

SOFTWARE INTRODUCTION

This application program can collect data from the HD350 when the meter is connected to a PC. The data may be plotted graphically, displayed as text, or exported to spreadsheet programs.

Note: The maximum number of data points that can be collected is 5500

System Requirements

Operating System: Windows 2000/ XP/ Vista

Minimum hardware requirements:

- PC with Pentium 90MHz or higher
- 32 MB RAM
- At least 7MB hard disk space for the supplied software
- Display resolution of 1024 x 768 with High Color (16 bit)

Main Menu

Save - Save the recorded real time data to the PC

Open - Open a saved file

Real Time Data Run - Begin collecting real time data

Stop – End a real time data collection session

Print- Print the real time data as a graph

Undo Zoom

Help Utility document

Tool Bar

PRESS (Pressure) – Display the Pressure measurement data graph only.

VEL/FLOW (Velocity/ Flow) - Display the Velocity / Flow measurement data graph only.

TEMP (Temperature) - Display the Temperature measurement data graph only.

Combine - Combine the three above data channels (PRESS/ VEL-FLOW/ TEMP).

Y Axis – Edit the Y AXIS properties (OFFSET and GAIN)

Y OFFSET

There are 5 Offset value selections 0, 2, 5, -2, and -5

Y GAIN

There are 12 Gain value selections ranging from 1 to 100,000

For example, if Y OFFSET is set to '0' and Y GAIN is set to '10', the Y Axis will range from '0' to '100' in increments of '10'.

OPERATION

Initiating Communication

- Connect the meter to the PC USB port using the supplied USB cable
- Turn the meter ON
- Run the HD350 software program
- Use the AUTO DETECT or the MANUAL DETECT utility located under the COM PORT menu to select the PC COM PORT number. The proper COM PORT number must be established before communication can begin.
- When communication is established, the meter's display and the virtual meter display (software window) will indicate the same value
- If communication is unsuccessful the virtual meter will display "OFFLINE"
- If communication fails, check that the USB cable is connected correctly (replace the cable if the cable is faulty), close all other applications and then choose other serial ports from the MANUAL DETECT menu until communication is successful (wait a few second after a new COM port is selected).

Plotting Data

1. If communication is successful, click RUN icon The Sample Rate dialog box will appear. The same action can be initiated by selecting RUN from the REAL TIME menu.
2. Enter a number (1 or greater) in the field to set the sample rate and then click "OK". The data will begin plotting on the Real Time Graph Window
3. When a plot is stopped either by selecting STOP from the REAL TIME menu or by pressing the STOP icon, a request to save the plotted data will appear.

Zoom (IN)

1. Press the left mouse button and drag a rectangle around the area to be expanded.
2. Release the mouse button.
3. Use the scrollbar to scroll the data

Zoom (OUT)

Zoom out to full view by clicking the Zoom Out icon.

Y Axis Offset and Gain

Click Y AXIS SETUP to change the vertical axis offset or the full scale range (gain)

Cursor

The cursor appears at the mouse location on the graph. The measurement value and date/time for a given data point selected by the mouse on the graph, is displayed at the bottom of the graph (and at the top of a recalled data graph).

Saving a Data File

1. Click the FILE SAVE icon to open the file save dialog box or select SAVE from the FILE menu.
2. Name and Save the file using the default extension. The file will be saved with the “.METERDat” extension to be reopened in the HD350 program and also as a “.TXT” file (automatically saved to the desktop) to be opened in other word processing or spreadsheet programs.

Opening a Saved Data File

1. Click the File Open icon or select OPEN from the FILE menu to open the “Graph” window and then click the “Download” tab to open a saved file.
2. Click “Open Graph File” to open a *.METERDat file as a graph
3. The opened graph supports: File Open, Print, Zoom, the Y Axis Setting, and data point selection using the mouse cursor.