DryLogger
mod.9265.300

INSTRUCTION MANUAL

CE

EC CONFORMITY

Units 9265.300 conform to EC directives 89/336/EEC , the following harmonized standards are in use : EN 60204-1, EN 50081-1 e EN 50082-1.

WARRANTY

This unit is guaranteed against all defects due to faulty materials and workmanship, within 12 months from the date of purchase.

A use not conforming to what specified might be dangerous to the safety of the operator and may damage the unit.

In such circumstances the manufacturer is relieved of any liability and the warranty itself will decay.

REPAIR

Repairs have not been attempted by anyone other than authorized repair distributors.

Do not try to repair the unit by yourself.

Protecting the environment

Separate collection.This product must not be disposed of with normal household waste.

Should you find one day that your product needs replacement,or if it is of no further use to you,do not dispose of it with household waste. Make this product available for separate collection.

Separate collection of used products and packaging allows materials to be recycled and used again.

Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household,at municipal waste sites or by the retailer when you purchase a new product.

TECHNICAL FEATURES

Precision Temperature/Humidity meter. It is also a datalogger used to collect environmental data of humidity and temperature and to transfer them to a Windows PC (2000/XP/Vista/7)

Humidity range: . . . . . 1 to 95% RH
Resolution: 0.1%RH
Accuracy: . . . . . ±2%RH (@ 25°C, 10%RH~90%RH)
. . . . . ±3%RH (@ 25°C, 1%RH~10%, 90%RH~95%)

Temperature range: . . . . . -20°C to +60°C
Resolution: . . . . . 0.1°C
Accuracy: . . . . . ±1°C

Sensor: . . . . . internal

Memory: 64Kbyte
# of reading: . . . . . 21600 couples of RH and T
Sample rate: . . . . . can be set at 1, 5, 10, 15, 30 sec
. . . . . and 1, 5, 10, 15, 30 min
Interfaccia: . . . . . RS232 e USB

LCD Display : . . . . . 48 x 11 mm
Dimensions: . . . . . 184 x 67 x 44mm
Weight: 320g

Battery: . . . . . 4 x 1.5V IEC type AA
Battery Life: . . . . . it depends on battery capacity
. . . . . With capacity=2600mAh and the instrument always ON, the life is 8 month
Low Battery indication when the battery level falls below 4V

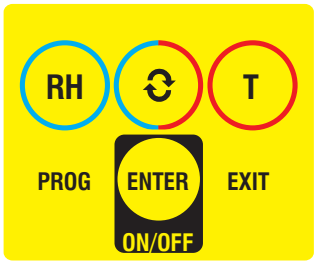
CONTENTS

1) DryLogger

2) USB to Serial RS232 adapter cable

3) Installation disk containing:
- PL2303 drivers for the adapter cable
- LogManager software for downloading, displaying, analyzing and reporting your collected humidity and temperature data
- Instruction Manual

KEYBOARD



RH	To display humidity
⟲	To alternately display the humidity and the temperature
T	To display the temperature To change the temperature unit (°C or °F)
PROG	To enter the programming mode
ENTER	To confirm the action in the programming mode
ON/OFF	To light-up and shut-off the instrument
EXIT	To exit from the programming mode

BATTERY REPLACEMENT

When "**Low Batt**" is displayed you must replace the batteries.
Open the battery cover located in the backside of the instrument, removing the 2 fixing screws. Replace the batteries respecting the right polarity (see indication). Close the battery cover.

NOTE1: the instrument can work some days when "**Low Batt**" is displayed, even if datalogger is sampling.

NOTE2: replace batteries within 1 minute in order to keep data memory and datalogging activity

. . . . . OPERATIVE INSTRUCTIONS

ON / OFF

In order to light-up DryLogger press **ENTER**. Display will show date, time, sample rate and sample data collected. After these informations the instrument will show humidity and/or temperature.

To shut-off DryLogger keep pressed the **ENTER** key for 2 seconds

ATTENTION: Shutting-off DryLogger will stop any datalogging activity. The instrument stop the sampling activity and save the data collected..

