Data Logger Perceptec DL12 *One Way* Manual

Disposable

Content:

1 - Introduction

The DL-12 *One Way* Data Logger is a portable and disposable data recorder capable of registering and monitoring temperature data of the environment in witch it is installed, then transferring those data to a computer through the DL12 *One Way* System, a software developed by Perceptec specially for this purpose. The DL-12 *One Way* Data Logger is specially suitable to transport of perishable products, transport of thermolabile drugs, ice chest containing products, or any situation where the temperature record is necessary.

The information of this manual only applies to the DL-12 *One Way* model and the DL-12 *One Way* System.

2 – Features

The image below shows the main features of the Data Logger DL-12 *One Way*:

The items highlighted in the figure are explained below:

01 – Green Led: When off indicates 3 Data Logger status:

-*Locked*: Default , Data Logger is not programed and the Start button can't be activated.

-*Waiting activation*: Data Logger programed, waiting activation by Start button.

-*Disabled*: after data reading and data recording process over.

When blinking once every 5 seconds, indicates that the Data Logger is **Enabled** and registering data.

02 – Loop for hanging: To easy remove the device.

03 – Start button: Pressed for 5 seconds and if the Data Logger was programed, enable the data registration.

04 – USB Connector: Used to connect the Data Logger to a computer.

3 – Software install

In order to activate the Data Logger *One Way*, follow this steps:

    a) Install the **DL12** *One Way* **System** in your PC

The **DL12** One Way **System** can be installed in Windows® The software is distributed as an executable file suitable for installation through the Windows Installer software. The installation file can be accessed at http://www.perceptec.com.br/download/oneway .

These are the minimum requirements:

- **OS:** Windows XP Home (SP2+), Windows XP Professional (SP2+), Windows Vista or Windows 7.
- **HD: 1** GB to install.
- **RAM:** 512 MB.
- **Video:** minimum resolution 800x600 pixels, 256 color depth
- **USB Port:** 1 USB port to connect the DL12 *One Way* to the computer.
- **Mouse:** Or other pointing device in order to operate the System

First, download the file clicking in the button showed below:

After click, the following screen will pop up:
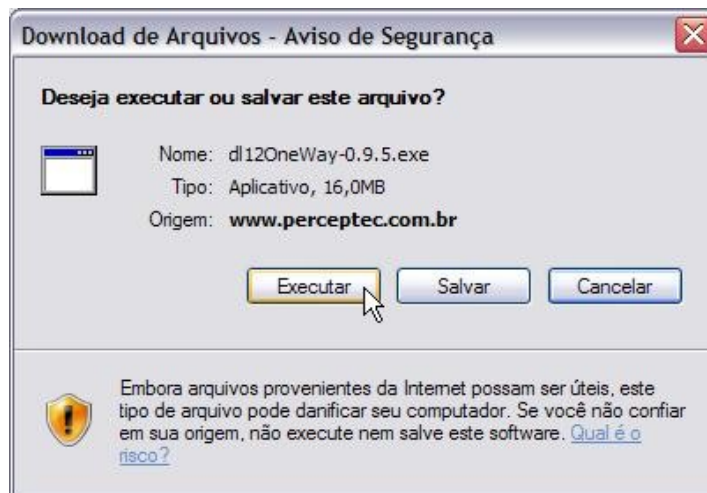
Click **Execute**. Another screen may be presented:

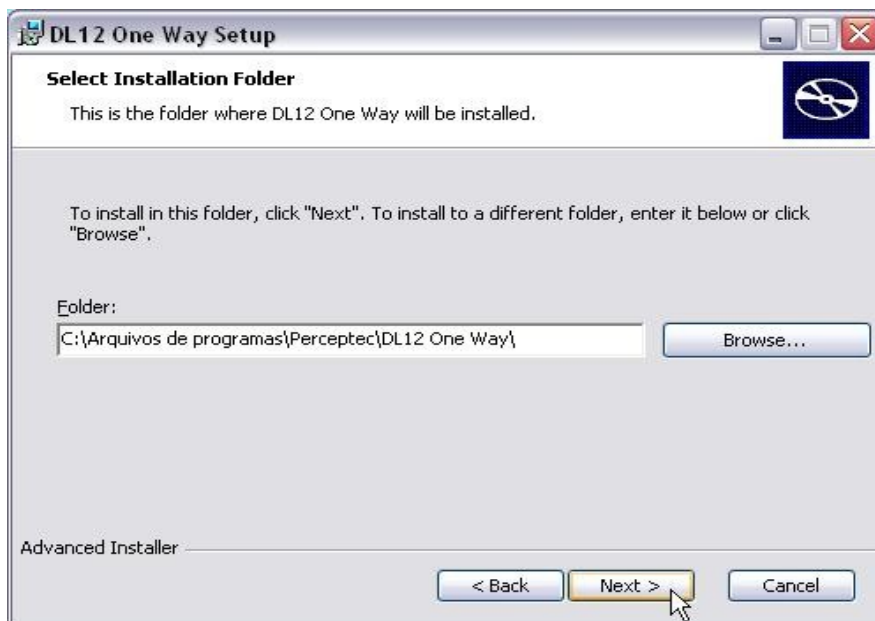Click **Execute** to continue downloading:

