

## Plantar Test (Hargreaves' Method) Analgesia Meter

*With automatic paw withdrawal latency detection*

### Model: PT 01

The Plantar Test (Hargreaves Test) is a well-established experimental method, widely employed in rodents to assess thermal nociception and hyperalgesia in rodents. The plantar test has been widely used in the experiments involving, pain sensitization, hyperalgesia or recovery of thermal pain response following neural injury and regeneration. First described by Hargreaves et al. (1988), the method has become a standard in pain research due to its accuracy & non-invasive design. In this test, a controlled infrared heat stimulus generated by a focused light source is applied through a glass pane to the plantar surface of the hind paw. When the stimulus reaches a threshold perceived as painful, the animal exhibits a paw withdrawal reflex. The system automatically records the paw withdrawal latency in seconds, along with stimulus intensity, providing an accurate and objective measure of pain sensitivity.



The Instrument consists of:

- 1) A movable IR Emitter/Detector Unit with automatic paw withdrawal latency detection
- 2) A Glass Base Stand with Animal-Enclosure Assembly suitable for 12 mice or 6 rats
- 3) A Controller Unit, incorporating a Command/Display Module
- 4) Software for data transfer

### Key Features & Benefits:

- Automatic and manual detection mode for scoring of paw withdrawal latency
- High-power IR emitter with filter. As the light source is Infrared, it's invisible to animals and therefore non distracting.
- Adjustable lamp intensity for precise stimulation
- Stand-alone operation, no external PC required
- Internal memory for automatic data storage
- Modular animal enclosure with capacity of 6 rats or 12 mice.
- Easy to use pedal switch in manual mode
- Software for PC connectivity through RS232 interface for data transfer and report generation.
- Software with data entry for experiment no./ sequence no./ animal sex/ left, right paw etc.
- Calibration mode using Heat Flux Meter (Optional)

## System Specification:

Specifications	PT01
Display	LCD
Data Export	Pdf format, transfer data to PC via RS-232 to USB cable
Cut-off Timer	0 to 999.99sec
Latency Time	in 0.1s steps
I.R. Intensity	Adjustable from 1 to 100 (in one-digit steps)
Useful for	Mice & Rats
Measurement Mode	Manual or Automatic
Animal Positioning	Glass Base Stand assembly with animal enclosure suitable for 12 mice or 6 rats
Certifications	CE Compliant

## Ordering Information:

Model	Accessories	Dimensions	Power Requirements
PT01	Control Unit IR Emitter/Detector Unit Glass Platform Stand Modular Enclosures Pedal Switch Instructions manual Software for PC Connectivity	Glass Base Stand: Stand with enclosure suitable for 12 mice or 6 rats by changing the partition.  Dimensions: Glass Base Stand: 745x296x180mm (LxWxH)  Enclosure: Rat: 204 X 98 X 140mm Mice: 98 X 98 X 140mm	220/230V AC 50 Hz 110/120V AC 50-60Hz

*\*Needs to be specified in the order information*

**Optional: Computer and printer to be arranged by user**

## Optional: Heat Flux Radiometer for Calibration



## Software Report Format :



Note: Orchid's continuing product development makes specifications subject to change without prior notification.



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