DISPLAY MODE

To set the display to show the humidity press 

To set the display to show alternately the humidity and the temperature press 

To set the display to show the temperature press 

To change the temperature unit (°C or °F) keep pressed the 

key for 2 seconds

DATALOGGER

GETTING STATUS

1) Repetitively press **PROG** until the display will show "**DL Info**"
2) Press the **ENTER** key to know if datalogger is sampling.
   "DL Run=Y" sampling is on
   "DL Run=N" sampling is off
3) Press the **ENTER** key to know the sample rate
   For example "SR 1sec" means that the sample rate is 1 second
4) Press the **ENTER** key to know the sample data collected
   For example "S 21600" means that the memory is full and sampling activity is stopped.
5) Press the **ENTER** key to exit from the programming mode.

During point 2,3,4,5 it's possible to press the **EXIT** key to exit immediately from the programming mode

ERASING MEMORY

If memory contains collected data (see "Getting Status") and you want erase them follow the instructions below:

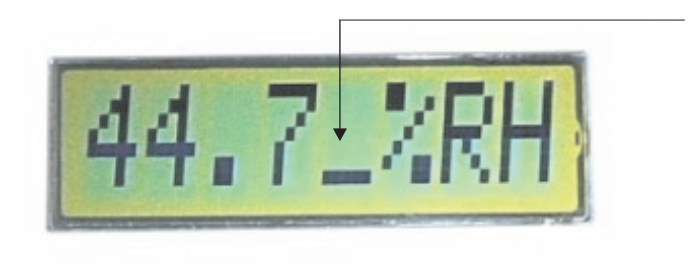
1) Repetitively press **PROG** until the display will show "**DL Clear**"
2) Keep pressed the **ENTER** key for 2 seconds. The DryLogger will exit from the programming mode.

START SAMPLING

To start sampling data be sure that the DryLogger memory is clear (see "Getting status").

If the memory is not empty erase it (see "Erasing memory")

1) Repetitively press **PROG** until the display will show "**DL Start**"
2) Keep pressed the **ENTER** key for 2 seconds. The DryLogger will exit from the programming mode.



A switching bar in the 4th position on the display indicates that the datalogger is sampling.

STOP SAMPLING

If there is a sampling activity and you want to stop:

1) Repetitively press **PROG** until the display will show "**DL Stop**"
2) Keep pressed the **ENTER** key for 2 seconds. The Drylogger will exit from the programming mode.

ATTENTION: it's not possible to collect more than 1 session of data. Therefore if you want to sample again you must first erase the memory.

ENABLING PORT

If there is no sampling activity it's possible to interface the DryLogger and a PC.

1) Repetitively press PROG until the display will show "**Comm.On**"
2) Keep pressed the **ENTER** key for 2 seconds.
3) The display will show
   "PC <-> DL"
4) The DryLogger has now his port enabled. If there is no communication activity within 10 minutes the instrument will disable his port to reduce consumption. In this case repeat from point 1.

DISABLING PORT

1) Repetitively press **PROG** until the display will show "**Comm.Off**"
2) Keep pressed the **ENTER** key for 2 seconds. The DryLogger will exit from the programming mode.

LOGMANAGER: Operative Instructions

SOFTWARE INSTALLATION

If you want to connect the DryLogger to a USB port of your PC you must first install the PL2303 drivers like decribed in the file "User's manual.pdf" located in the directory PL2303 of the installation disk.

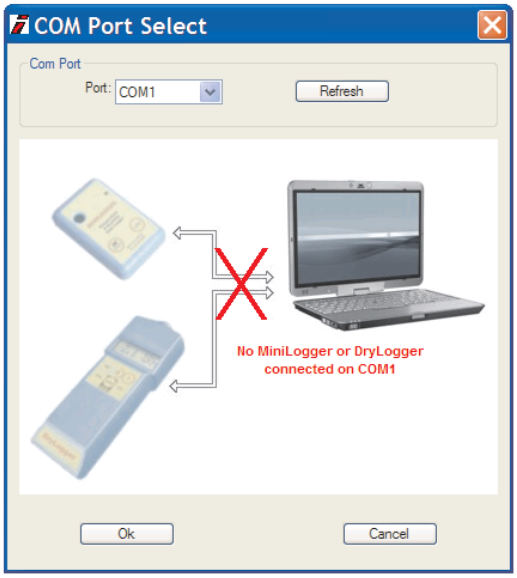
Otherwise if you want to connect the DryLogger to a RS232 port of your PC it's sufficient to use a common serial cable.