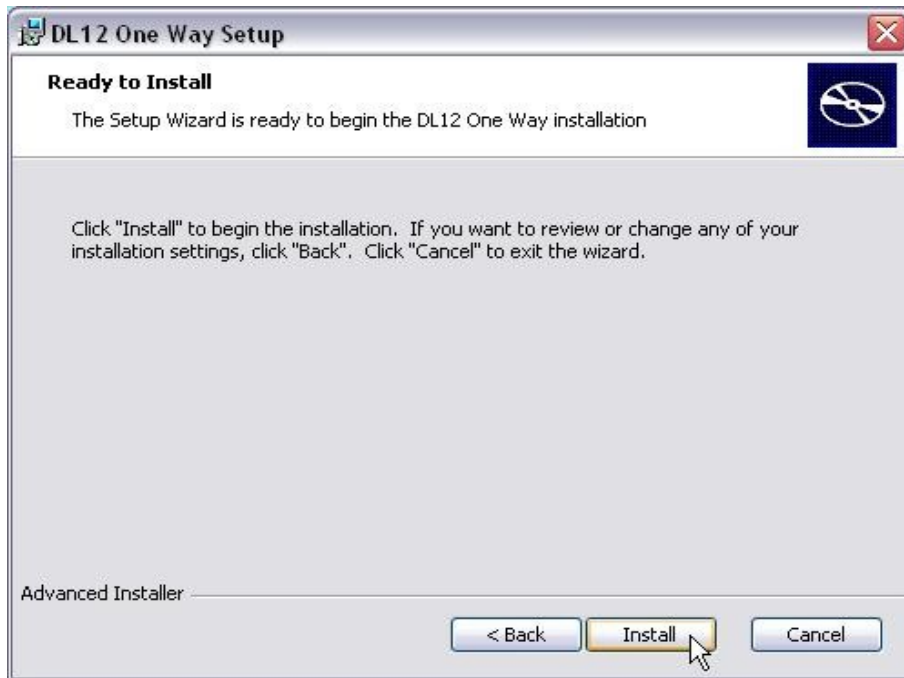You can choose the installation language as shown below:

This action will open the Windows Installer, and the following screen will appear:
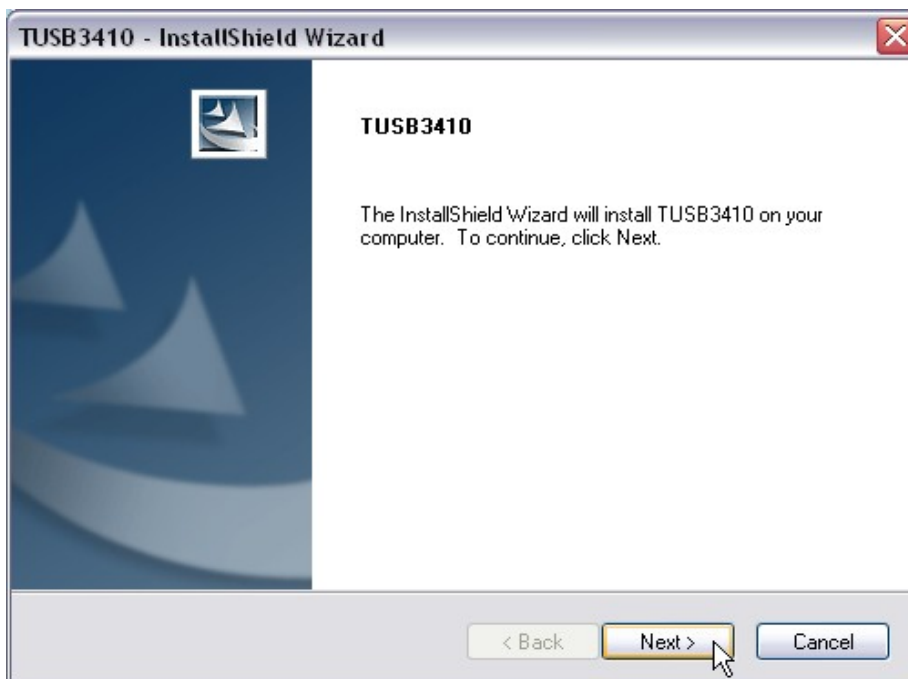

