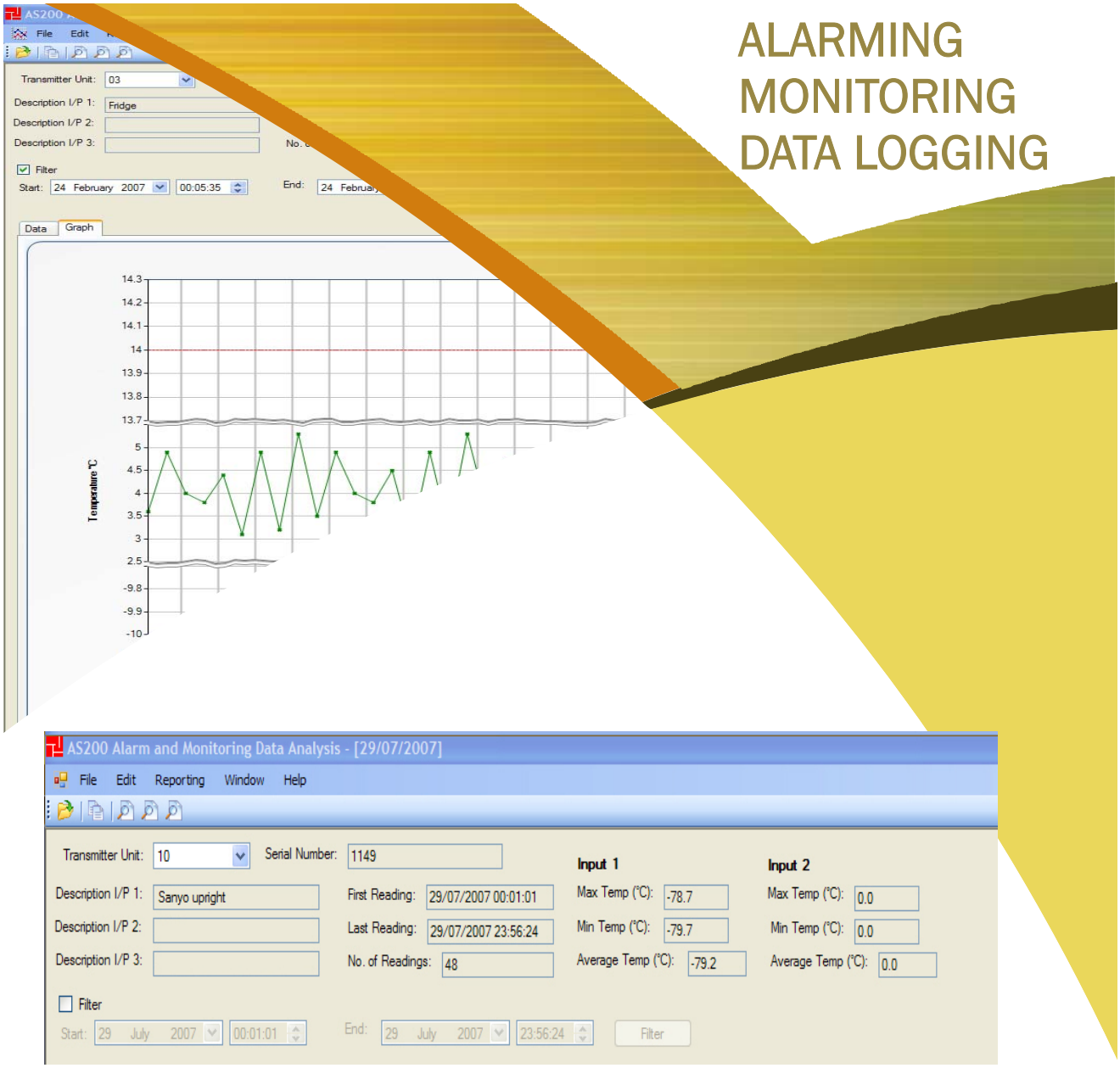


AS200 CAPTURE AND ANALYSIS SOFTWARE

USERS MANUAL

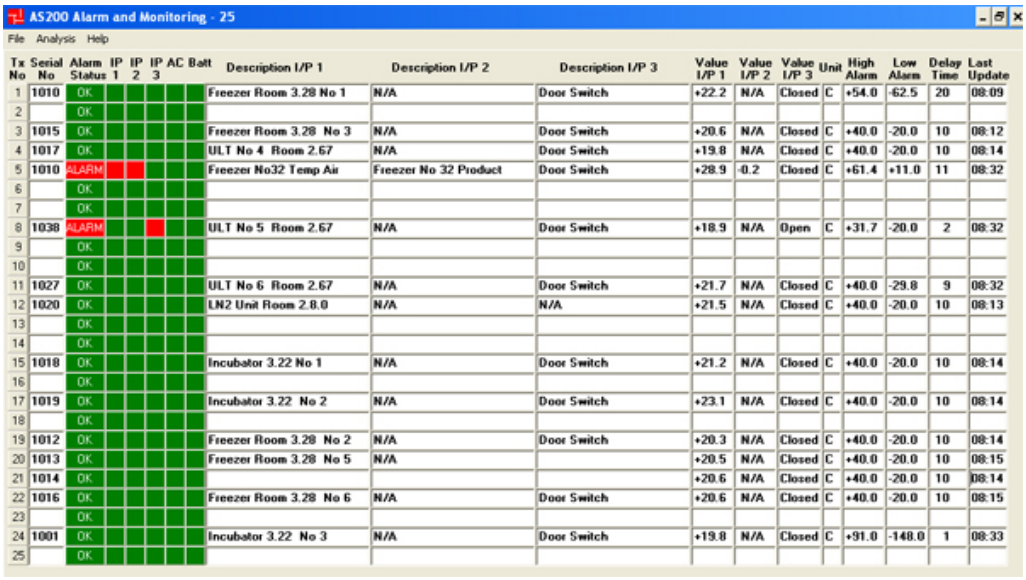
Table of Contents

IMPORTANT : THE LICENCE AGREEMENT SECTION 3 ON PAGE 7 MUST BE READ BEFORE INSTALLING OR USING SOFTWARE

Section 1 ► Monitoring & Data Capture Software

1 Overview

- Display and logging of all the information sent from the transmitters.
- Data is updated every 30 minutes from each transmitter, increasing to every 10 minutes when in an alarm condition.
- Information sent from each transmitter includes the following :- transmitter number, transmitter serial number, value I/P1, value I/P2, value I/P3, high alarm set-point, low alarm set-point, delay time and time of last update.
- Alarm status of input 1, input 2, input 3, AC power and low battery are displayed.
- Data is recorded in a CSV and PSA file. The PSA file is encrypted and can only be decoded and read by our analysis software. The CSV file can be read in our analysis software or excel. A set of new CSV and PSA files are generated every day to make record archiving simple.
- Standard 25 inputs can be expanded in blocks of 25 up to 125 inputs.



