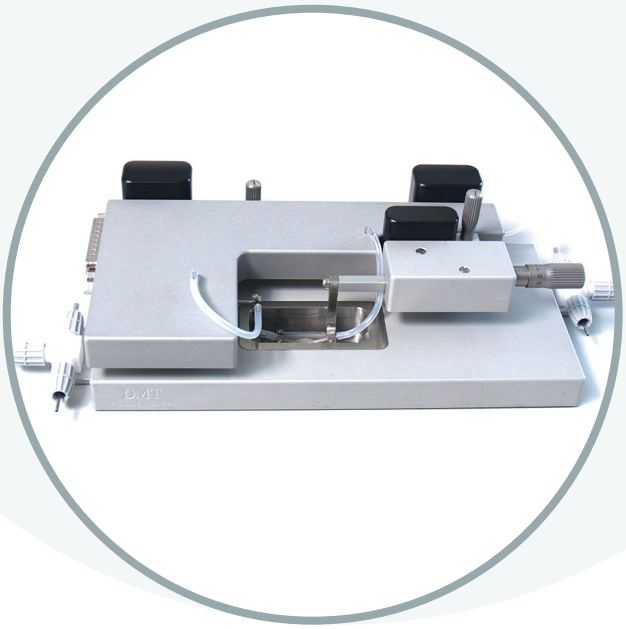
IMAGING PRESSURE MYOGRAPH SYSTEM - 120CP

- Study the structure and function of small vessels >40 µm under near-physiological conditions
- Specifically designed for use with laser scanning microscopes and imaging systems
- Ideal for studying intracellular ion concentrations and isobaric constriction
- Designed to accommodate objective working distances as low as 100 µm



The Imaging Pressure Myograph System - 120CP is a system designed specifically for use with laser scanning imaging microscopes (LSCM) and other high magnification microscopes for imaging studies where intracellular processes within the smooth muscle cells or endothelial cells of the intact, pressurized vessel are needed. This system is ideal for studying intracellular ion concentrations such as calcium or tracking the trafficking of fluorescent probes, tags or proteins in small vessels (internal diameter >40 µm). However the chamber can still be used for standard pressure myography.

The conical open bath design allows easy access for high magnification/high numerical aperture lenses used in inverted microscopes. It also allows access for direct immersion lenses used in upright imaging microscopy. In addition, the top part of the myograph can be easily lifted, facilitating maintenance and mounting.

Specially designed and angled mounting supports in combination with a z-axis manipulator facilitate precise vertical positioning of an isolated blood vessel directly above or on top of the chamber window, permitting the use of objectives with working distances as low as 100 µm on an inverted LSCM.

The intravascular pressure and the pressure gradient along the vessel can be precisely controlled. A built-in heating system maintains bath temperature above ambient temperature. The customized chamber cover includes ports for super fusion, for rapid draining and filling, and for gas bubbling. To facilitate cleaning, the chamber is made of acid-resistant stainless steel. When using the myograph on an imaging microscope, data acquisition of inlet and outlet pressure, force and temperature is possible by using either the analog outputs or the serial interface.

IMAGING PRESSURE MYOGRAPH SYSTEM - 120CP

CHAMBER:	
Chamber volume (min)	6.5 ml
Chamber(s)	1
Chamber material	Acid resistant stainless steel
Vessel size	>40 µm
Vessel alignment	X, Y, Z
Micrometer resolution	0.01 mm
Mounting type	Cannulas
TEMPERATURE:	
Range	15.0 to 50.0 °C
Resolution	0.1 °C
Stability	±0.2 °C
Heating	Yes
TRANSDUCER FORCE:	
Output reading	mN
Range	±200 mN
Resolution	0.01 mN
Force calibration	Yes
TRANSDUCER PRESSURE:	
Output reading	mmHg
Range	0 - 250 mmHg
Pressure stability	±0.5 mmHg
Resolution	0.1 mmHg
Force calibration	Yes
RESERVOIR:	
Heated	Yes
Capacity	250 ml
Pressure circuit	Closed
Air inlet	1 bar (max)
OUTPUT:	
Data communication	USB 2.0
Analogue output channels	4
Analogue output range	±2.5 V

Danish Myo Technology A/S

E-mail: sales@dmt.dk
Tel.: +45 87 41 11 00
Fax: +45 87 41 11 01

DMT-USA,Inc.

E-mail: sales@dmt-usa.com
Tel.: +1 734 707 0250
Fax: +1 678 302 7013

DMT-China

Tel.: +86 21 6486 9685
Fax: +86 21 5877 0063

DMT-Asia Pacific

Tel.: +61 2 8814 1597