Click **Next**. The following screen allows to select the destination folder:

It is recommended to maintain the suggested location. Click **Next**, and in the next screen **Install**:
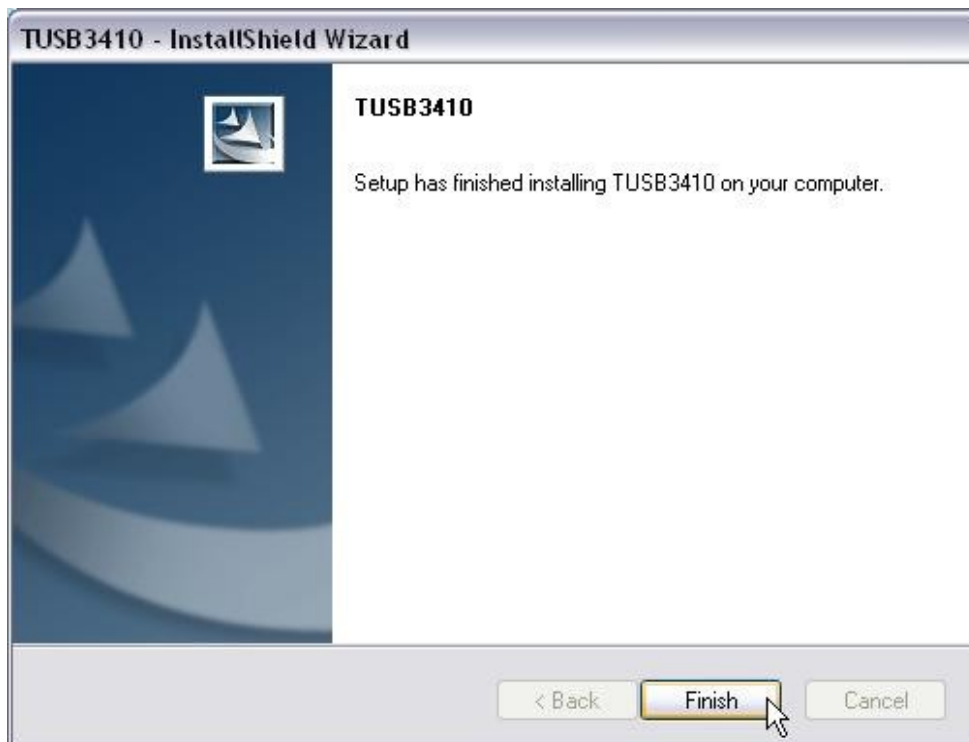

The software will install the **TUSB3410** driver:

Click **Next**. Another screen will pop up:

Click on **I accept the terms of license agreement** and then **Next**. At the end of the installation process, the following screen will appear:

Click **Finish.** At the end of the installation process, the following screen will appear:
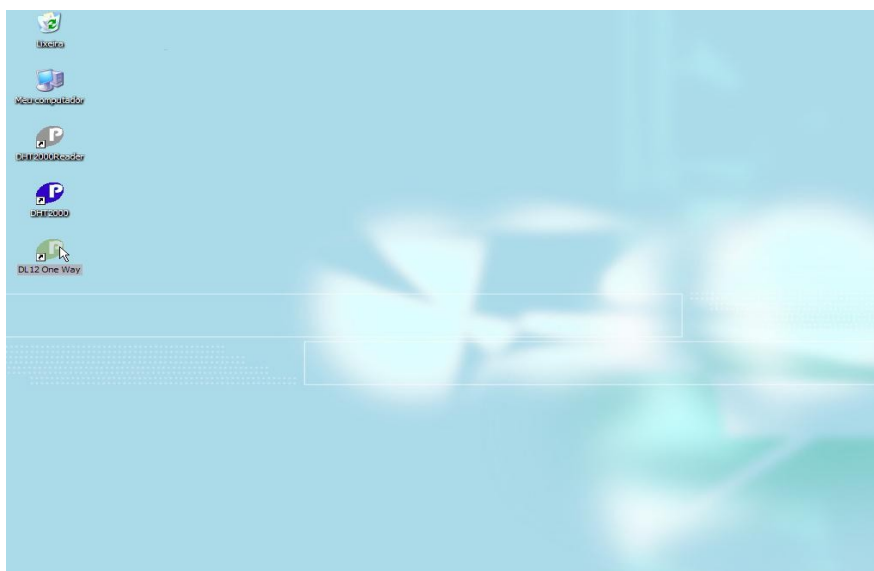
Click **Finish**. The installation process creates a **DL12** *One Way* desktop shortcut.

    b) Run software.

