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PAIN and INFLAMMATION

# Analgesy-Meter

## Randall-Selitto Paw Pressure Test

Cat. No. 37215

now available with  
optional upgrade to

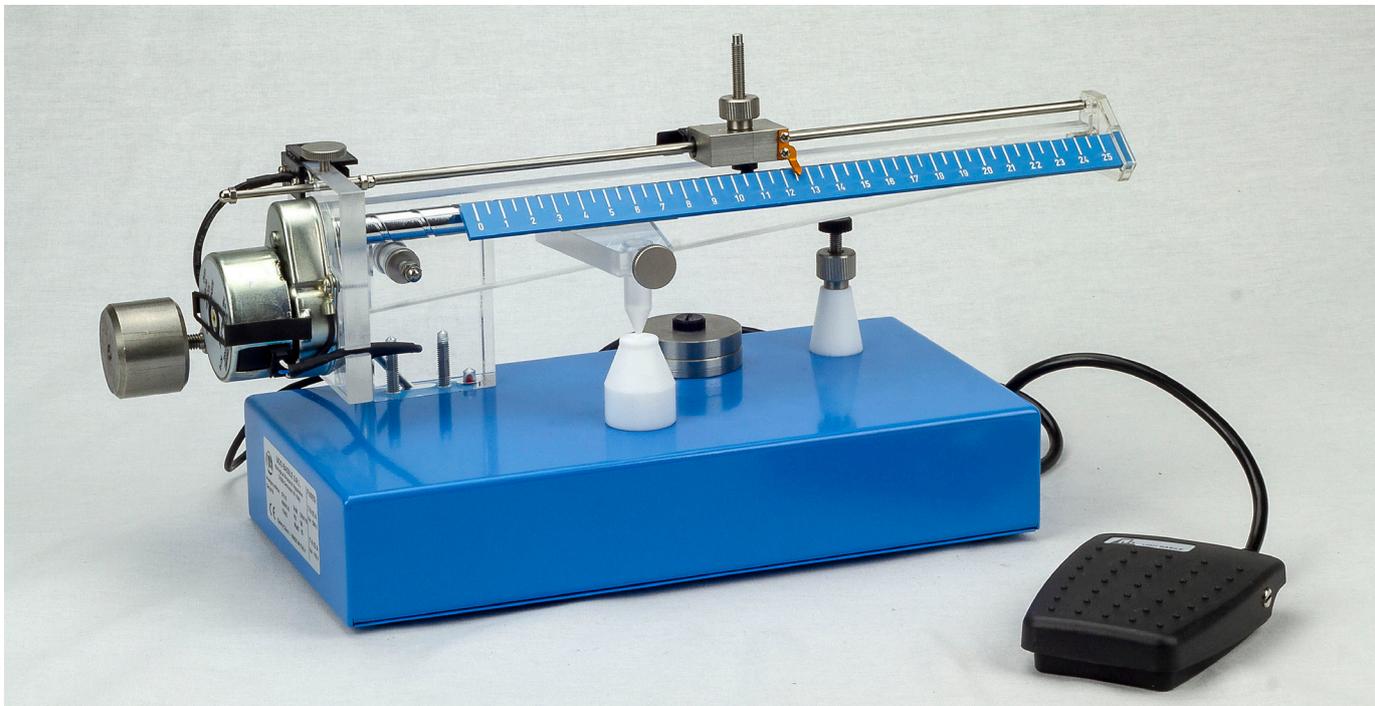
***digital reading***

### General

The 37215 is the up to date version of the classical 7200 paw pressure test which, **since 1965**, is helping to perform a rapid precise screening of analgesic drugs in a number of academic and industrial laboratories.

We are now introducing a **specific pressure sensor and the related controller**, available as optional, to transform the **Analgesy-Meter in a fully digital device**.

As the basic design is unchanged, results with the digital model are **consistent with published data**. The upgrade kit has been designed to be fitted on existing Ugo Basile Analgesy-Meters as well. Ask for details!



### Main Features

- Same instrument, three force ranges (from 0 to 250, 500, 750 g)
- Simple and reliable: no calibration needed!
- **NEW model with digital reading**
- Specific version for Mouse available, with lower (50% pressure range)
- Classic method since the 1960s: hundreds of papers published!
- **Upgrade kit for old Analgesy-Meters available**

**Ugo Basile: more than 25,000 citations**

## Instrument Description

The force is applied to the animal's paw, which is placed on a small plinth under a cone-shaped pusher with a rounded tip. The operator depresses a pedal switch to start the mechanism which exerts the force: the force increases at a constant rate, thus enabling perfect reproducible measurements to be made. The motor stops immediately the pedal is released.

