IMR DATA
DATA AQUISITION PROGRAM FOR
IMR COMBUSTION GAS ANALYZERS

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Environmental Equipment, Inc.

IMR Data Acquisition v4.0

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Purpose

This data acquisition software is designed to accept and store sensor readings from IMR 1400/2800 portable gas analyzers. The stored information can be used for statistical purposes and monitoring gas emissions over a certain period of time.

System Requirements

Hardware Requirements:

- Pentium 90 MHz Processor or better.
- 32 MB of RAM or higher.

Software Requirements:

- .Net Framework v2.0 or later.
- Windows 98 or later.
- Internet Explorer 5.01 or later.
- Microsoft Windows Installer 2.0 or later.
- Crystal Reports redistributable package.

Additional Hardware Required:

- A PC with Serial Port (RS232).
- Serial Cable (RS232 NULL cable).

Features

- Microsoft Access database for storage and data management.
- Ability to view incoming data from IMR gas analyzers.
- Ability to view the received data at a later time.
- View and print reports of the saved data.
- Export reports.
- Export data to MS Excel.
- View and print pie charts or bar graphs of the saved data.
- Sort the received information.

Installation

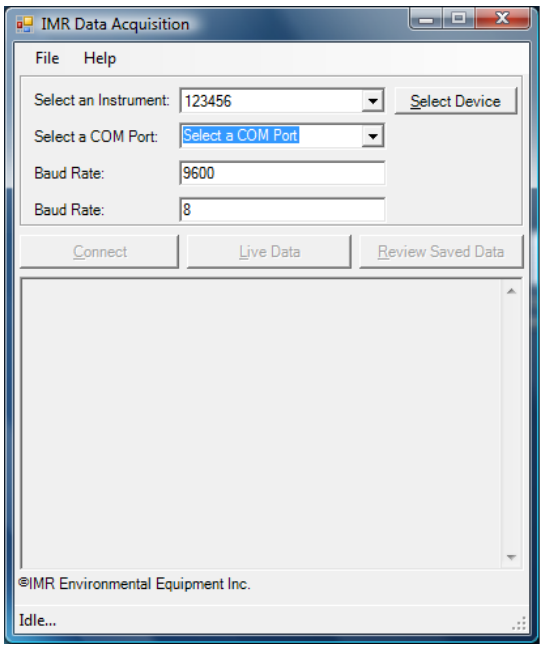
On the provided CD you will find the following files as well as this help file.

- Setup.exe
- Dotnetfx.exe
- WindowsInstaller-KB884016-v2-x86.exe
- CRRedist2008_x86.msi
- CRRedist2008_x64.msi

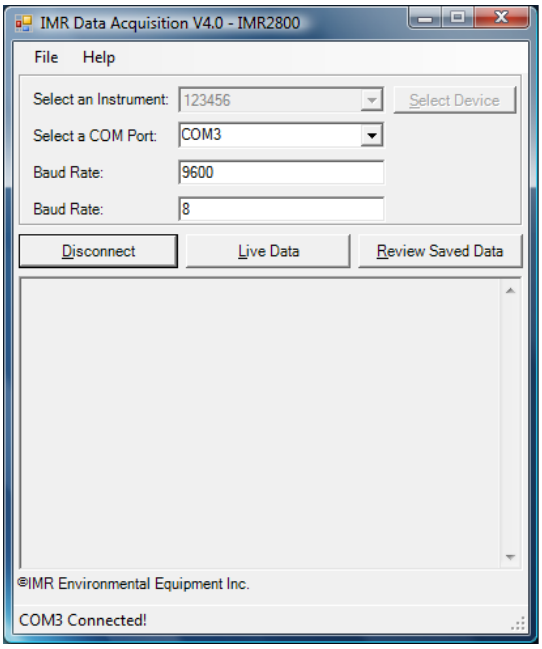
To proceed with the installation, execute the "setup.exe" file. The setup file will ask you where to install the program. Make sure the extraction folder is defined as:
"*C:\Program Files\IMR_DAC*" (or "C:\Program Files (x86)\IMR_DAC" on x64 machines) and then proceed with the installation. This application requires .net framework v2.0 or later; for your convenience .net framework v2.0 is provided on this CD.
In order to utilize the reporting feature of this software, Crystal Reports redistributable package has to be installed as well. Depending on your operating system and whether it is a 64 bit OS (operating system) or a 32 bit OS, you will have to choose between CRRedist2008_x64.msi for x64 bit operating systems and CRRedist2008_x86.msi for 32 bit operating systems.

