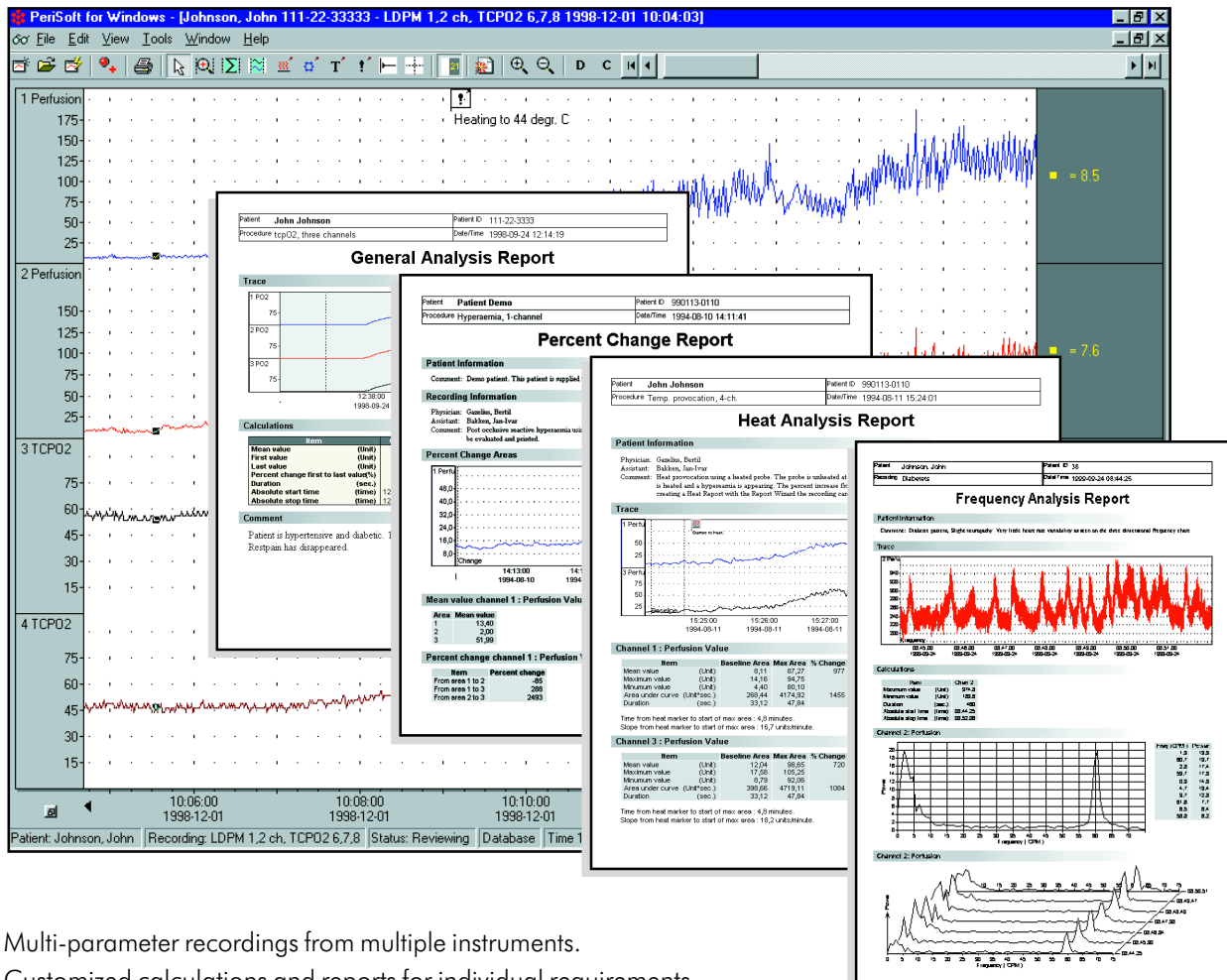




Data acquisition software

PeriSoft for Windows is a user-friendly, advanced and versatile program for data acquisition, recording and analysis.



Multi-parameter recordings from multiple instruments.
Customized calculations and reports for individual requirements.



DATA MANAGEMENT WITH PERISOFT

PeriSoft for Windows (PSW) can record, analyze and print data from Perimed's large range of PeriFlux instruments and other similar instruments. PSW is currently used in both clinical settings and research laboratories. The program is user-friendly and is especially suited for the clinical environment, yet advanced enough for the most demanding researcher.

The screenshot displays two overlapping windows from the PeriSoft software. The top window, titled 'Patient Form', contains fields for 'First name: John', 'Last name: Johnson', and 'Identity: 111-22-3333'. A 'Comment' field contains the text: 'Patient has a history of smoking and is overweight, the problem wound is located on the dorsum of the foot.' The bottom window, titled 'Recording Information', features dropdown menus for 'Physician: Dr. Gazelius', 'Assistant: Jan-Ivar Bakken', and 'Referrer: Johnson, John'. A 'Comment for the recording' field contains the text: '15th hyperbaric treatment. Recording 13. Patient is responding well to treatment. Restpain has disappeared. Electrodes fixed 1 cm proximal and one cm distal to the wound. Recording time for baseline extended to 20 minutes.'

Comments and information about the patient and the recording.

Record, store and analyze data

PSW can record, store and analyze hundreds of channels of data from any number of instruments. Perimed's PF 3, PF 4001 and System 5000 instruments, as well as TINA $tcpO_2$ monitors from Radiometer can be connected via the serial port(s). Multiple instruments are connected by using separate serial ports. Other instruments with analog outputs can be connected via the PF 472 A/D Converter Box. Data recorded with PeriSoft for DOS can be imported.

User-friendly, advanced, versatile

PSW is simple to use and can be customized to individual requirements. Reports can include calculations, date and time, and patient information. Markers can be added for extra information and identification of events. On screen, recorded parameters are color-coded for easy site identification. Simultaneous preview allows the user to analyze the data while continuing to record.

Script

Using the script wizard, it is possible to design a complete procedure. The script can instruct the operator when needed, control the time schedule, add markers, areas and, at the end of the procedure, create reports. The script can also set, start and stop heating.

Export of data

Data can be exported as an ASCII file or copied to clipboard. To reduce file size, data reduction can be performed.

Base, Reference and Alarm lines

Baseline enables calculations from a set level.

Reference line is an aiming help line for example to see changes from an initial level.

Alarm line initiates an alarm if the signal is below or above the set level.

Reports

Reports, including graphical data and calculated values, can be viewed on screen and printed. Using the Report Wizard, one or more sections of the recording is selected for viewing, analysis and print-out. Reports are customizable and can include the tracing, a table of calculations specific for the report and comments. Most reports include maximum and minimum, area under curve, duration, and start and stop time. The current reports available are:

General Analysis Report

For calculating values in a section of the recording. Available calculations include mean, maximum, minimum, standard deviation, standard error, first value, last value, percent change, slope and response time.

Percent Change Report

For comparing mean value of one section to other sections. Used for calculating changes, for example after a provocation.

Frequency Analysis Report

For measuring the frequency content of a section of the recording. The frequencies are printed in two dimensional and three dimensional Fast Fourier Transform (FFT) diagram.

Heat Analysis Report

The perfusion change after local heating (e.g. 44°C) is a measure of the tissue reserve capacity. The report includes calculations of mean values before and after heating, percent change, and slope and time from heat-start to max area.

Computer requirements, demo copy

PSW requires a PC with Windows 95/98/NT4, minimum Pentium 100 with 32 MB RAM and one serial port per instrument. A CD-ROM demo of PSW is available. Please contact Perimed for more information.