The LogManager software don't need any installation: simply copy the file "LogManager.exe" in a directory of your PC and run it to be operative.

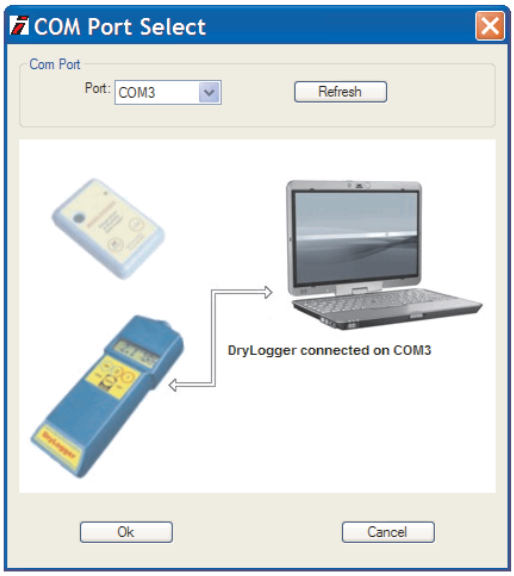
SETTING THE DRYLOGGER CONNECTION

1) Connect the DryLogger to the PC (via RS232 or USB port)
2) Enable the DryLogger port (see "Enabling port")
3) Run LogManager, pull down the "Settings" menu and click on "COM port select". Select the right port from the availables (COM1, COM2, COM3 etc..).

The status of the connection between the DryLogger and the PC is clearly indicated:



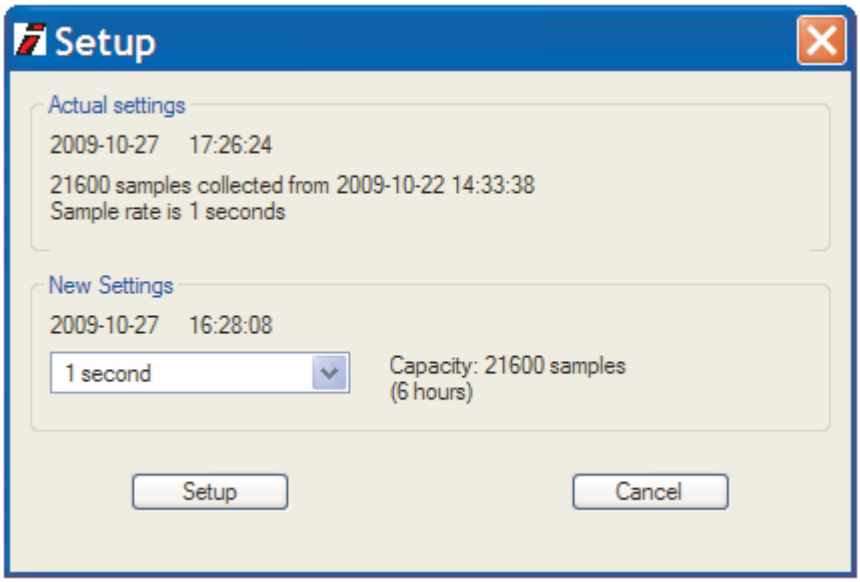
DryLogger is connected



DryLogger is not connected

SETTINGS THE DRYLOGGER PARAMETERS

Pull down the "Datalogger" menu and click on "Setup" to set the time, the date and the sample rate of the DryLogger.



