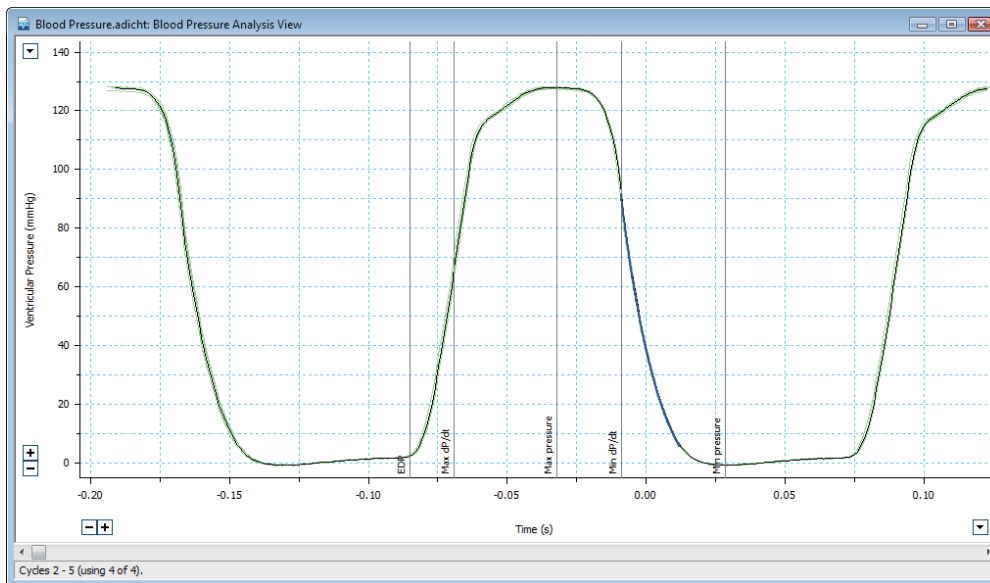


Blood Pressure Analysis

Blood Pressure Module for LabChart® & PowerLab®



Signal averaged left ventricular pressure waveform with event markers. The average pressure waveform is shown in black and the individual cycles that constitute the average are shown in green.

The Blood Pressure Module for LabChart software automatically detects, analyzes and reports cardiovascular parameters from arterial or ventricular pressure signals. This can be done either online (during recording) or offline (after recording).

The Classifier View allows easy selection of pressure waveforms for analysis. Using the classifier, you can exclude pressure cycles that are contaminated by artifacts or feature abnormal cycle heights and durations. Specific pressure cycles with increased frequency and/or amplitude can be selected for analysis.

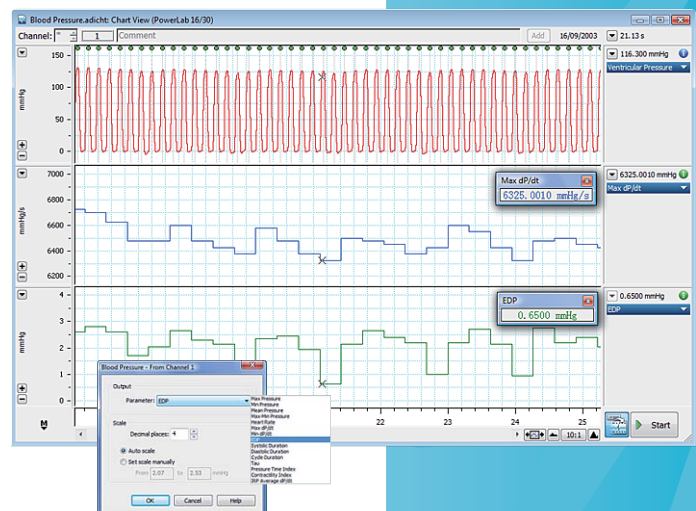
The Analysis View displays individual pressure cycles or an average of a specified number of cycles. Depending on the type of signal under investigation (ventricular or arterial), the software automatically labels key parameters. These include peak systolic and end diastolic pressure, dP/dt and many more. These measurements are automatically logged in the Table View for quick review and easy exporting.

LabChart also displays parameters calculated by the Blood Pressure Module as continuous data on separate channels. Raw data is unaltered by any calculation, ensuring that you can reanalyze recorded ventricular or arterial pressures at any time.