Tx No	Serial No	Alarm Status	IP 1	IP 2	IP 3	AC	Batt	Description I/P 1	Description I/P 2	Description I/P 3	Value I/P 1	Value I/P 2	Value I/P 3	Unit	High Alarm	Low Alarm	Delay Time	Last Update
1	1010	OK						Freezer Room 3.28 No 1	N/A	Door Switch	+22.2	N/A	Closed	C	+54.0	-62.5	20	08:09
2		OK																
3	1015	OK						Freezer Room 3.28 No 3	N/A	Door Switch	+20.6	N/A	Closed	C	+40.0	-20.0	10	08:12
4	1017	OK						ULT No 4 Room 2.67	N/A	Door Switch	+19.8	N/A	Closed	C	+40.0	-20.0	10	08:14
5	1010	ALARM						Freezer No32 Temp Air	Freezer No 32 Product	Door Switch	+28.9	-0.2	Closed	C	+61.4	+11.0	11	08:32
6		OK																
7		OK																
8	1038	ALARM						ULT No 5 Room 2.67	N/A	Door Switch	+18.9	N/A	Open	C	+31.7	-20.0	2	08:32
9		OK																
10		OK																
11	1027	OK						ULT No 6 Room 2.67	N/A	Door Switch	+21.7	N/A	Closed	C	+40.0	-29.8	9	08:32
12	1020	OK						LN2 Unit Room 2.8.0	N/A	N/A	+21.5	N/A	Closed	C	+40.0	-20.0	10	08:13
13		OK																
14		OK																
15	1018	OK						Incubator 3.22 No 1	N/A	Door Switch	+21.2	N/A	Closed	C	+40.0	-20.0	10	08:14
16		OK																
17	1019	OK						Incubator 3.22 No 2	N/A	Door Switch	+23.1	N/A	Closed	C	+40.0	-20.0	10	08:14
18		OK																
19	1012	OK						Freezer Room 3.28 No 2	N/A	Door Switch	+20.3	N/A	Closed	C	+40.0	-20.0	10	08:14
20	1013	OK						Freezer Room 3.28 No 5	N/A		+20.5	N/A	Closed	C	+40.0	-20.0	10	08:15
21	1014	OK									+20.6	N/A	Closed	C	+40.0	-20.0	10	08:14
22	1016	OK						Freezer Room 3.28 No 6	N/A	Door Switch	+20.6	N/A	Closed	C	+40.0	-20.0	10	08:15
23		OK																
24	1001	OK						Incubator 3.22 No 3	N/A	Door Switch	+19.8	N/A	Closed	C	+91.0	-148.0	1	08:33
25		OK																

1.1 Connecting a Computer to AS200RX

Connect the USB cable from the computer to the receiver. It is assumed that the drivers will be loaded from the initial installation of the setup software. If the drivers have not been installed consult the AS200 Operating manual and disc supplied with the receiver.

1.2 Installing Capture Software

Double click on the AS200 Capture 25 file, prompts will guide the installation. Once installed the program can be accessed from the program bar under the heading Asper.

1.3 Connecting to the AS200RX

If the Receiver is connected to the computer the capture software will connect automatically when the program is started.
On the first start up of the software the user will be prompted to choose whether a buffer board or no buffer board is installed in the receiver. Connect will be displayed at the bottom LHS of the screen with the com port used. If the software has not been connected, disconnected or no device found will be displayed. To connect manually go to File > Connect.

The Capture software must be continually run to capture and store data if a buffer board is not installed in the receiver. If the receiver becomes disconnected from the computer the system will display “Disconnected”. If a buffer board is installed in the receiver it will continue to log data when disconnected from the computer. The buffer board must be enabled in the software if fitted to the receiver. Setting > Buffer.
To synchronise the time in the buffer board to the computer go to Setting > Set time.

Note : If you find a problem with the receiver not connecting to the software try the following.
1. Reboot software.
2. Switch receiver off then on with the receiver on/off switch situated in the back panel.
3. Change to another usb port on the computer.
4. Fit a usb hub to the computer

1.4 Main Screen

The data will collect the following details from each transmitter, transmitter number, transmitter serial number, value I/P1, value I/P2, value I/P3, high alarm set-point, low alarm set-point, delay time and time of last update. This data will be collected every 30 minutes, this interval will increase to every 10 minutes when the transmitter is in an alarm condition. If a probe is broken at a transmitter PB will be displayed at the input value.

1.5 Data Folders
The user can enter the path of two data folders where the collected data will be stored. File > Data Folders > Data Folder1 + Data Folder 2.

1.6 Descriptions
The user can enter descriptions for I/P1, I/P2 and I/P3 for each transmitter. Most transmitters purchased only use I/P1 and a typical description would be type of equipment or ID or location. E.g. –80 Freezer No 05.

