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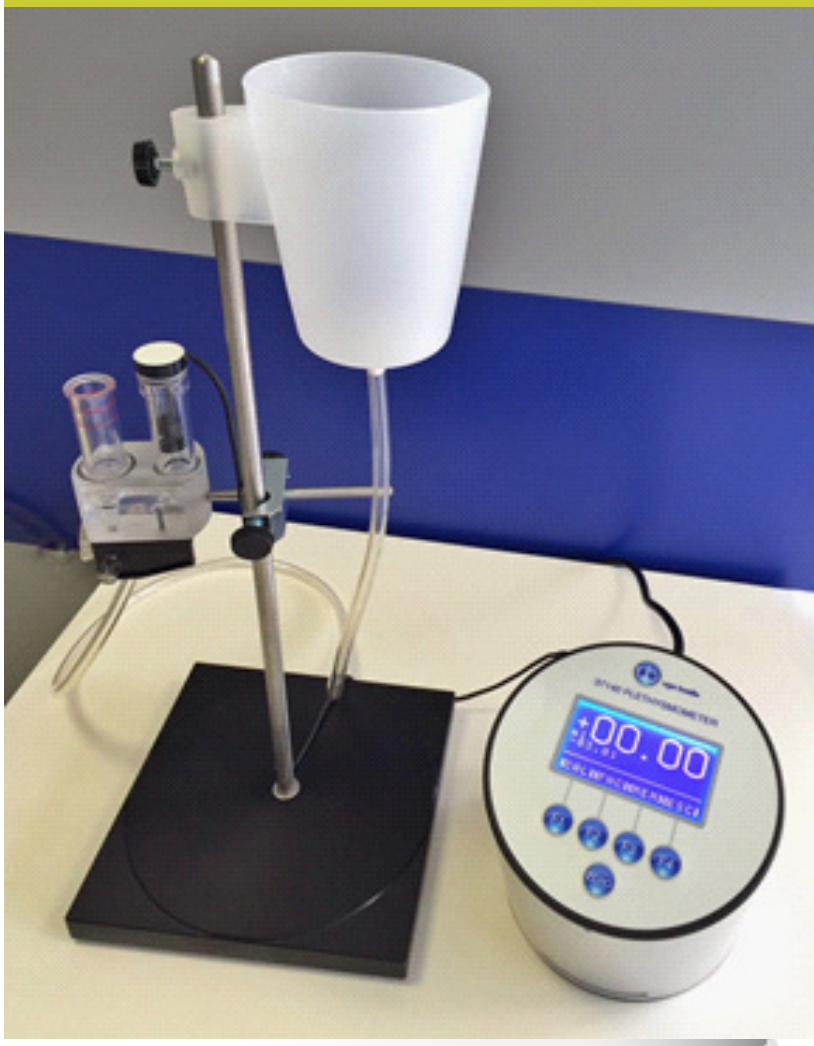
PAIN and INFLAMMATION

Plethysmometer

Cat. No. 37140



General

In research on rheumatoid arthritis, the central development of oedema, and its modifications by pharmacological processes, it has proved of great value to measure inflammatory processes in the rat paw.

Our **Plethysmometer 37140** displays the exact paw volume on the graphic LCD read-out. Small differences are detected by a transducer of original design.

The 37140 is provided with a pedal holding-command which freezes the reading, enabling the operator to concentrate its attention to the paw dipping.

The paw volume is shown on the multifunction graphic display in four digits, with 0.01 ml resolution. A zero key is provided to zero the meter before each measurement.

Including measuring cell for both RAT & MOUSE paw!!

FOR ACCURATE MEASUREMENT OF:

- RAT paw oedema
- MOUSE paw oedema

MICROPROCESSOR Controlled Instrument. Main Features:

- Computer compatibility : direct connection to PC (via the **52050 Software** included)
- Read-out : multifunction graphic display
- Print-out : by optional thermal MiniPrinters 57145

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Volume Measuring Water Cell

The measuring cell consists of two vertical interconnected Perspex tubes; the animal paw is dipped in the larger tube (1.8cm diam) to measure water displacement. A tube of smaller diameter (1.3cm) is also included for measuring the mouse paw.

The smaller diameter side tube contains the transducer which measures the conductance between two vertical wire electrodes.

Conductance is linearly proportional to the water level, hence to the displaced volume.

Data Acquisition

The 37140 Plethysmometer is microprocessor controlled, featuring direct PC output. Internally stored data can be routed to the PC serial (RS232) or USB port (via adaptor).

Communication is managed by the dedicated Software Cat. 52050-02, a Windows® based Data Acquisition Software Package, which enables data storage into individual files (in .csv format) to be easily managed Excel or other statistical analysis packages.

Ordering Information

37140	**PLETHYSMOMETER**, standard package including:-
7141	Electronic Block
7152-S	Standard Water Cell, diam. 1.8cm, including mouse paw tube **7186**, diam. 1.3cm
7153-L	Conductance Transducer
7140-154	Water Reservoir
7155	Calibration Probes (0.1, 0.2 , 0.5, 1, 2, 4ml)
7160	Wetting Compound, 100ml bottle
7165	Connection tube (cell-reservoir & drain vessel)
37215-303	"Hold" Pedal Switch
52050-02	CUB Dedicated Software (on USB drive)
37140-302	Instruction Manual (on USB drive)
52010-320	USB to serial port converter
52010-322	Connecting cable 9 to 9 pin
4210	Three Claw Stand, 10mm diam. upright
4003	Open Side Boss-Head
E-WP 008	Mains Cord

Also Available

37140-25	**Plethysmometer**, complete with water cell **diam. 2.5cm** & standard accessories
37140-35	**Plethysmometer**, complete with water cell **diam. 3.5cm** & standard accessories

Other Available Water Cells

7157	Special Water Cell, diam. 2.5cm, complete with Transducer 7153-L
7159	Special Water Cell, diam. 3.5 cm, complete with Transducer 7153-L

Optional

57145	Thermal Mini-Printer
37400-305	Thermal Paper Roll for 57145

Specifications

Power Requirement	Universal input 85-264 VAC, 50-60Hz, 40 W max.
Data Read-out	multifunction graphic display
Data Format	4 digits (2 integers, 2 decimals)
Resolution	0.01 ml
Commands	via soft-buttons
Connection to PC	direct connection to PC USB port, via serial to USB adaptor
Data Print-Out	via the optional MiniPrinter 57145

Physical

Weight	4.8 Kg
Shipping Weight	8.1 Kg approx.
Shipping Dimension	67x42x53cm

Bibliography

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