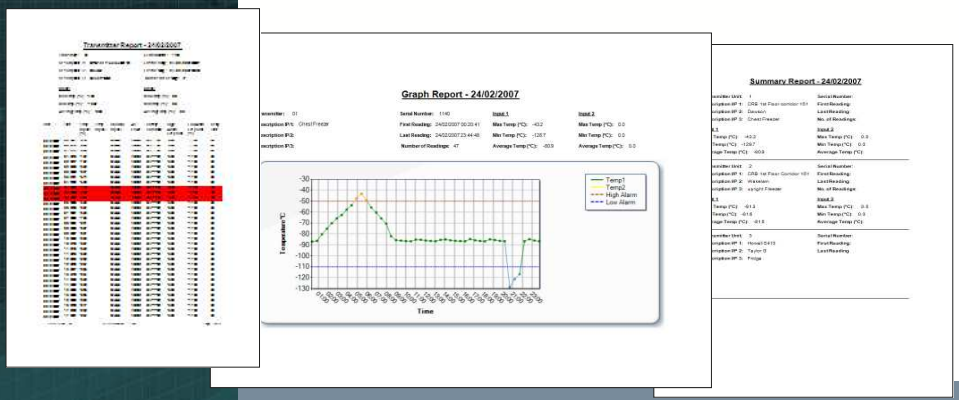


Data Analysis

Data analysis software allows the user to look at the data in numerical and graphical forms. Information at the top of the screen is displayed for the selected unit. Information includes, Serial Number, First Reading, Last Reading, Number of Readings, Max Temp, Min Temp and Average Temp for I/P1 and I/P2.

The data in the columns displays information on Date, Time, Temperature Input 1, Temperature Input 2, High Alarm Set-point, Low Alarm Set-point and Delay Time. Graphs with scale breaks can be displayed by simply clicking on the graph tab.

The alarm log gives historical information of time, date, call direction, telephone numbers, alarm input and whether the call was successful or failed.



Reporting

Print out of the data can be done in three ways.

- *Transmitter Report* prints the data column view.
- *Graph Report* prints the graph view.
- *Summary Report* prints the “header” information for each transmitter and alarm log.

CALIBRATION

A calibration service can be offered for all our products.

SERVICE AND SUPPORT

We service and repair all of the electronic products we manufacture. All our goods carry a 1 year return to base warranty. If one of our products needs repair while under warranty, we will repair or replace it

ALARM & MONITORING APPLICATIONS

- ULT FREEZERS
- LN2 STORAGE
- INCUBATORS
- ISOLATORS
- CLEAN ROOMS
- FREEZERS
- FRIDGES
- COLD ROOMS
- CULTURE ROOMS
- CLIMATE MONITORING
- CRYOGENICS
- COMPOST
- TEMPERATURE, –200°C to +100°C

System Specification and Functions

AS300 COMMUNICATOR

Number of AS200TX Transmitters per AS300 Communicator

- 100 AS200TX.

Built in Communications

- 5 Telephone numbers.
- Web access for data and alarm history (Option).

Passwords

- Master and Acknowledger 4 digit password.
- Lock switch on receiver, disabling change of settings by mobile phone.

Telephone Alarm Messages

- Up to five telephone numbers can be programmed into the AS300 Communicator. A text message will be sent to a mobile or a voice message sent to a land line. The outgoing message (OGM) can be up to 80 characters long and the value and input alarming is tagged on to the end of the OGM.

GSM Signal

- Visual indication of signal strength. Audible and visual indication if network strength is lost or low.

Sim Card

- Low Credit Warning text message and visual, audible warning on GSM Unit. (*Sim Credit Warning only available on O2 and Vodafone)*

Memory

- Over 4000 readings

Display

- Scrolling display of Sim Number, Sim Credit, Signal Strength. (*Sim Credit only available on O2 and Vodafone)*
- Three Menu's :-, System, Alarm Log and Transmitter Information.

Battery Back Up

- Rechargeable Batteries

External Dimensions

- 160H x 90L x 50D mm

FUNCTIONS INITIATED FROM MOBILE PHONE

- Enable or Disable AS300 Communicator.
- Setup Telephone Numbers, mobiles and land lines.
- Enquire Details from AS200TX transmitters Including Alarm Status, Temperature Readings, Alarm Log, Transmitter Signal Strength, GSM Signal Strength, Setup Values, Telephone Numbers and OGM Programmed, Amount of Credit in Sim Card.
- Acknowledge Alarms.
- Test Alarm Function.

AS200TX TRANSMITTER

Inputs

- Temperature and Volt Free.
- Temperature Range +100°C to –200°C.
- Temperature resolution 0.1°C.
- Temperature Accuracy 0.1°C.

Alarms

- High and Low Alarms.
- Adjustable Time Delay For Temperature Alarms (0 to 90 mins).
- Power Fail Alarm.
- Status & Alarm information on transmitter.

Display

- Transmitter Unit Number
- Time Delay
- Temperature Input 1

Data

- All data transmitted including temperature, high & low alarms and delay time every 15 minutes.

Battery Back Up

- Rechargeable Batteries

External Dimension

- 110H x 65W x 27D mm