Usage with IMR 2800

IMR Data Acquisition software uses your computer's serial port (COM port) to communicate with your IMR 1400/2800 instrument. To connect to your portable IMR gas analyzer, make sure your instrument is already turned on and connected to your computer using a RS232 cable. Select the appropriate COM port from the COM port drop down menu on your IMR Data Acquisition software and press Connect.



Startup



Connected Successfully

Figure 1.

Once a connection is established, navigate through your IMR 2800's main menu to get to:

“Main Menu->Organization->Interface” Select “Formatted Output” for the format of the data output, and then select Continuous output. This program is only capable of recognizing the “Formatted Output” and using the “Decimal Output” option is not possible with this version of the software.

Usage with IMR1400

IMR1400 works similar to the 2800 except that once a connection is established between the analyzer and IMR Data Acquisition, you have to navigate to the customer menu on the analyzer and press the “Enter” key to transmit data to the IMR Data Acquisition software.

Live Data

By pressing the “Live Data” button on the main form, you can see the data that you are receiving from the analyzer as it gets processed by the software. The top portion of this form will display the data received from IMR1400 or IMR2800 analyzers, but the bottom portion will contain fields that are only valid for IMR1400.

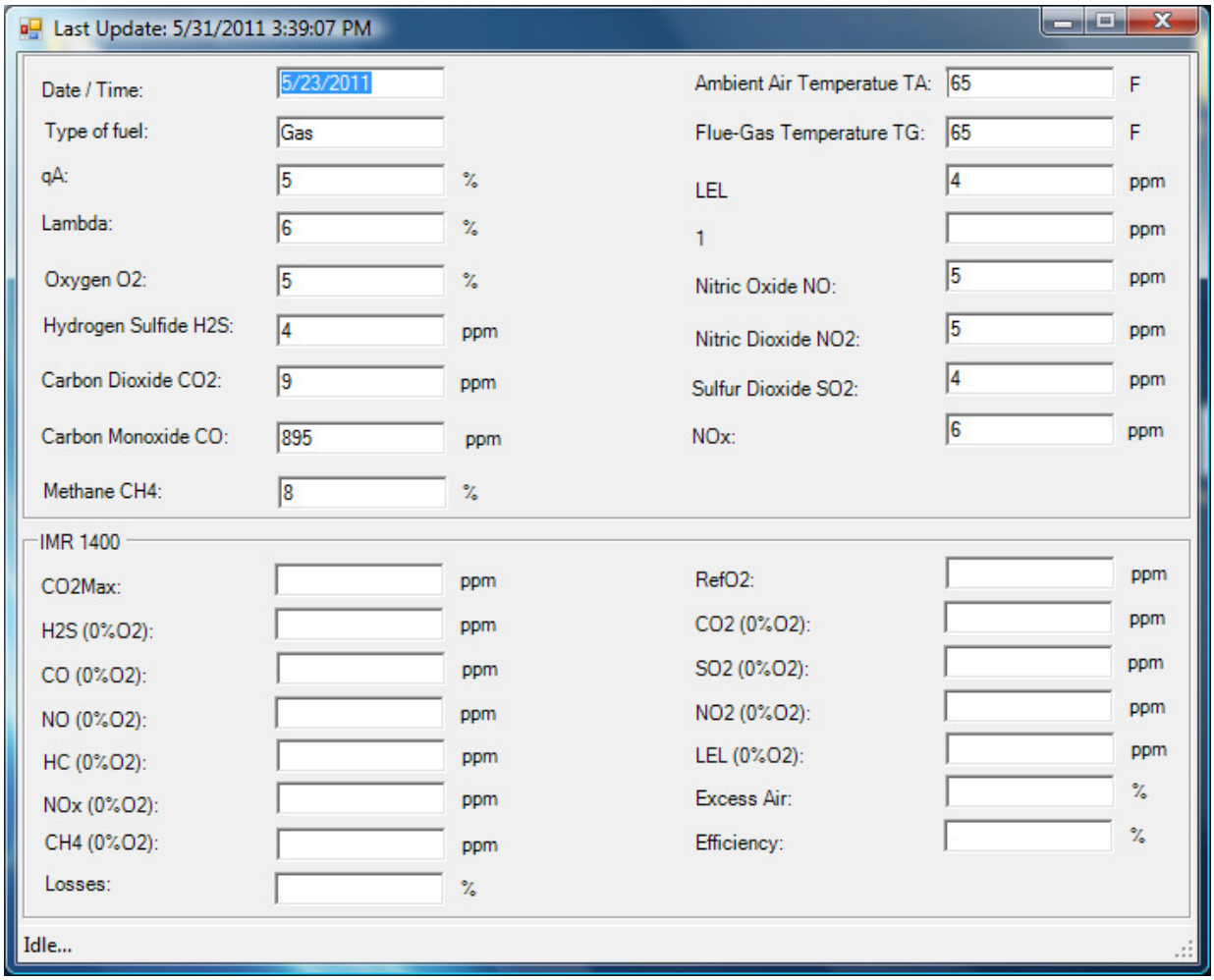


Figure 2.

Review Saved Data

By clicking on the “Review Saved Data” command button, you can view the data that’s been saved in the program’s database. Additionally, you will have the option of viewing reports or graphs from the “Review Saved Data” window.

In order to organize your saved data, you have the option of selecting a particular date or by checking off the “Show All” checkbox, you can see all your saved data.

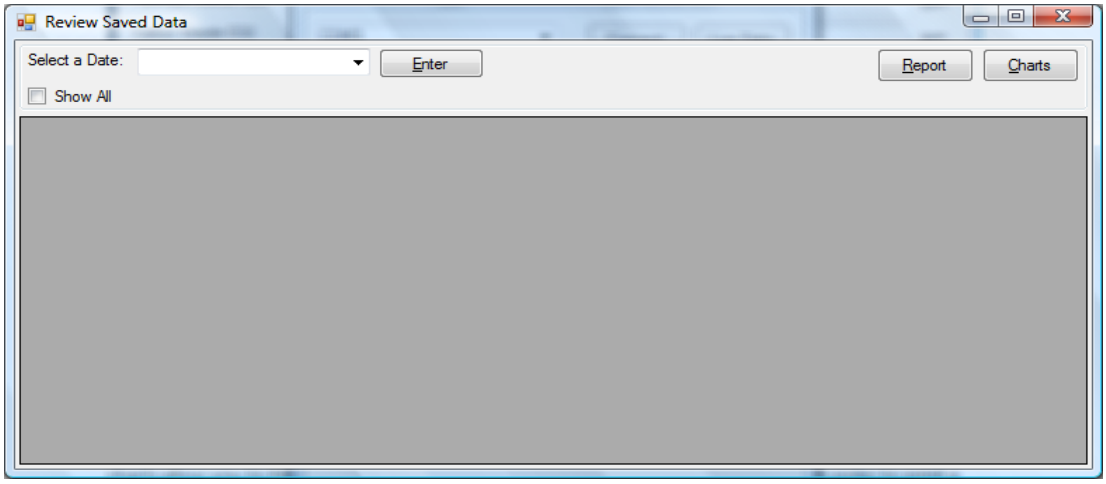


Figure 3.

Charts & Graphs

There are two types of charts that are available with this application; Pie Charts and Bar Graphs. Both charts allow you to filter your data based on a specific date or use all available data. In order to print a chart, this program will open an image (jpeg) representation of your graph in your default image viewer, which you can use to print the chart. Maximizing the size of your Chart window will allow you to print a higher resolution copy of the chart.