Force is measured on the scale calibrated in 10g steps, The scale can be multiplied by 2 or 3, by placing on the slide one or two discs provided with as standard.

After each test the slide is returned to its starting point by lifting it and pushing it to the left. The 37215 features a low voltage synchronous motor and conforms the CE rules.

The standard 37215 can be conveniently used with mice. However, a dedicated model is also available, when lower pressure (50%) is desirable, model **37216**, which includes a special chisel-shaped pusher (also available separately)

## Data Acquisition

The classic Analgesy-Meter can now be integrated with a **specific pressure sensor and the related controller, available as optional, which upgrades the Analgesy-Meter to a fully digital device.**



As the basic design is unchanged, results with the digital model are **consistent with published data.**

The design of the upgrade kit makes it easy to retrofit existing UB Analgesy-Meters as well.

**Ask for details!**

## 37215 Specifications

Power Requirements: 115 or 230V, 50/60Hz, 15W max.

Start / Stop : by pedal switch

Force Range 37215 : 0 to 250, 500, 750 grams

37216 : 0 to 125, 250, 375 grams

### Physical:

Dimensions : cm 40 x 16 x 14

Packing : cm 55 x 45 x 36

Weight : 2.1Kg

Shipping Weight : 5.0Kg approx

## Ordering Information

**37215** **ANALGESY-METER**, complete with following standard accessories:-

**37215-302** Instruction Manual (on USB key)

**37215-303** Pedal Switch, complete with cable

**37215-323** Set of discs for additional weight

**37215-321** Plinth

**37215-322** Standard Pusher \*

**E-WP008** Mains Cord

\* Pushers in special material/shapes, available on request

**37216** **ANALGESY-METER**, low-pressure model, suitable for mice, with pusher 37215-326

## Optional Upgrade to Digital

**37215-100** **ANALGESY DAQ** upgrade kit

**37215-BUNDLE** Analgesy-Meter & Upgrade Kit

## Bibliography

### METHOD PAPER

- L.O. Randall and J.J. Selitto: "A Method for Measurement of Analgesic Activity on Inflamed Tissue" *Arch. Int. Pharmacodyn. CXI*, No. 4: 409-419, 1957.

### REFERENCE TO UB ANALGESY-METER (RAT)

- E.K. Joseph et alia: "Vascular Endothelial Cells Mediate Mechanical Stimulation-Induced Enhancement of Endothelin Hyperalgesia via Activation of P2X2/3 Receptors on Nociceptors" *J. Neuroscience* 33 (7): 2849-2859, 2013
- L. Ferrari et alia: "Role of Nociceptor  $\alpha$  CaMKII in Transition from Acute to Chronic Pain (Hyperalgesic Priming) in Male and Female Rats" *J. Neuro-science* 33 (27): 11002-11011, 2013
- D.A. Andersson et alia: "TRPA1 Has a Key Role in the Somatic Pro-Nociceptive Actions of Hydrogen Sulfide" *PLoS ONE* 7(10): e46917, 2012
- K. Király et alia: "The Dipeptidyl Peptidase IV (CD26, EC 3.4.14.5) Inhibitor Vildagliptin is a Potent Antihyperalgesic in Rats by Promoting Endomorphin-2 Generation in the Spinal Cord" *Eur. J. Pharmacol.* 650: 195-199, 2011
- Zs. Helyes et alia: "Involvement of Transient Receptor Potential Vanilloid 1 Receptors in Protease-Activated Receptor-2-induced Joint Inflammation and Nociception" *Eur. J. of Pain* 14 (4): 351-358, 2010

### REFERENCE TO UB ANALGESY-METER (MOUSE)

- K. Sugimoto et alia: "The Impact of Low-Dose Insulin on Peripheral Nerve Insulin Receptor Signaling in Streptozotocin-Induced Diabetic Rats" *PLoS ONE*: 8(8): e74247, 2013
- M.J. Hussey et alia: "Deletion of the Adenosine A2A Receptor in Mice enhances Spinal Cord Neurochemical Responses to an Inflammatory Nociceptive Stimulus" *Neuroscience Letters* 506(2): 198-202, 2012
- M.S. Nash et alia: "7-tert-Butyl-6-(4-Chloro-Phenyl)-2-Thioxo-2,3-Dihydro-1H-Pyrido[2,3-d]Pyrimidin-4-One, a Classic Polymodal Inhibitor of ..." *J. Pharmacol. Exper. Therap.* 342 (2): 389-398, 2012