

AS300SA STAND ALONE ALARM & MONITORING SYSTEM



Monitor and Protect Irreplaceable Samples / Valuable Assets

SIMPLE INSTALLATION

It's easy to install the AS300SA. Fit the temperature probes into the equipment and then program the settings into the AS300SA unit 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.



QUERY UNIT FROM A MOBILE PHONE

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



SETUP AND CHANGE SETTINGS FROM A MOBILE PHONE, ALL PASSWORD PROTECTED.

- Including
 - ◆ Contact Telephone Numbers, Five Telephone Numbers.
 - ◆ Outgoing Message.
 - ◆ Input Settings

ACKNOWLEDGE ALARM FROM A MOBILE PHONE

- Including
 - ◆ Alarm text must be acknowledged from mobile phone, if no acknowledgement is received the AS300SA will repeat text's until acknowledged.
 - ◆ Once acknowledged, recipient's who have received an alarm text will be sent a message giving telephone details of the acknowledged.

INPUT DATA & ALARM LOG SENT TO WEB SERVER

- Including
 - ◆ Data logged from the AS300SA 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 AS300SA stand alone unit is exceptionally easy to install.



Web Data Analysis & Alarm Log



Mobile Phone



AS300SA Stand Alone Unit



Hard wired Temperature Probes



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 AS300SA System will meet the alarm, monitoring and logging requirements.

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 AS300SA unit is exceptionally easy to install.

AS300SA

The AS300SA stand alone unit will accept up to three inputs the usual configuration being I/P1 Temperature, I/P2 Temperature and I/P3 Digital. The system uses the GSM network for communications, this allows the AS300SA 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.

Five telephone numbers can be allocated in the AS300SA, this allows personnel who are responsible for the equipment to be contacted immediately in case of an alarm.

The AS300SA has many special features like the Defrost Function which allows an input to have the alarms disabled. The disabled period can be set from 0 to 90 hours from the users mobile phone. Once the disabled period has elapsed the alarms will become active automatically.

- Compact size. 170H x 85W x 35W (mm)
- Simple to use.
- Configurable Inputs I/P1, I/P2, I/P3 and Power Fail.
- Two menus available giving information on the system.
- Last 10 alarms stored in alarm log
- All alarms are time and date stamped.
- Acknowledged by mobile phone.
- Up to five telephone numbers can be allocated to the AS300SA
- Audible alarm.
- Power failure alarm.
- Rechargeable battery backup.
- Built in communications to mobiles, land lines and web.



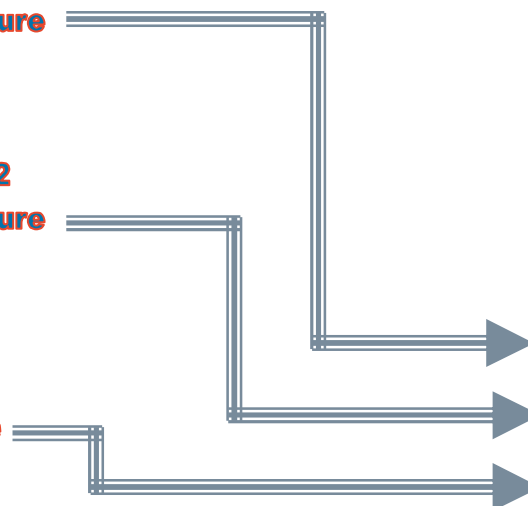
INPUT 1
Temperature



INPUT 2
Temperature



INPUT 3
Volt Free





Data Logging & Alarm Log for the AS300SA

The AS300SA can log data which can be sent to a server, this data can be downloaded to a computer and stored. The data collected can be analysed using our data analysis software. The data interval stored can be set from 1 minute to 60 minutes by text message to AS300SA. An alarm log is also kept giving details of all telephone calls to contact and acknowledgement personal, which are time and date stamped.

