ORGAN BATH SYSTEM – 820MO

- **Multi-purpose functionality**
- Ideal for work requiring a higher throughput such as repetitive concentration-response curves
- **Accurate, reliable direct data streaming**
- Built-in electrical heating, electronic valves for simultaneous rapid removal of buffer

The Organ Bath System - 820MO represents a state-of-the-art 4-channel organ bath system for isolated vessel rings (>250 µm) or muscle strips (>20 mm). This system is designed from the traditional organ bath concept, and a small footprint, programmable force transducers, built-in vacuum, and gas bubbling with the easy addition of automatic refilling have all been incorporated into the design. Gone are the days of floor-to-ceiling organ baths that take up entire bench space. Changing transducers to study large rings or muscle strips is no longer needed as you can easily adjust the force range to give the most sensitive data collection for various tissues. Built-in vacuum and gas bubbling allows for a turn-key system ready for use as soon as it arrives.

The design and materials used for the chambers make maintenance and cleaning as minimal as possible. Preparing the system for experimentation takes little time, and cleaning at the end of the experiment is a matter of a few water washes. The aluminum and stainless steel in the chambers do not require detailed cleaning procedures and will stand up to heavy use. The chambers can be easily moved to a dissection microscope for quick tissue mounting- regardless of rings or muscle strips.

The tissue mounts are positioned in the chamber, where one side is attached to the force transducer and the other to a micrometer. The micrometers allow the accurate pre-load setting, while sensitive force transducers will measure isometric vessel and muscle contractions. Force output is available via a USB connection as an analog signal or digital format.

Following mounting and equilibration, the length-tension relationships of the tissue can be determined. During the actual experiment, the length of the muscle is kept constant. Compounds can be added directly to the chamber to assess function. To study striated muscle function, stimulation electrodes are built into the chamber cover (optional) and can activate the muscle via field stimulation from a current stimulator. This organ bath is well suited to work with the Automatic Buffer Filler System - 625FS, which can be conveniently arranged side-by-side, making the 820MO ideal for work requiring high-throughput screening, such as drug testing or for experiments requiring the separation of tissue preparations in individual baths.

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CHAMBER:	
Chamber volume (min)	4.0 ml
Chamber volume (max)	8.0 ml
Chamber(s)	4
Chamber material	acid resistant stainless steel
Tissue size - **ring** mount	>500 µm
Tissue size - **strip** mount	>1 mm
Vessel normalization	>Manually
Micrometer **graduation**	0.01 mm
Mounting type	pins or clamps
TEMPERATURE:	
Range	15.0 to 50.0 °C
Resolution	0.1 °C
Stability	±0.2 °C
Heating	Yes
TRANSDUCER:	
Output reading	mN or g
Range	±200/±400/±800/±1600 mN
Resolution	0.01 mN
Force calibration	Yes
OUTPUT:	
Data communication	USB 2.0
Analogue output channels	4
Analogue output range	±2.5 V
Analogue signal	Filtered or raw
Voltage	100 - 240 VAC
Dimensions (LWD)	48 x 24 x 17 cm

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