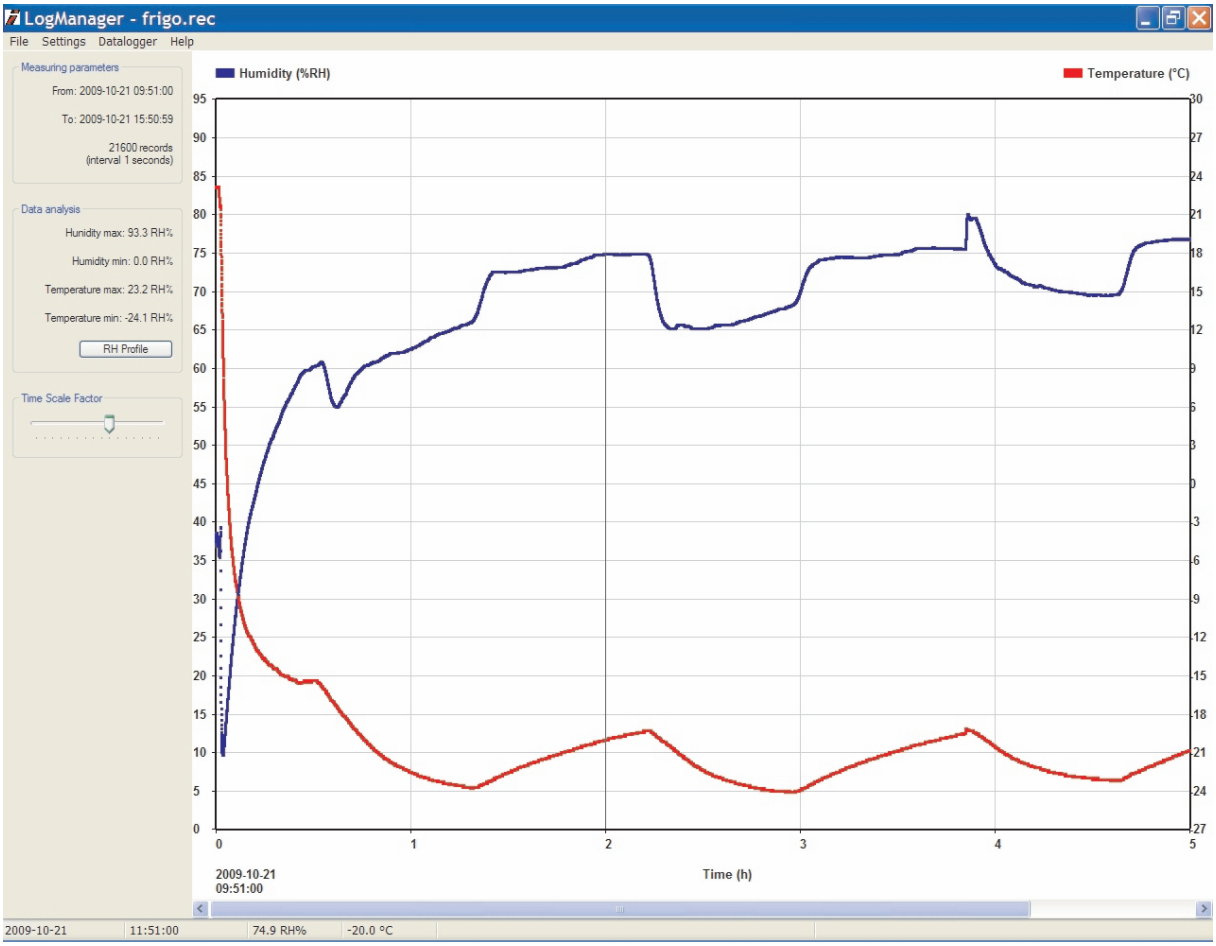
The sample duration depends on the sample rate.

Sample rate	Sample duration
1 sec	6 hours
5 sec	1 day and 6 hours
10 sec	2 days and 12 hours
15 sec	3 days e 18 hours
30 sec	7 days e 12 hours
1 min	15 days
5 mini	75 days
10 min	150 days
15 min	225 days
30 min	450 days

ATTENTION: when you set the new value of date, time and sample rate any collected data logged into the DryLogger memory will be erased.

DATA DOWNLOAD

Pull down the "Datalogger" menu and click on "Read" for downloading and displaying the collected humidity and temperature data..



Immediately after the downloading a message prompt will ask you if you want to save the data. The format used to save the data is "*rec" that is a simply text file like this:

TEMP,HUMI,TIME
Interval=10 Seconds
60.7,19.4,09:31:01 AM 05/20/2008
60.4,19.4,09:31:11 AM 05/20/2008
60.3,19.5,09:31:21 AM 05/20/2008
60.2,19.4,09:31:31 AM 05/20/2008
....etc....

This file can be easily edited into a text editor or imported into a spreadsheet.

PRINTING

To print the showed graph pull down the "File" menu and click on "Print".