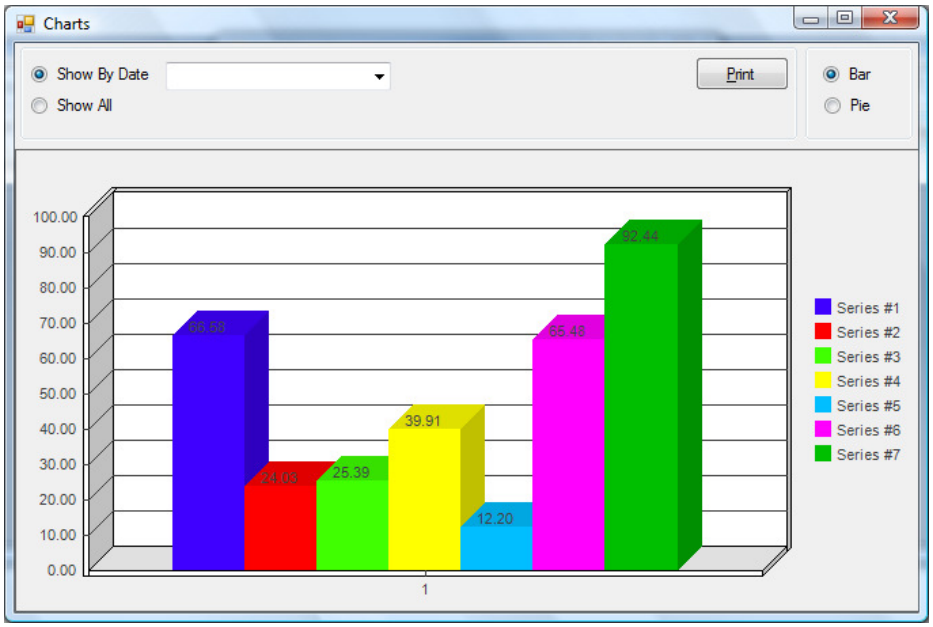


Figure 4.

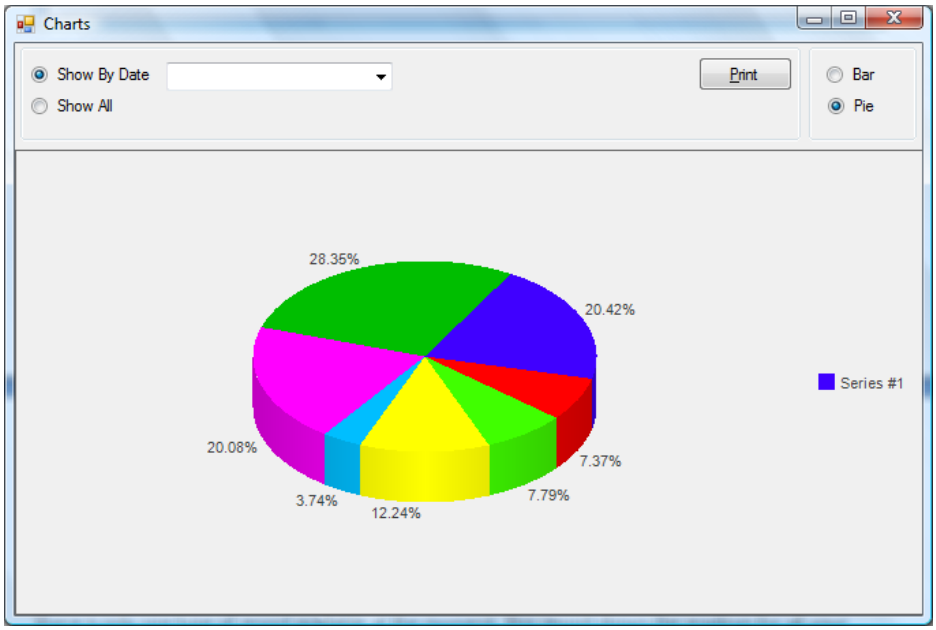


Figure 5.

Reports

By pressing the "Report" button on the "Review Saved Data" form you can view a report that shows the readings for all your available gas sensors. Also, it allows you to print all your saved data or print a specific page of the report.

Export to Excel

IMR Data Acquisition allows you to export the saved data into an Excel spreadsheet. Simply select an instrument, and press "Select Device" to load the information for a particular instrument. Then click on the file menu and select "Export to Excel". Set the location and the name of the excel file and press "Save" to create the Excel file.