Datadump

Managing your remote data

Login

Username:

Password:

Login

Datadump

Managing your remote data

Received	Device ID#	Ident File No.	Serial	Alarm Message	Firmware
2010-12-30 13:25:24	35760202514454	588 8784 2016267	1000	Gas Square ULT	2683U19194
2010-12-12 12:40:21	35760202514454	588 8784 2016267	1000	GBM Alarm and Monitoring System	2683U19194
2010-12-11 12:46:28	35760202514454	588 8784 2016267	1000	GBM Alarm and Monitoring System	2683U19194
2010-12-10 12:46:28	35760202514454	588 8784 2016267	1000	GBM Alarm and Monitoring System	2683U19194
2010-12-09 12:52:55	35760202514454	588 8784 2016267	1000	GBM Alarm and Monitoring System	2683U19194
2010-12-08 12:48:54	35760202514454	588 8784 2016267	1000	GBM Alarm and Monitoring System	2683U19194
2010-12-07 16:52:47	35760202514454	588 8784 2016267	1000	GBM Alarm and Monitoring System	2683U19194
2010-12-06 18:43:08	35760202514454	588 8784 2016267	1000	GBM Alarm and Monitoring System	2683U19194
2010-12-05 10:42:58	35760202514454	588 8784 2016267	1000	GBM Alarm and Monitoring System	2683U19194
2010-12-04 10:43:43	35760202514454	588 8784 2016267	1000	GBM Alarm and Monitoring System	2683U19194

[Download Here \(File Control\)](#)

Data Dump

Data from the AS300SA 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.

AS300 Alarm and Monitoring Data Analysis - [10/11/2010 to 16/11/2010]

File Edit Reporting Window Help

Serial Number: 0

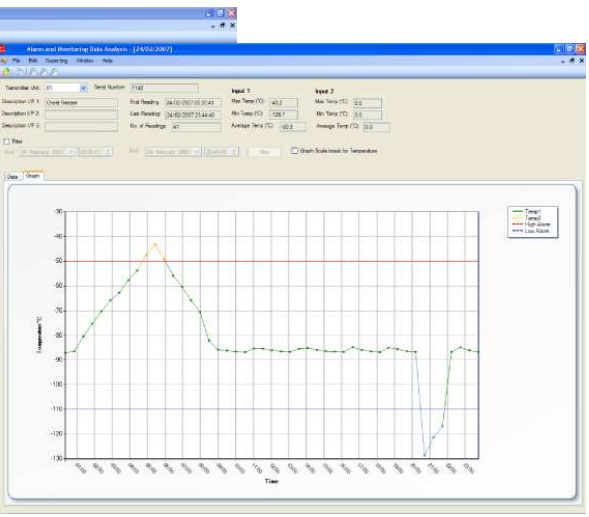
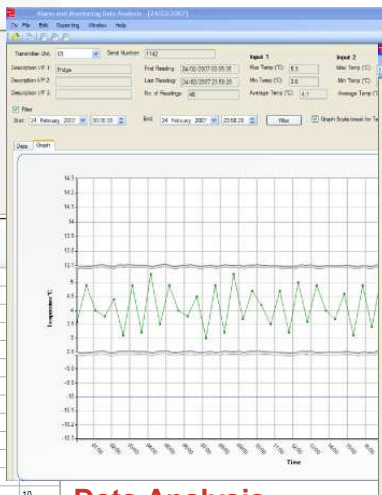
First Reading: 10/11/2010 13:46:42