To run the software just click at the **DL12** *One Way* desktop icon created:

    c) Connect the Data Logger to the computer..

    d) Set the Data Logger as you wish.

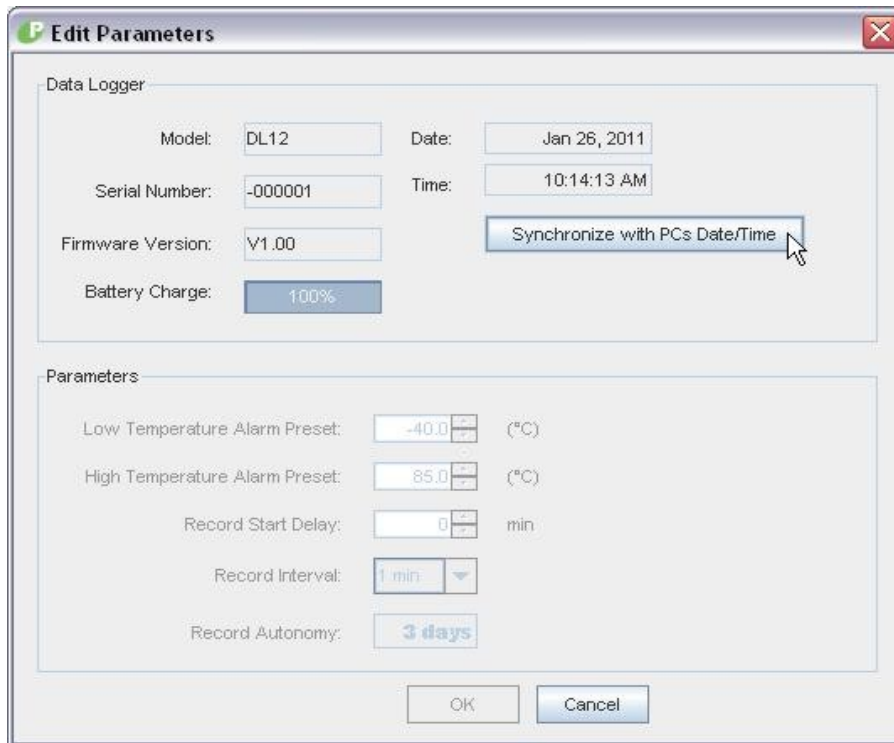![Perceptec - Soluções e Tecnologia]

4 - Operation

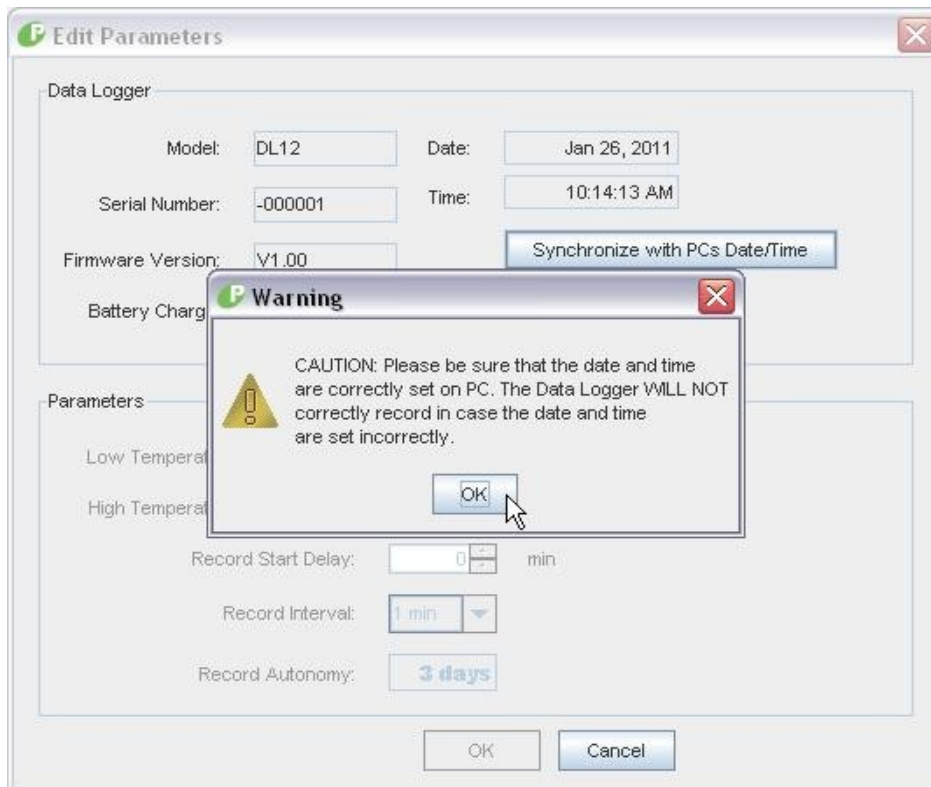When the software is open, the following screen will appear:

You can choose the software language by click the flags, as shown below:
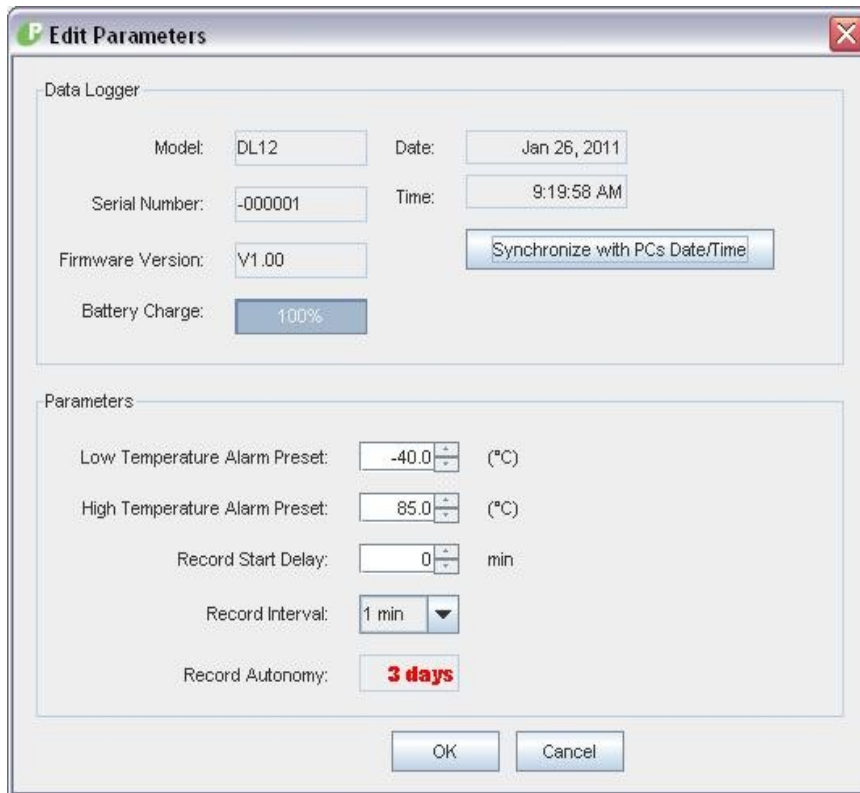
After the software locate the Data Logger, the following screen will appear:

Click **Synchronize with PCs Date/Time** to adjust date and time of the device according to the computer,a warning screen will pop up:

Click OK. After synchronize, the field **Parameters** will be able to be programed:

The parameters are:

Preset Low Temperature Alarm : minimum temperature desired.

Preset High Temperature Alarm   maximum temperature desired.

NOTE:The operational range of the device is from-40°C to +85°C, with 0.1°C resolution.

Record Start Delay: If wish, the record start can be delayed up to 60 minutes after press the Start Button.

