

The Modular Sensory Analyzer for thermal testing

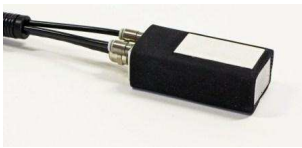
The Somedic MSA NG is an advanced diagnostic system which has evolved from Somedic SenseLab's extensive experience in developing and manufacturing sensory equipment. Somedic MSA NG sets a new standard in function, performance and safety, meeting the requirements of the most demanding user.



The Somedic MSA NG is a modular system, giving users the option to upgrade and/or add new functions. Also our modular components facilitate service and maintenance. All communication with the Somedic MSA NG goes by the standard serial port. A (laptop) computer is sufficient for efficient work.

The Thermal Stimulator features an innovative new design in thermodes. The new thermodes offer high thermal capacity and exceptionally even temperature distribution across the thermode surface. The thermodes include dual temperature sensors on the thermode surface and a third on the thermode heat exchanger.

Further needs? Somedic SenseLab has produced a version of the Somedic MSA NG that is compatible with fMRI equipment. Substantial modifications have been done and an upgrade kit is available. Please contact us for further information.



Thermode 25x50



Thermode 18x18



Thermode 9x9



Thermode 9x9dental

Key application

- Quantification of small fibre function

Key features

- Thermal stimuli with high accuracy and repeatability
- Thermodes of different sizes, that easily can be exchanged, adapting the Somedic MSA NG to tests at different anatomical locations
- A dedicated Windows program that handles all set-ups and running of the Somedic MSA NG, as well as storage of the results in a standard Access databases, that facilitates the generation of various types of reports

Technical Specification – Somedic MSA NG (Next Generation)

Intended use

Somedic MSA NG is intended for the study, in medical practice and research, of the relationship between the intensity of controlled thermal stimuli and the associated percept(s). Determination of perception and/or pain thresholds are performed by using a hand-held transducer to apply on intact skin stimuli of accurately controlled temperatures.

General information

Investigational paradigm	Method of Limits
Thermode data (std size)	Fluid cooled Peltier element
	Active area: 25 x 50 mm (12,5) cm ²
	Contact material: Non-allergic silver 925/1000 jeweller grade
	Temp measurement: 3 thermocouple elements
	Max. pump capacity: 36 W
	Range, steady state: 5 to 52 °C
	Range at 1 °C/s: 10 to 52 °C
Thermode control unit	Control resolution: >0.02 °C
	Calibration uncertainty: +/- 0.2 °C
Available thermode sizes	25 x 50; 18 X 18; 9 x 9; 9 x 9 dental (mm)

NB. Due to spatial summation it is highly recommended to use the largest thermode possible for your investigation in order to obtain the best possible result.

Physical characteristics

Size	Standard tabletop 450 x 325 x 185 (W x D x H) mm or 19 inch rackmount, 4U in height
Weight	11 kg

Environmental requirements

Temperature	17-28 degrees Celsius
Humidity	30-80% relative humidity, non-condensing

Electrical requirements

Mains power	200-240 VAC
	Consumption: < 270 W
	Frequency: 47-63 Hz
Thermode control unit	Voltage: < 16 V
	Current: < 3 A
	Consumption: < 270 W