1.7 Alarms
Alarms are indicated on the screen by the colour off the transmitter monitoring box, changing from green to red. Items monitored are I/P1, I/P2, I/P3, AC connected and battery low.

Section 2 ► DATA ANALYSIS SOFTWARE

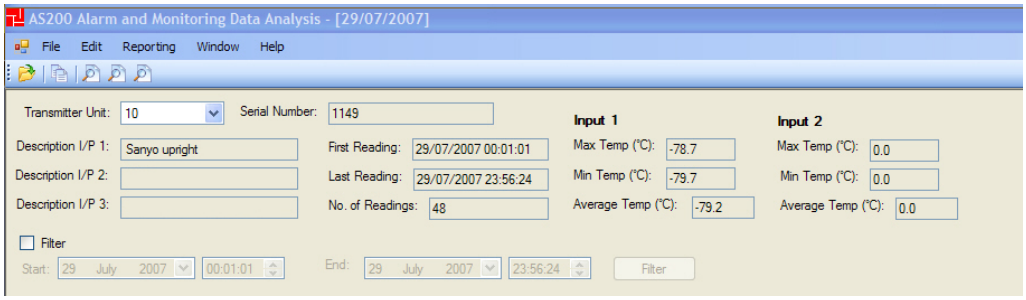
2.0 Data Analysis Software Overview
- CSV and encoded PSA files can be read.
- Numerical & Graph information easily displayed for any transmitter.
- Easy print facility for data required.
- Filtering of data is possible between specific dates and times.
- Statistical Information of the following is recorded : First Reading; Date and Time, Last Reading; Date and Time, Number of Readings, Maximum Temperature, Minimum Temperature, Average Temperature, Time in High Alarm and Time in Low Alarm.
- The Data Capture software and Data Analysis software come as a package. Each licence allows one capture software and up to 5 data analysis software programs.

2.1 Installing Data Analysis Software
Double click on the AS200 Alarm and Monitoring Data Analysis file, prompts will guide the installation. Once installed the program can be accessed from the program bar under the heading Asper.

2.2 Opening a Data File
To open a data file go to File > Open. The files are automatically saved in a date form e.g. 12_08_2007 is data collected on the 12th August 2007. Two files are made for each date a csv and psa. The psa file is encrypted and can only be viewed in the analysis software.

2.3 Using a Data File
Once the required date or dates are opened for analysis, select the transmitter unit number required to be viewed. This is done by using the mouse to move the "Transmitter Unit" column numbers up or down. Once the required transmitter unit is selected data for this unit is displayed.

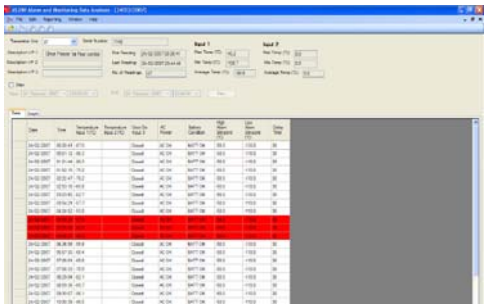
2.4 Top Screen Displayed Information
Information at the top of the screen is displayed for the selected transmitter. The information is Serial Number, Descriptions if entered into the capture screen, First Reading, Last Reading, Number of Readings, Max Temp, Min Temp and Average Temp for I/P1 and I/P2.



2.5 Column Data
The data in the columns gives easy access to the following :-
Date, Time, Temperature input 1, Temperature Input 2, Door Switch I/P3, AC Power, Battery Condition, High Alarm Set-point, Low Alarm Set-point and Delay Time.

2.6 Alarm Highlighting Column Data

If an alarm occurs it will be highlighted in red for a high alarm and blue for a low alarm in the column data.



