

- For use with skeletal or cardiac muscle or strips of other muscle types up to 19 mm in length
- Up to four muscle strips can be examined under isometric conditions simultaneously
- Built-in heating, oxygen and suction ports
- Force output is available as direct analog transducer output
- The unit can easily be used with the CS4/CS8 Stimulator
- Optional add-on of the Automatic Buffer Filler System - 625FS allow semi-automated filling of all four chambers
- Digital output. Data directly piped into Labchart Pro via USB cable. No Powerlab box needed



The Muscle Strip Myograph System - 820MS represents a state-of-the-art 4-channel myograph system for muscle strips of up to 19 mm in length. The system was originally developed to give the skeletal muscle physiologist a highly sophisticated, easy-to-use, robust, high-throughput muscle myograph. The rectangular design of the chamber, however, gives this system the flexibility to mount larger, longer muscle strips of various organs, including larger segments of smooth muscle.

The system comes standard with a unique tissue clamp system to hold the mounted tissues. Customized mounting supports can be made upon request.

Each muscle bath unit, made of aluminium, features a rectangular stainless steel chamber. The tissue clamp supports are positioned in the chamber, where one side is attached to the force transducer and the other side to a positioner screw. The positioners allow the accurate setting of pre-load while sensitive force transducers allow provide measurement of isometric muscle contractions. Force output is available as an analog signal or in digital format via a USB connection, to labchart using the DMT device enabler.

Each muscle bath unit has individually controlled gas inflow and suction. The system is automatically heated to a given user programmed set temperature.

Following mounting and equilibration, the length-tension relationships of the muscle 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 any positive or negative inotropism.

Stimulation electrodes built into the chamber cover (optional) can be used to activate the muscle via field stimulation from the CS4 or CS8 stimulator.

This myograph is well suited for studies involving muscle strip reactivity. Multiple units, especially in combination with the Automatic Buffer Filler System - 625FS, can be conveniently arranged side-by-side, making the 820MS ideal for work requiring high-throughput screening, such as drug testing or for experiments requiring the separation of muscle preparations in individual baths.



# MUSCLE STRIP MYOGRAPH SYSTEM - 820MS

## SPECIFICATIONS:

|                        |   |
|------------------------|---|
| Vessel size            | 3 mm - 19 mm  |
| Chamber                | Four individual chambers  |
| Chamber material       | Acid-resistant stainless steel  |
| Chamber volume         | Max. 8 ml   |
| Chamber suction        | Manual or automatic, time controlled, user defined                                |
| Chamber cover          | Supplied with connections for gassing   |
| Chamber gassing        | Individually controlled per chamber by needle valved                              |
| Force range            | User selectable at $\pm$ 200/400/800/1600mN                                       |
| Force resolution       | 0.1 mN  |
| Weight calibration     | Semi automatic  |
| Heating                | Built into chamber, independent of super fusion                                   |
| Temperature range      | Ambient temperature -50°C   |
| Temperature resolution | 0.1°C   |
| Temperature probe      | External  |
| Output reading         | Force (mN) or Grams (g)   |
| Analogue output        | Independently filtered or unfiltered (direct) 4-channel output at 2.5V full scale |
| Digital output         | USB   |
| Voltage                | 100-240 VAC (auto) 50/60 Hz   |
| Ambient temperature    | 15 -30°C  |

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