Record Interval: In this area you can choose the record interval of the device. As shown in the figure below, the record interval can be 1, 5, 10, 15 or 30 minutes.
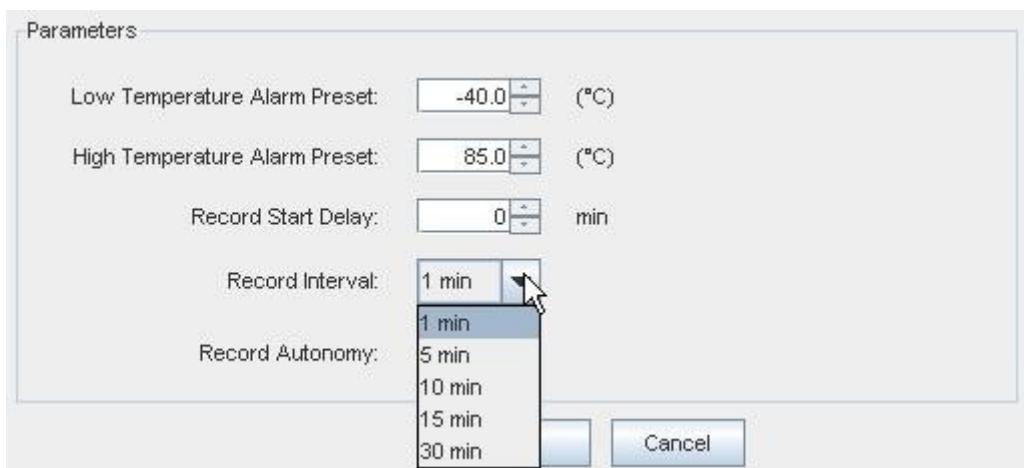
The autonomy varies according to the record interval, as shown below:

Record Interval:	1 min
Record Autonomy:	**3 days**

Record Interval:	5 min
Record Autonomy:	**15 days**

Record Interval:	10 min
Record Autonomy:	**30 days**

Record Interval:	15 min
Record Autonomy:	**45 days**

Record Interval:	30 min
Record Autonomy:	**90 days**

After choosing the interval record, click OK to finish programming.

After finish programming, the following screen will be presented:

Click Exit to close the software.

In order to enable the device, press the **Start** button for 5 seconds and the green LED will start

blink,indicating that the Data Logger is enabled. If the record start delay was set, the device will start record after the determined time, otherwise the Data Logger will start recording data immediately.

Attention: Once enabled, it is not possible to program the Data Logger *One Way* again, it is only possible to read the data recorded. Before enabling, the programming process can be done as often as needed . This process acts as a security key so that data are not unduly altered.

To read the data recorded, first open the software DL12 *One Way* System and connect the Data Logger to the PC. The following screen will be presented:

By default, **Stop Data Logger recording** is enabled, but it can be disabled, and than the Data Logger will not stop recording after data reading. Click **Close** and the report will pop up:
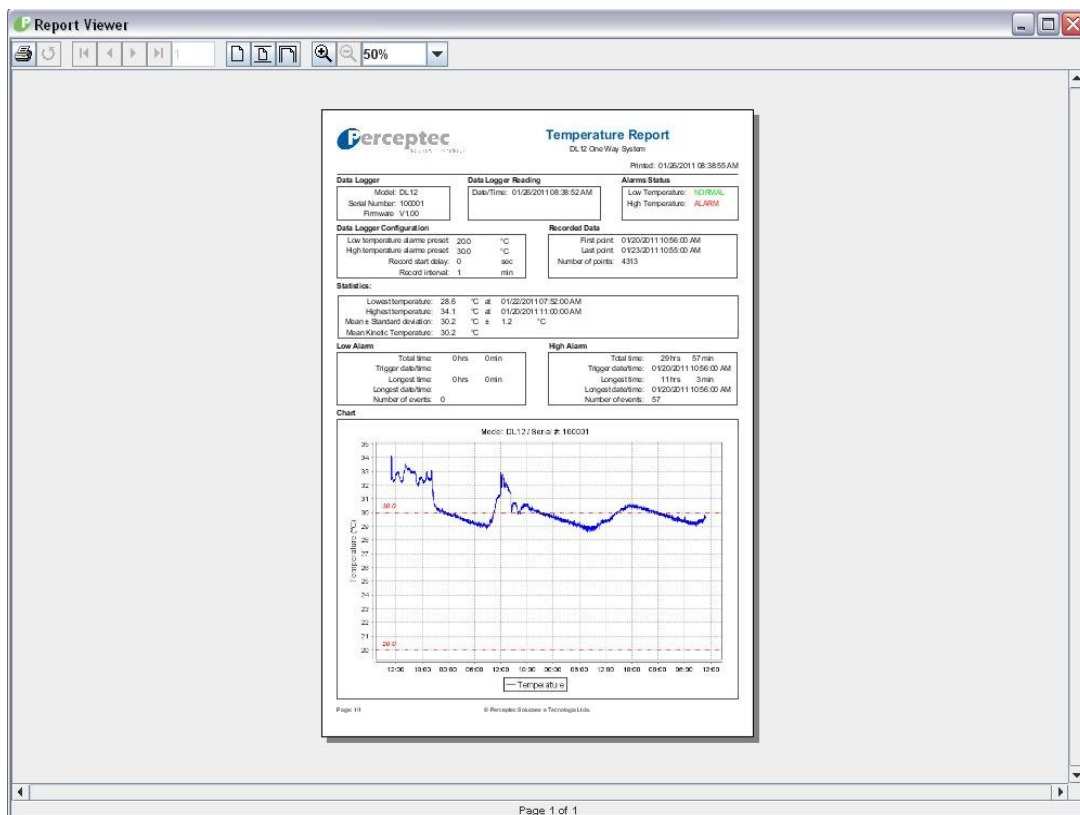