2.7 Filtering Data

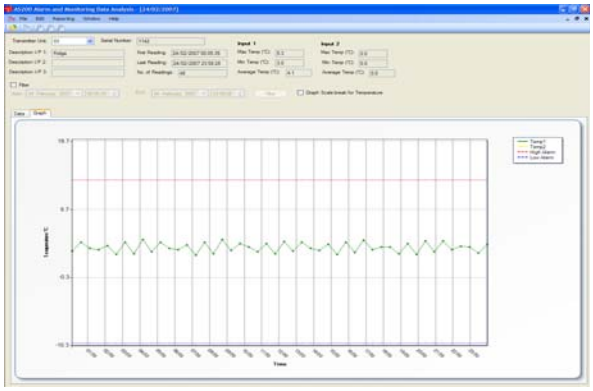
Data can be filtered by ticking the filter box and selecting a start date and time and end date and time. Once this has been done click on the filter button.

2.8 Displaying Graphs

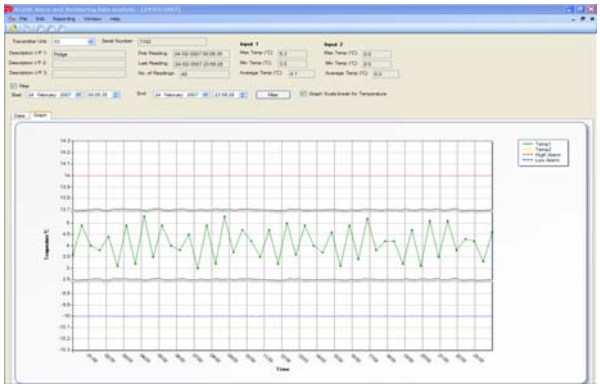
A graph of the current data can be displayed by clicking on the Graph Tab. To return to the column data, click on the Data Tab.

2.9 Graph Scale Break for Temperature

When the graph is displayed, if there is a relatively large difference between the High Alarm, Low Alarm and I/P1, I/P2 measurements, the I/P1 and I/P2 variations can be hard to distinguish. To make this clearer, the "Axis Scale Break" feature collapses the gap between the highest data line and lowest data line. This allows the variations between the data lines to become more visible.



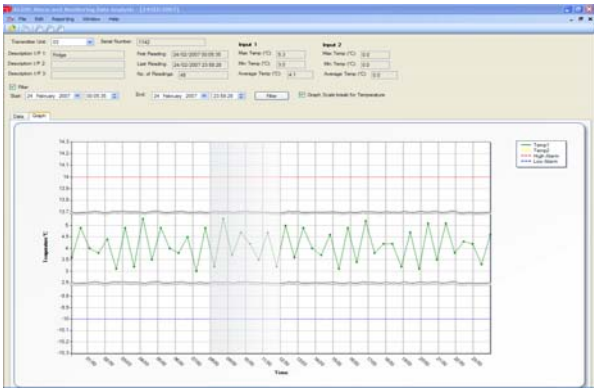
Scale Break Off



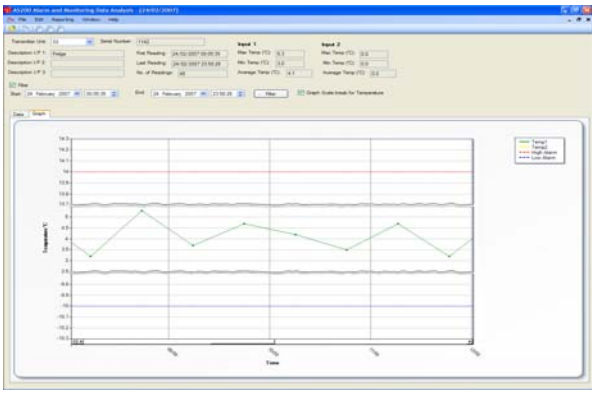
Scale Break On

2.10 X Axis Zooming

As well as the existing "Filter" functionality of the analysis application, which allows the user to filter a subset of the transmitter readings using a smaller time span, there is also the "Graph Zoom" function. This allows the user to zoom into a specific X-axis range of the graph. This is achieved by clicking on the start of the range required and then dragging the mouse to the end of the range the zoomed data is then displayed.