Last Reading: 16/11/2010 15:29:43

No. of Readings: 167

Filter: Start: 10 November 2010 13:46:42 End: 16 November 2010 15:29:43

Time	Probe 1 Actual Temp (°C)	Probe 1 Upper Limit (°C)	Probe 1 Lower Limit (°C)	Probe 1 Time Delay	Probe 2 Actual Temp (°C)	Probe 2 Upper Limit (°C)	Probe 2 Lower Limit (°C)
10/11/2010 13:46:42	15.2	28.0	-199.0	1	14.9	99.0	-199.0
10/11/2010 14:47:05	15.9	28.0	-199.0	1	15.7	99.0	-199.0
10/11/2010 15:47:28	15.3	28.0	-199.0	1	15.0	99.0	-199.0
10/11/2010 16:47:52	14.8	28.0	-199.0	1	14.6	99.0	-199.0
10/11/2010 17:48:15	14.4	28.0	-199.0	1	14.4	99.0	-199.0
10/11/2010 18:48:39	13.8	28.0	-199.0	1	13.9	99.0	-199.0
10/11/2010 19:49:02	13.3	28.0	-199.0	1	13.4	99.0	-199.0
10/11/2010 20:49:26	12.7	28.0	-199.0	1	12.7	99.0	-199.0
10/11/2010 21:49:49	12.5	28.0	-199.0	1	12.4	99.0	-199.0
10/11/2010 22:50:13	12.2	28.0	-199.0	1	12.2	99.0	-199.0
10/11/2010 23:50:36	12.1	28.0	-199.0	1	12.0	99.0	-199.0
11/11/2010 00:50:59	11.9	28.0	-199.0	1	11.9	99.0	-199.0
11/11/2010 01:51:23	11.9	28.0	-199.0	1	11.8	99.0	-199.0
11/11/2010 02:51:46	11.8	28.0	-199.0	1	11.8	99.0	-199.0
11/11/2010 03:52:16	11.6	28.0	-199.0	1	11.6	99.0	-199.0
11/11/2010 04:52:33	11.3	28.0	-199.0	1	11.3	99.0	-199.0
11/11/2010 05:52:57	11.1	28.0	-199.0	1	11.1	99.0	-199.0
11/11/2010 06:53:20	11.4	28.0	-199.0	1	11.4	99.0	-199.0
11/11/2010 07:53:44	11.7	28.0	-199.0	1	11.5	99.0	-199.0
11/11/2010 08:54:09	12.3	28.0	-199.0	1	12.2	99.0	-199.0
11/11/2010 09:54:31	12.5	28.0	-199.0	1	12.3	99.0	-199.0
11/11/2010 10:54:54	12.7	28.0	-199.0	1	12.6	99.0	-199.0
11/11/2010 11:55:17	13.0	28.0	-199.0	1	12.9	99.0	-199.0



Data Analysis

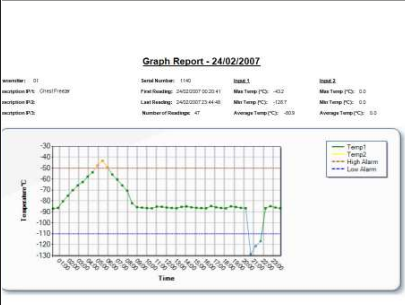
Data analysis software allows the user to look at the data in numerical and graphical forms. Information at the top of the screen is displayed for the selected unit. Information includes, Serial Number, First Reading, Last Reading, Number of Readings, Max Temp, Min Temp and Average Temp for I/P1 and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

Transmitter Report - 24022007

Time	Temp1	Temp2	High Alarm	Low Alarm
10/11/2010 13:46:42	15.2	14.9	0	0
10/11/2010 14:47:05	15.9	15.7	0	0
10/11/2010 15:47:28	15.3	15.0	0	0
10/11/2010 16:47:52	14.8	14.6	0	0
10/11/2010 17:48:15	14.4	14.4	0	0
10/11/2010 18:48:39	13.8	13.9	0	0
10/11/2010 19:49:02	13.3	13.4	0	0
10/11/2010 20:49:26	12.7	12.7	0	0
10/11/2010 21:49:49	12.5	12.4	0	0
10/11/2010 22:50:13	12.2	12.2	0	0
10/11/2010 23:50:36	12.1	12.0	0	0
11/11/2010 00:50:59	11.9	11.9	0	0
11/11/2010 01:51:23	11.9	11.8	0	0
11/11/2010 02:51:46	11.8	11.8	0	0
11/11/2010 03:52:16	11.6	11.6	0	0
11/11/2010 04:52:33	11.3	11.3	0	0
11/11/2010 05:52:57	11.1	11.1	0	0
11/11/2010 06:53:20	11.4	11.4	0	0
11/11/2010 07:53:44	11.7	11.5	0	0
11/11/2010 08:54:09	12.3	12.2	0	0
11/11/2010 09:54:31	12.5	12.3	0	0
11/11/2010 10:54:54	12.7	12.6	0	0
11/11/2010 11:55:17	13.0	12.9	0	0



Summary Report - 24/02/2007

Parameter	Value
Serial Number	1100
First Reading	24/02/2007 05:56:26
Last Reading	24/02/2007 23:56:26
No. of Readings	48
Max Temp (°C)	16.2
Min Temp (°C)	11.1
Average Temp (°C)	13.5

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.

