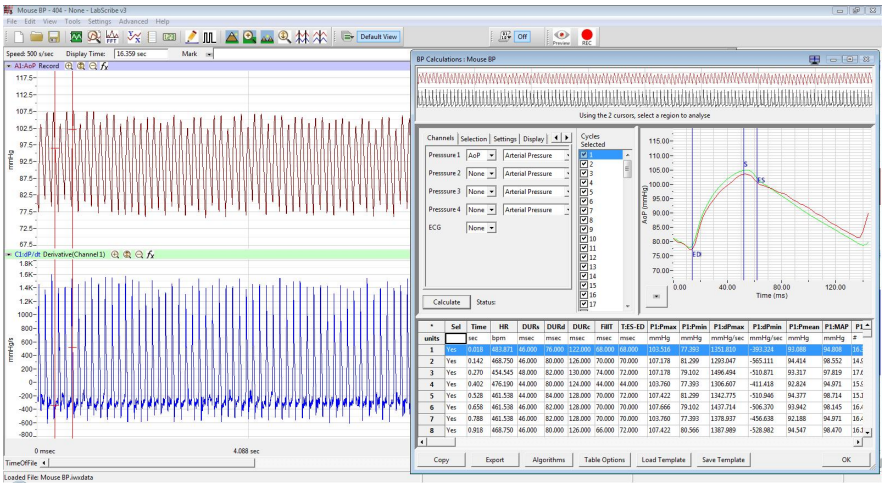
Fiber Optic Pressure Catheter Systems

Measure Pressure in Small Vessels and Ventricles

iWorx offers the Opsens Fiber Optic pressure catheters in sizes starting at 1.0F. These catheters are recommended for measuring pressure in small vessels as well as ventricular pressures in small rodents. They are also highly recommended for recording arterial and chamber pressures in large animals. Being fiberoptic, they are suited for MRI applications as well.

Fiber Optic catheters offer superior sensitivity and temporal resolution compared to fluid-filled catheters and are generally more suitable for measuring intra-cardiac pressures from animal species with high intrinsic heart rates.

Systems include catheters, an amplifier/signal conditioner, data recorder and software.



LabScribe Blood Pressure Module

The LabScribe Blood Pressure Module acquires and analyzes data from blood pressure transducers. Data can be analyzed from ventricular and arterial signals in real-time.The software automatically calculates common indices of function from the blood pressure signal where it can easily be exported to another program for further analysis.

Arterial Pressure Calculations

- Heart Rate (HR)
- Maximum Pressure (Pmax)
- Minimum Pressure (Pmin)
- Mean Arterial Pressure (MAP)
- Systolic and diastolic pressure
- Maximum dP/dt (dP/dtmax)
- Minimum dP/dt (dP/dtmin)
- Pulse Height
- Notch Pressure
- Systolic Duration
- Diastolic Duration
- Cycle Duration
- Time To Peak
- Election Time
- Percent Recovery

Ventricular Pressure Calculations

- Heart Rate (HR)
- Maximum Pressure (Pmax)
- Minimum Pressure (Pmin)
- Mean Pressure (Pmean)
- End-systolic / End-diastolic Pressures (Pes / Ped)
- Maximum / Minimum dP/dt (dP/dtmax / dP/dtmin)
- Developed Pressure
- dP/dt@
- Contractility Index
- Relaxation Index
- Systolic / Diastolic Durations
- Cycle Duration
- Tension Time Index
- Relaxation Time
- Isovolumetric Time
- Tau (Weiss, Logistic, Glantz, Mirsky)

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