

- Modular system for ex-vivo testing of tissue strips or rings
- Integrated automatic drain and filling of chambers
- Designed for pharmacological testing and screening
- Direct streaming of data into LabChart Pro by ADInstruments



The DMT 4-Chamber Tissue Organ Bath System enhance the productivity by combining many features and procedures in a versatile, compact system that automates many routines... providing greater throughput and more accurate data.

It is used extensively to investigate the physiology and pharmacology of smooth muscle and other muscular tissue preparations. These studies offer the advantage that preparations are subjected to pharmacological agents without the influence of systemic processes present in intact animals. The data is generally more consistent and reproducible and serves as a tool for tissue screening and for pharmacology studies (i.e. concentration response curves).

The modular design with features such as rapid air-heating, consistent temperature control, computer-automated filling and emptying control to ease workload, allows up to four individually mounted tissue strips or rings to be studied simultaneously and independently. Multiple systems can be linked together (via USB connection) for high throughput screening which can be easily operated by a single person.

The most common application of our Tissue Organ Bath is in cardiovascular research, using isolated aortic rings, heart tissue (papillary muscle, left ventricle) or other muscle strips. For gastrointestinal research preparations of ileum and colon are often used, as well as gastric antral muscle and sphincter. Respiratory physiology and pharmacology can be studied in isolated phrenic diaphragm preparations, pulmonary arterial smooth muscle and even lung parenchyma. Other smooth muscle preparations that are used in organ bath research include urinary bladder and penile muscle strips.



TISSUE ORGAN BATH SYSTEM - 750TOBS

CHAMBER:

Chamber volume (min)	10, 20 (*1) or 50 ml
Chamber(s)	4
Chamber material	Glass
Mounting type	Pins, clips or hooks
Drain/fill	Automatic
Aeration	Yes

TEMPERATURE:

Range	< 50.0 °C
Resolution	0.1 °C (filtered signal)
Heating	Built-in air circulation

TRANSDUCER:

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

RESERVOIR

Amount	4 bottles
Volume	900 ml (x4)
Heating	Electronical - built - in
Temperature	< 40.0 °C
Temp. resolution	0.1 °C
Temp. stability	±0.3 °C

*1 20 ml chambers supplied as standard