System Specification and Functions



TEST ALARM FUNCTION

This allows the user to send a test message to the AS300SA unit to simulate a full test of an alarm on an input. This generates your chosen phone call and acknowledger sequence.

DISABLE / DEFROST FUNCTION

This allows the user to send a text message to the AS300SA unit to disable either I/P1 or I/P2 for the desired time, up to 90 hours. Once this time has elapsed the input will be automatically be reactivated to accept alarms.

CALIBRATION FUNCTION

This allows the user to calibrate input 1 or input 2 for temperature. This is done by disconnecting the probe from the relevant input and connecting the calibration key-fob to the input. A text message is sent to the AS300SA for the relevant input. The unit now carries out a calibrating procedure which takes approximately 2 minutes. During calibration the relevant stages are indicated on the display.

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
- ◆ HUMIDITY, 0 to 100% RH
- ◆ PRESSURE 0 to 100Pa
- ◆ CO₂, 0 to 20 %
- ◆ OTHER APPLICATIONS AND RANGES AVAILABLE

INPUTS THAT ARE CONFIGURABLE

- ◆ I/P1 Precision Temperature +/-0.1°C. (-200°C to +100°C) other sensor can be configured e.g. CO₂, Pressure, Humidity etc.
- ◆ I/P2 Precision Temperature +/-0.1°C. (-200°C to +100°C) other sensor can be configured e.g. CO₂, Pressure, Humidity etc.
- ◆ I/P3 Volt Free.

OUTPUTS

- ◆ Relay.

CONFIGURABLE ALARMS

- ◆ I/P1, I/P2, I/P3, I/P RS232, Power Fail.

MEMORY

- ◆ Over 4000 readings.

TELEPHONE NUMBERS

- ◆ 5 Telephone Numbers.

PASSWORDS

- ◆ Master and Acknowledger 4 digit password. The Master is used to change or enable parameters and functions.

DISPLAY

- ◆ Display of Sim Number, Values of I/P1, I/P 2, Sim Value and Signal Strength.

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.

BATTERY BACK UP

- ◆ Rechargeable Batteries

EXTERNAL DIMENSIONS

- ◆ 160H x 90L x 50D mm

TELEPHONE ALARM MESSAGES

- ◆ Up to five telephone numbers can be programmed into the AS300SA a text message will be sent to a mobile and a voice message sent to a land line. The outgoing message can be up to 90 characters long and the value and input alarming is tagged on to the end of the OGM. Visual indication of alarm message sent on GSM unit.

ALARM MENU

- ◆ Alarm Log, time and date stamped listing the last ten alarms.
- ◆

FUNCTIONS INITIATED FROM MOBILE PHONE

- ◆ Enable or Disable GSM unit.
- ◆ Setup Alarm Parameters e.g. High Alarm, Low Alarm and Delay time for each input. (Delay time 0 to 90 minutes)
- ◆ Setup Telephone Numbers, mobiles and land lines.
- ◆ Acknowledge Alarms.
- ◆ Test Alarm Function.
- ◆ Disable / Defrost Alarm Facility For I/P1 and I/P2 to accept alarms. (0 to 90 hours)
- ◆ Calibration Function.
- ◆ Output Function. This allows the customer to turn the relay output on or off.
- ◆ Query Details Including Alarm Status, Signal Strength, Setup Values, Amount of Credit in Sim Card and Input Readings.
- ◆ Query last five alarms log.
- ◆ Query Telephone numbers entered.
- ◆ Query Out Going Message entered.

