

Data Force Software

Digital Force Graphing

- ▶ Dillon Data Force Windows™-based software delivers the full potential of Dillon Digital Force instruments by providing real-time graphing software.

Data Force enables a PC to communicate with Dillon digital instruments via the instruments' standard bi-directional RS-232 interface. The PC functions as a virtual chart recorder with the following features:

- **Force vs time graph (real time)**
- **Start/stop triggers**
- **Auto-ranging**
- **Zooming/re-scaling**
- **Overlaying the test traces**
- **Printout of tabular data**
- **Data export to spreadsheets**

During a test, Data Force records force data at a rate of up to 200Hz (200 times per second). When the test has finished, operators can define a range of data by dragging two sliders, and, within that range, the software calculates average, maximum, minimum and area under the plotted curve.



Operators can re-scale and relabel graph axis and add graph titles. The software will save user-defined preferences for repeat testing. It will plot a series of similar tests on the same graph.

Data can be printed in tabular or graphical form or exported in ASCII format.

Data Force is flexible and easy to use. It operates from either the keyboard or a mouse.

The software provides an extensive system of context-sensitive Help screens.

DILLON

Force Measurement Equipment

Specifications

Operates with Dillon instruments:

- EDXtreme & Communicator
- FI-521 Force Indicator
- GL

RS-232 communication: 300 to 921,600 baud

RS-232 request character: Configurable

Data acquisition rate:

From 0.01 to 200Hz (load points per second)

Maximum number of data points: 17,280,000

Duration of data logging: 24 hours

Data which can be plotted/accumulated:

Force vs time

Force units: lb, oz, kN, N, mN, kg, g

Time units: seconds, minutes or hours

Logging start/stop triggers: On force or time

Automatic real-time graph scaling & zooming

Multiple test display: Up to four traces can be overlaid

Print output: Graphs & raw data

Data export to other PC software:

ASCII file (comma or tab delimited)

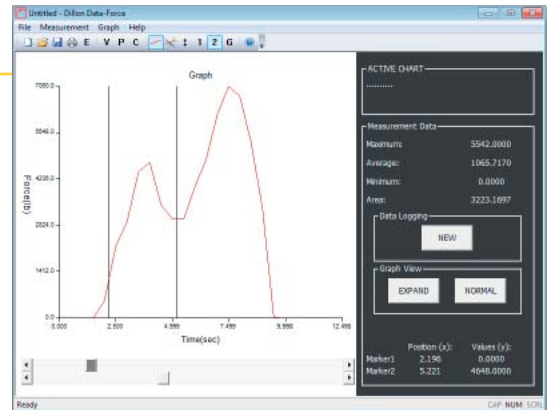
Accessories required:

- RS-232 cable (9-pin available)
- RS-232 to USB converter (available)

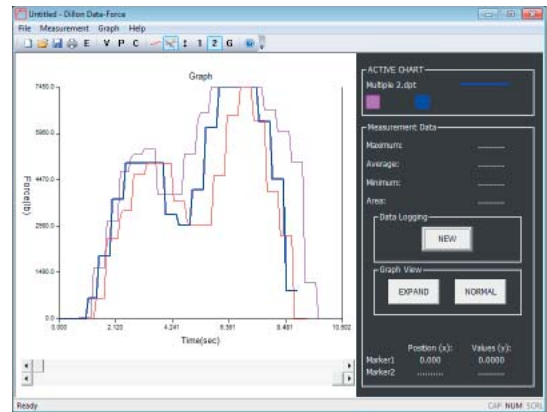
Computer required:

- Microsoft Windows™ XP or 7 with USB port
- USB dongle (supplied)

User-defined text: Graph titles, axis labels and notes



First peak



Multi-trace display

| Time | Force |
|-------|-------|
| 0 | 0 |
| 0.049 | 0 |
| 0.1 | 0 |
| 0.148 | 0 |
| 0.199 | 1836 |
| 0.248 | 1836 |
| 0.299 | 1836 |
| 0.35 | 1836 |
| 0.4 | 1836 |
| 0.449 | 1836 |
| 0.498 | 1836 |
| 0.549 | 1836 |
| 0.6 | 4412 |
| 0.648 | 4412 |
| 0.699 | 4412 |
| 0.748 | 4412 |
| 0.803 | 4412 |
| 0.85 | 4412 |
| 0.898 | 4412 |
| 0.949 | 4412 |
| 0.998 | 4412 |
| 1.049 | 4412 |
| 1.1 | 6728 |
| 1.148 | 6728 |

Exported data