

- **Wire Myograph with four chambers allows the study of four vessels or tissue rings simultaneously**
- **Ideal for work requiring a higher throughput such as repetitive concentration-response curves**
- **Jaw and pin mounts facilitate the use of a mix of small or larger ring segments from 60  $\mu\text{m}$  to 450  $\mu\text{m}$  (up to 10 mm when using pins)**
- **The segments remain viable for >12 hours**
- **Built-in electrical heating, electronic valves for simultaneous rapid removal of buffer, analog output of force**
- **Optional add-on of the Automatic Buffer Filler System - 625FS allows semi-automated filling of all four chambers**

The Multi Wire Myograph System - 620M is the successor to our very popular 610M myograph system. This 4-channel multi myograph system is a highly sophisticated yet robust research instrument. It is an easy-to-use system for in vitro studies of small and large blood vessels, trachea or gut mounted as larger ring preparations (up to 10 mm). Each individual myograph unit, made of aluminium, has a centrally located 8 ml stainless steel chamber. The tissue supports (jaws or pins) are then positioned in the chamber, where one side is attached to the force transducer and the other side is attached to a micrometer.

Each unit has individually controlled gas inflow and suction. Heating and connections for vacuum and gassing are in the myograph interface, permitting the preparations in all four chambers to be kept under physiological conditions (37 °C, and bubbled with a gas mixture of your choice). The interface also houses all the electronics, and micro-processor for calibration, the circuitry for analog outputs, and an USB port for easy updates.

Following mounting and equilibration, passive length-tension relationships for the vessels are determined using a normalization procedure. This ensures reproducibility amongst the segments and between experiments. During actual experiments, the circumference of the vessel is kept constant. Compounds can be added directly to the chamber, and the vessel's contractility and reactivity are measured under isometric conditions.

This myograph is highly suited for pharmacological investigations on vessel reactivity. Multiple 620M units, especially in combination with the Automatic Buffer Filler System - 625FS, can be conveniently arranged side-by-side. This makes the 620M an ideal system for work requiring a higher throughput, such as drug screening, concentration responses or experiments where individual testing of vessels in separate baths is necessary.



**Technical specifications**

<b>Vessel size:</b>	>60 µm / >450 µm up to 10 mm
<b>Chamber:</b>	Four individual chambers
<b>Chamber material:</b>	Acid-resistant stainless steel
<b>Chamber volume:</b>	Max. 8 ml
<b>Chamber suction:</b>	Manual or automatic, time controlled, user defined
<b>Chamber cover:</b>	Supplied with connections for gassing
<b>Chamber gassing:</b>	Individually controlled per chamber by needle valves
<b>Force range:</b>	User selectable at ± 200/400/800/1600 mN
<b>Force resolution:</b>	0.1 mN
<b>Micropositioners:</b>	Manually operated precision micrometer
<b>Weight calibration:</b>	Semi Automatic
<b>Heating:</b>	Built into chamber, independent of superfusion
<b>Temp. range:</b>	Ambient temp. - 50 °C
<b>Temp. resolution:</b>	0.1 °C
<b>Temp. probe:</b>	External
<b>Output reading:</b>	Force (mN)
<b>Analogue output:</b>	Independently filtered 4-channel output at 2.5V full scale
<b>Voltage:</b>	100 to 240 VAC (auto) 50/60 Hz via external power supply
<b>Ambient temp.:</b>	15-30 °C

**Optional accessories**

- Automatic Buffer Filler System - 625FS
- Chamber cover for field stimulation
- Plastic mounting jaws for field stimulation
- Combined pulse & train generator - CS200

**Set-up example**