Features & Benefits

- Provides analysis of cardiovascular pressure from humans as well as large and small animals
- Averages any number of pressure waveforms
- Allows analysis of blood and cardiac pressure in real time
- BP Classifier allows fast detection and exclusion of atypical waveforms
- Logs pressure parameters to a table in real time
- LabChart displays pressure parameters as continuous data on separate channels

Below: Ventricular pressure recording (top channel) with maximum dP/dt and EDP calculated online (lower channels).



Blood Pressure Module

Detection & Analysis Settings

The Settings dialog allows easy configuration of detection and analysis parameters for ventricular or arterial pressure recordings. It includes averaging, cycle detection, analysis, end of diastole options and isovolumic relaxation (Tau).

Classifier View

The Classifier View allows cycles to be selected based on height and duration. The user can drag the edges of the selection box to include or exclude detected cycles in any analysis.

Analysis View

The analysis view displays every beat with any averaged waveform displayed in black. Vertical markers indicate arterial or ventricular cycle parameters. You can view each beat, or an average of successive beats, using the horizontal scrolling bar.

Table View

The Blood Pressure Module logs all calculated parameters in the Table View. Table rows are linked to the various LabChart windows. Highlighting a row will automatically show the corresponding beat in the Analysis View as well as the data in the Chart View.

Some of the calculated ventricular parameters

- Maximum Pressure
- Mean Pressure
- Maximum dP/dt
- End Diastolic Pressure (EDP)
- Isovolumic Relaxation
- Minimum Pressure
- Maximum-Minimum Pressure
- Minimum dP/dt
- Contractility Index

Some of the calculated arterial parameters

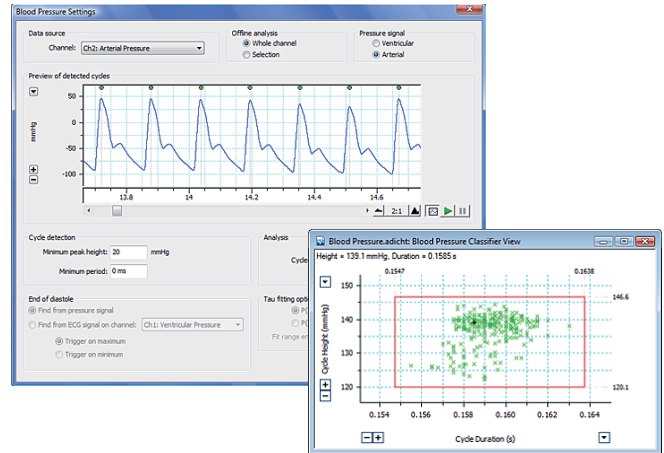
- Systolic Pressure
- Mean Pressure
- Ejection Time
- Diastolic Pressure
- Pulse Pressure
- Pressure at Dicrotic Notch

Ordering Information

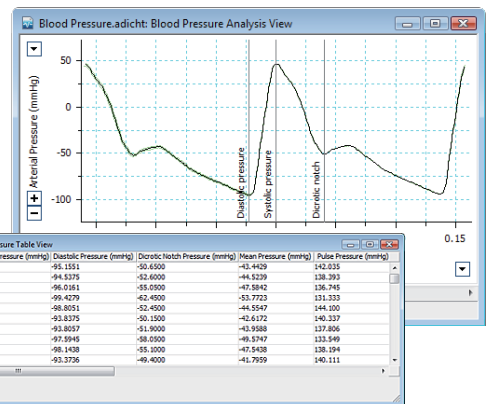
Blood Pressure Module	LabChart Pro	GLP Software*
MLS370/7 Blood Pressure Module (Windows®)	MLS260/7 LabChart Pro Modules (Software suite including all LabChart Modules)	MLS330/7 GLP Client (Windows®)
		MLS335 GLP Server (Windows®)

*Together with PowerLab and LabChart, the GLP Client and GLP Server facilitate GLP and 21 CFR Part 11 compliance.

 Share your data with colleagues. Free LabChart Reader – download to view and analyze LabChart data.



BP Settings dialog (top) and Classifier View (bottom).



Analysis View with markers (top) and Table View with logged parameters (bottom).

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PowerLab systems and signal conditioners meet the European EMC directive. ADInstruments signal conditioners for human use are approved to the IEC60601-1 patient safety standard and meet the CSA C22.2 No. 601.1-M90 and UL Std No. 2601-1 safety of medical electrical equipment standards.



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