

# REAL TIME SYSTEM APPLIED TO THE SOMATOSENSORIAL QUANTITATIVE THERMOTEST

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## Summary:

*This work is a real time application for a painless and bloodless analysis of the peripheral nervous system in patients with sensorial disorders due to affections in their thin myelinated fibers and their amyelinic fibers.*

*The Somatosensorial Quantitative Thermotest is an ideal method for this evaluation, since it allows not only to quantify sensorial deficit, but also to value positive sensorial phenomena.*

*The system integrates hardware and software and works based on a battery of tests which, by means of controlled stimuli measure the patient's answer to heat and cold. It should be noticed that these stimuli can be adapted in order to carry out a more accurate diagnosis.*

*Both hardware and software have been specially designed for this application. This permits to control stimuli generation in real time, which reduces sensorial thresholds appreciation errors.*

**Key words:** Signal Processing - Real Time - Medical Diagnosis

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