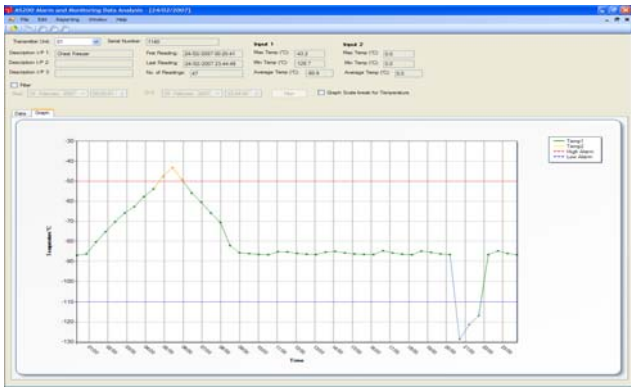


Highlighted Area to be Zoomed



Zoomed Graph

5.11 Alarm Highlighliting



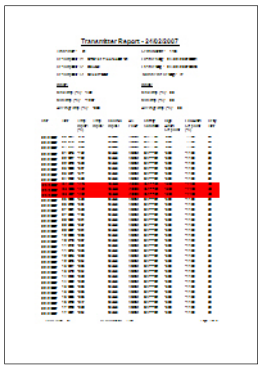
If either I/P1 (Temp1) or I/P2 (Temp2) value goes into the high alarm, the graph line is coloured red. If the input value goes below the low alarm set-point, the graph line is coloured blue.

5.12 Reporting

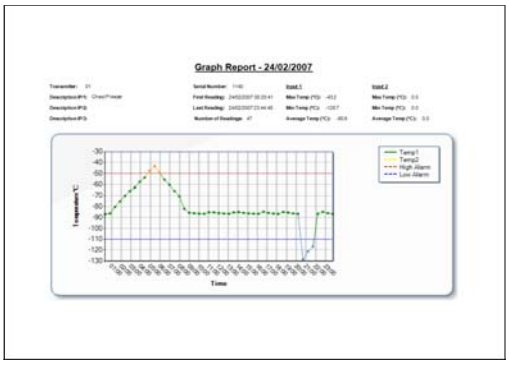
Print out of data can be done in three ways.

- "Transmitter Report" prints the data column view.
- "Graph Report" prints the graph view.
- "Summary Report" prints the "header" information for each transmitter.

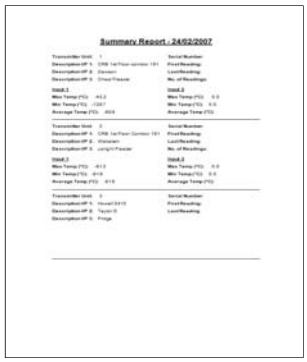
To access these functions go to Reporting > Transmitter Report etc.



Transmitter Report

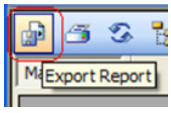


Graph Report



Summery Report

5.13 Report Output Format



The reports can be output in the following formats: -

- Adobe Acrobat (PDF)
- Microsoft Excel
- Microsoft Word

This can be done by selecting the "Exporting Report" button from the top left of the report window. Then select the report type from the "Save as type" selection in the "Export Report" dialog window.

5.14 Clipboard Export

Data in the data column and graph can be copied to the windows clipboard. In the data column the user can select the appropriate data cells using the mouse. The user then select the "Edit / Copy" menu item from the main window. For graphs the Graph's image is copied to the Windows Clipboard
Once the data is copied to the Windows Clipboard, this can then be pasted into any appropriate Windows application (***Note :- By clicking the top left cell, all the cells in the data column are selected)***
.

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