



iMind Intelligent Temperature Logger

Need to record temperatures regularly?
Got a computer?

Food Safety, Drug Storage, Heating & Air Conditioning, Transport,
Environmental monitoring

Try our **LOW COST** Starter Pack

The Intelligent Temperature Logger from iMind Ltd could be the solution you need.

The iMind Intelligent Temperature Logger is a new product in the UK market that will record the temperature at programmed intervals and keep a log of this information for up to 11 months. Periodically the data is downloaded to a computer and stored as a series of reports.

The iMind Intelligent Temperature Monitor is a small stainless steel device about the size of three 5p coins stacked one on top of the other. This small case contains an unbelievable amount of technology including its own computer and battery that can last over eight years. It is very robust and can be used in a wide range of environments. It is mounted in a plastic key fob enabling it to be hung wherever required. The monitor will record the temperature of its environment and store up to 2048 time and date stamped readings. The operating temperature range is -40 to +85 °C.

The temperatures recorded are accurate to within 0.5°C. The time interval between recordings can be from 60 seconds to 4 hours depending on the requirements.

The data is saved from the Intelligent Temperature Monitor on to a computer by plugging the monitor into a socket connected to the USB port on the computer. A simple program is run on the computer to transfer the data stored in the Intelligent Temperature Monitor onto the computer as a unique file. The data stored, over time, builds up a series of reports that show the temperature recorded along with the time and date for each Intelligent Temperature Monitor used. An example of the two reports generated can be seen over the page. The first report is a 'Full Log Report' which gives details of all temperatures logged during the measuring period. The second report is a 'Conformity Report' which can be used to show that the temperature was within a determined range at least twice a day. This report is ideal for businesses that store food in refrigerators to show that the food is being stored correctly.



It is not just food that needs to be stored at the correct temperatures. Drug companies often specify that their products should be stored within a specified temperature range. Electronic components should be stored at temperatures less than 25 °C.

The Intelligent Temperature Monitors can even be attached to products to ensure that they are handled correctly during transportation. For example when a temperature sensitive product is dispatched an Intelligent Temperature Monitor can be included in the packaging. Before the product is used the user can check the temperature log to ensure that the product has not been exposed to temperature extremes. They can then determine if the product can be used safely. That way the temperature of any product can be monitored from production right through to the end user.

For a heating and air conditioning installation these sensors could be used to build a temperature profile within a room or building to discover how effective the heating and air conditioning is. Where are the cold spots and hot spots, are the users really too cold/hot?

The above examples are only a few situations where this product would be ideal. There are many more applications where this type of product could be used – is yours one of them? Contact our distributor for more details. The Starter pack including one Intelligent Temperature Monitor is priced at just £79.95 including VAT. Delivery within the UK is free. Additional Intelligent Temperature Monitors can be purchased singly or in packs of five.

Buy the **STARTER PACK NOW** visit <http://www.imind.co.uk>

The starter pack contains the following items –

Software CD

The CD included in the package includes all the software, drivers and User Manual.

Intelligent Temperature Monitor (itm)

(Pictured on front page). The Intelligent Temperature Monitor is the device that records the temperature.

Intelligent Temperature Monitor Reader

The itm Reader allows the iMind itm to be connected to a computer.



USB Interface

The USB interface connects the Intelligent Temperature Monitor Reader to the USB port on the computer. A RS232 serial connector is available as an alternative.



itm plugged into the itm Reader



System requirements

To operate this software a basic PC computer is required. The computer must have a CD Drive, a USB port (or RS232 serial port), and be running Windows 98 SE, Windows Me, Windows NT4.0, Windows 2000 or Windows XP.

Example Reports

Main Chiller

Serial Number of Intelligent Temperature Monitor : 7C000000102E9C21
 High Threshold: 5.0
 Low Threshold: 0.0
 Current Real-Time Clock from Intelligent Temperature Monitor : 07/12/2004 09:50:27
 Current PC Time: 07/12/2004 09:50:21

Temperature Alarms

Format: [(HIGH/LOW), Time/Date Range]
 HIGH , 06/29/2004 12:02 to 06/29/2004 14:02

Temperature Histogram

Temp Range Readings
 -40.0 to -38.5, 0

... cont

-10.0 to -8.5,	0
-8.0 to -6.5,	0
-6.0 to -4.5,	0
-4.0 to -2.5,	0
-2.0 to -0.5,	0
0.0 to 1.5,	61
2.0 to 3.5,	70
4.0 to 5.5,	4
6.0 to 7.5,	21
8.0 to 9.5,	7
10.0 to 11.5,	2
12.0 to 13.5,	0
14.0 to 15.5,	1
16.0 to 17.5,	0
18.0 to 19.5,	0

... cont

84.0 to 85.5,	0
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Log Data

Format: [Time/Date , Temperature] (Celsius)

06/27/2004 02:02 , 2.0
 06/27/2004 04:02 , 2.5
 06/27/2004 06:02 , 1.5
 06/27/2004 08:02 , 0.5
 06/27/2004 10:02 , 0.5

... cont

07/10/2004 14:02 , 4.0
 07/10/2004 16:02 , 2.5
 07/10/2004 18:02 , 2.5
 07/10/2004 20:02 , 4.0

Conformity Report for Main Chiller

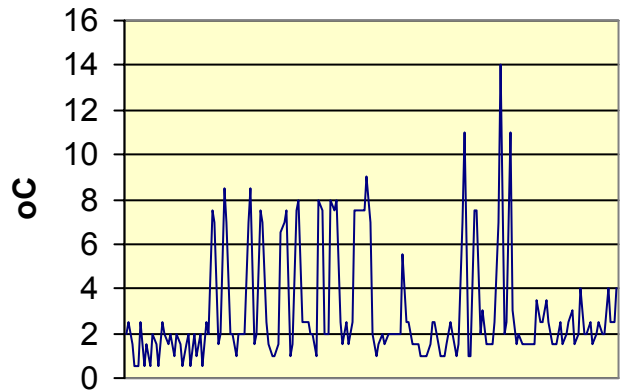
Date | Time ; Temperature (Celsius)
 =====

06/27/2004 08:02 ; 0.5
 06/27/2004 14:02 ; 0.5
 06/28/2004 08:02 ; 2.0
 06/28/2004 14:02 ; 1.5

... cont

06/30/2004 08:02 ; 2.0
 06/30/2004 16:02 ; 1.5
 07/01/2004 08:02 ; 1.5
 07/01/2004 16:02 ; 1.0

Chart Recorder Mode



The data can be exported to a spreadsheet and shown graphically. The picture above shows a typical graph displaying a potential problem.

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