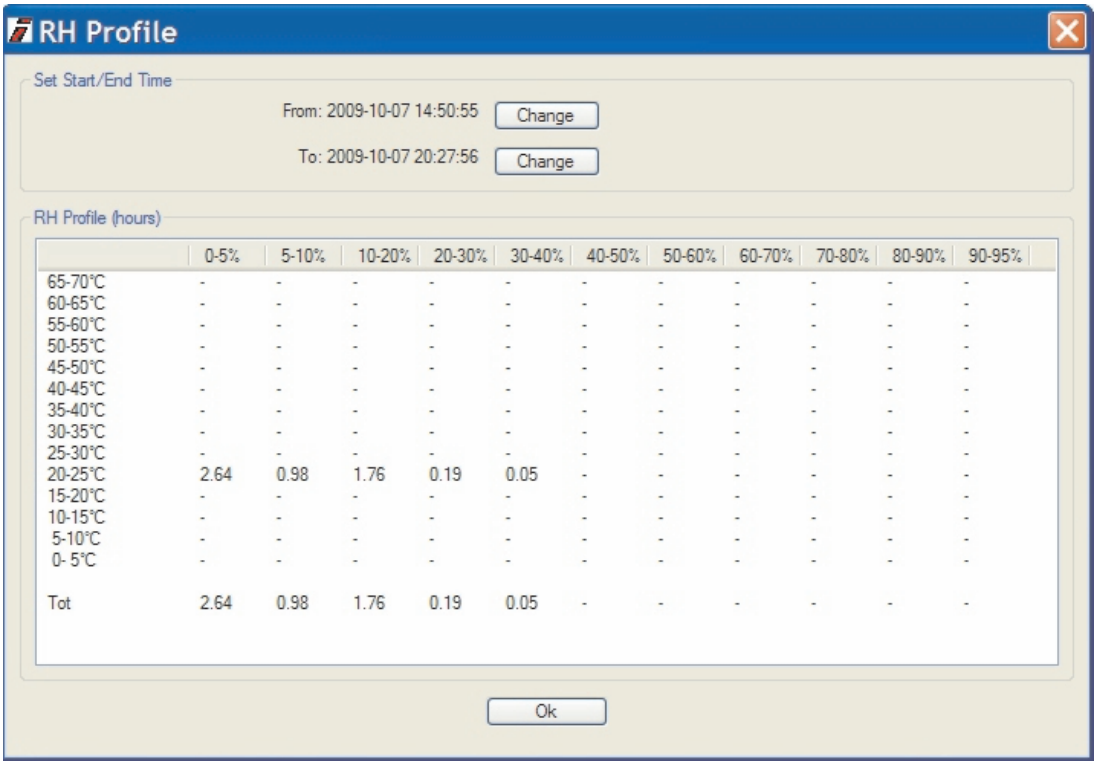
OPENING OF A FILE

Pull down the menu "File", click on "Open" and insert the path of the "*.rec" file to open.

RH PROFILE

To know the time amount when the DryLogger was in a determinate zone of RH/T is useful to see the RH profile.

Click on the "RH Profile" button located in the left bar.



	0-5%	5-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-95%
65-70°C	-	-	-	-	-	-	-	-	-	-	-
60-65°C	-	-	-	-	-	-	-	-	-	-	-
55-60°C	-	-	-	-	-	-	-	-	-	-	-
50-55°C	-	-	-	-	-	-	-	-	-	-	-
45-50°C	-	-	-	-	-	-	-	-	-	-	-
40-45°C	-	-	-	-	-	-	-	-	-	-	-
35-40°C	-	-	-	-	-	-	-	-	-	-	-
30-35°C	-	-	-	-	-	-	-	-	-	-	-
25-30°C	-	-	-	-	-	-	-	-	-	-	-
20-25°C	2.64	0.98	1.76	0.19	0.05	-	-	-	-	-	-
15-20°C	-	-	-	-	-	-	-	-	-	-	-
10-15°C	-	-	-	-	-	-	-	-	-	-	-
5-10°C	-	-	-	-	-	-	-	-	-	-	-
0- 5°C	-	-	-	-	-	-	-	-	-	-	-
Tot	2.64	0.98	1.76	0.19	0.05	-	-	-	-	-	-

OPTIONS

Pull down the menu "Settings" and click on "Preferences" to select the desired temperature unit (°C or °F) and to select the graps's colors.