

# CATSYS 2000 - Product Description



FEATURES	BENEFITS
<ul style="list-style-type: none"><li>• Portable Windows based test system</li><li>• Objective neurological examination</li><li>• Quantifies co-ordination ability, reaction time, tremor and postural stability (balance)</li><li>• Allows customized test battery definitions, includes standard test battery</li></ul>	<ul style="list-style-type: none"><li>• Objectivity in the neurological examination thus increasing accuracy and reproducibility</li><li>• Increased examination efficiency and capacity for scientists and doctors</li><li>• Objective monitoring of patients with regards to CNS-related diseases, drug development, occupational health and neurotoxic exposure</li><li>• Objective monitoring of personnel and operators</li></ul>

## The CATSYS 2000 System

The CATSYS system is a Windows based test system for quantification of CNS-related human behavior such as coordination ability, reaction time, tremor and postural stability (balance). The CATSYS system relates patients' performance to human normality or monitors inter-patient variations over a period of time.

The CATSYS system is a portable test system based on a small data logger, which communicates with your PC via a serial cable. The data logger records data from up to four sensors: a Tremor Pen™, a touch recording plate, a reaction time handle and a force plate (for balance-recording).

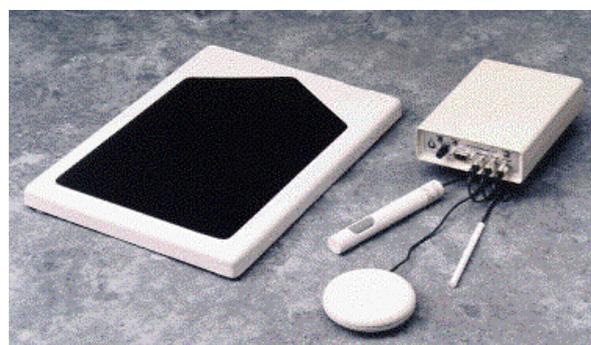
The Windows software includes user-friendly test routines and is very easy to operate. At the same time, the software contains a number of helpful facilities, such as customization of test data, bundling and export to most statistical systems.

## Applications

The CATSYS system is valuable for scientific researchers working with CNS-related diseases, drug development, occupational medicine, neurotoxic exposure and monitoring of personnel.

Examples of applications:

- Impacts from neurotoxic substances or drugs can be studied e.g. by applying and comparing statistical material to larger groups with control groups
- Side effects of psychopharmica and acceptable levels of side effects vs. drug-dose can be studied
- Monitoring of personnel e.g. pilots or drivers
- Studies within early diagnosis, supervision and adjustment of drug doses in the treatment of Parkinson's disease.



## Case studies

Many studies have been performed with the CATSYS system, and the references to various published papers can be found on our web site. Examples:

In South Africa, Italy and Denmark, steelworkers and miners are being examined to obtain a better understanding of the impact of long time exposure to manganese.

In Canada, USA and Denmark, the CATSYS system is being evaluated as a new tool for the diagnosis and supervision of Parkinson's disease.

In Denmark, we have quantified the devastating impact of mercury exposure on a group of workers, and followed their slow recuperation.

The experience from the case studies indicates that the CATSYS system increases the capacity and insight of the doctor or scientist, and it helps qualify interpretations and decisions.

A complete CATSYS test will take less than 15 minutes. The patients, supervised by trained personnel perform the test themselves. The supervisor can be trained in less than 4 hours, and is typically a nurse or a technical employee. It



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does not require the presence of either researcher or doctor.

## Demonstration

It is possible to download the CATSYS software from our homepage, as well as some sample test. This will give you a good impression of what benefits the CATSYS system has in store for you.

## Ordering

Our web site includes a facility for assisting you in composing and pricing a test system.

You may order a complete test system, or you may order parts thereof by removing sensors from the package.

## A complete test system includes

- Recording drum for hand pronation-supination and fingertap measurements
- Reaction time handle for reaction time testing
- Tremor Pen™ for tremor intensity- and frequency analysis measurements
- Force plate for postural stability testing

- Data logger, cables, manuals, calibration discs, special instrument suitcase

## Specifications

- Tremor frequency range: 2 to 15 Hz
- Tremor Sensitivity: acceleration > 0.3 cm/s<sup>2</sup>
- Sway Plate max/min load: 150/20 Kg
- Sampling frequency, tremor and force measurements: 32.5 Hz.
- Reaction time range: from 40 seconds tests for peak performance, to reaction time testing up to 10 min. for fatiguing and concentration ability testing
- PC System requirement: Windows 95, 98, 2000 or NT
- Total systems weight: 9.5 kg

## Service(s) and Hotline

- User information via e-mail sign-up groups
- One year warranty with software updates from our web site
- Continuous e-mail based hotline

## References

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