The report contain several information about the device, recorded data, statistic and low and high temperature alarm. Also contain a chart about the recorded temperatures and the temperature limits
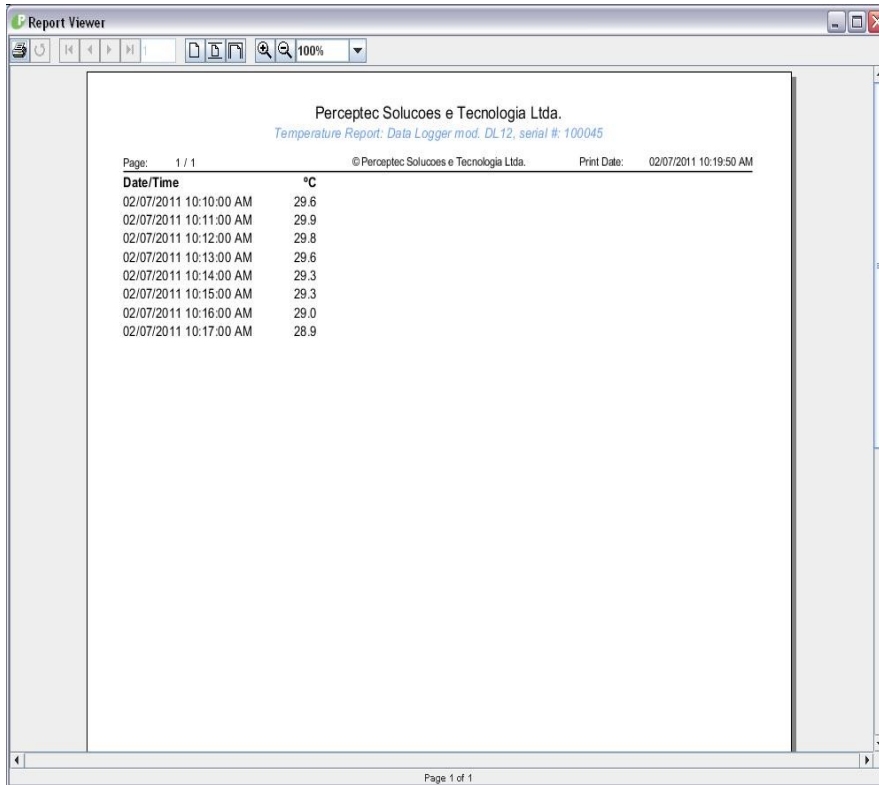
set by the user.

It is possible to choose between the default (as shown above) and the data table. To perform this operation, just click in the button shown in the figure below before read the records:

It is possible to select the two reports, or only one, as shown below:
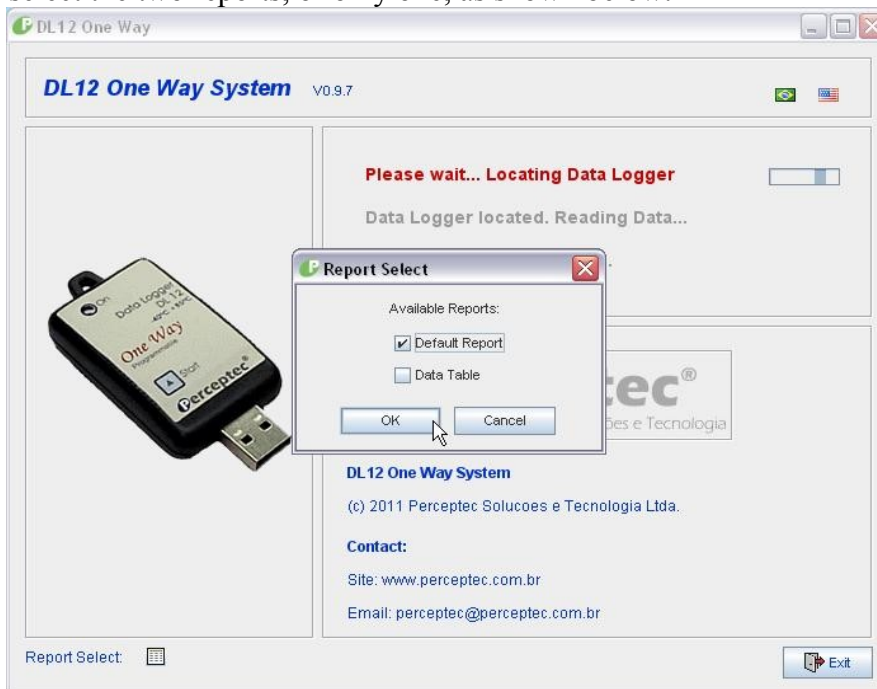
The Data table is presented in this form:

Click 🖨 to print the report.

After data reading and report presented, the main screen will be shown as below:

In order to read another Data Logger, just disconnect the current device and connect the next equipment.

5 – Specifications

The box below shows the DL12 *One Way* technical specifications:

Technical Specifications	DL-12
Temperature Sensor	Yes
Humidity Sensor	No
Sensor Location	Internal
Measurement range °C	-40 to +85°C
Operation range °C	-40 to +85°C
Operation range %UR	
Accuracy °C	0,8°C
Accuracy %UR	
Resolution °C	0,1°C
Resolution %UR	
Stored records	4320
Programmed registration	Yes
Record interval	1,5,10,15 e 30 min
Start Button	Yes
Battery type	Lithium
Average battery duration	4 months
External power	No
PC connection	USB
Made in	Brazil
Software platform	Windows®
Warranty	3 months
Alarm Light (leds)	No
LCD display	No
Dimension (mm)	75 X 35 X 15
Weight	35g

6 - Warranty Certificate

Perceptec guarantees the DL12 *One Way* Data Loggers family against manufacturing defects for a 03 (three) months from the date of receipt.

In case of any problem with the product during the warranty period, the same should be sent to Perceptec (São Paulo / SP), who will replace or spare parts needed

This warranty does not cover damage caused by misuse or conditions outside the recommended specifications, any kind of mechanical or electrical damage, the resulting impact of a fall, fire, lightning, theft, battery replacement, and modifications of any nature made in the equipment by unauthorized personnel. This warranty does not cover any transport costs.

The Perceptec disclaims all responsability for the results of the use of the device, or inability to use, not taking any charge or obligation, including but not limited to lost profits, business interruption, or loss of information, yet Perceptec that has been warned about such possibilities.

DEVICE INFORMATION:

Model: _____

Serial Number: _____

Sale Date:_____

7 - Certificate of Compliance

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CERTIFICATE OF COMPLIANCE – ONE WAY DATA LOGGERS

Prepared For:

Model Type: DL-12 One Way

Serial Number(s):

As part of the manufacturing and assembly process, the above referenced Data loggers units were quality control tested for temperature accuracy in a Temperature chamber against a standard Data Logger model DHT 2240, serial number 02588, with a Calibration Test #LV 23236/10 emmited by a testing laboratory certified by INMETRO for compliance with our stated accuracy constraint of ±0.8°C or better to -20°C, 0°C and 30°C.

By this procedure and the authorization of the responsible technician for the testing of these units, we certify that the above referenced units are accurate to within our stated accuracy constraint when operated in their published temperature range of -40°C to +85°C.

All standard temperature are certified on an annual basis by an independent testing laboratory certified by INMETRO. Certifications are held on file at Perceptec and copies can be provided upon request.

Certified Authority:

_____   ___/___/_____

Alexandre Faragó Junior   Date
Responsible technician

Perceptec Soluções Tecnologia Ltda.   Fone/Fax: (11)-5042-0079
Av. dos Caminds 504 – Moema   perceptec@perceptec.com.br
04086-011 – São Paulo - SP   1/1   http://www.perceptec.com.br

Perceptec can send this certificate of compliance if requested.

8-Contact

Perceptec will be happy to answer any questions about your DL12 *One Way* Data Loggers,as well the DL12 *One Way* System.

Contact:

Address:

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