

# OL023 Research Olfactometer



**OL023 (variant OM12b)**

## Field of Application

The Olfactometer OL023 was especially developed for the application in clinical and industrial research. In the focus are experiments for obtaining evoked potentials, experiments in MRI, fMRI, CT or PET as well as experiments for the food industry. Customer wishes for individual adaptations or extensions are welcome to be implemented.

## Brief Description

The OL023 is a complex device to produce well-defined reproducible smell- and pain stimuli in the nose.

All air flows are warmed to avoid thermal irritations and keep the natural sensitivity of the nose. A special switching principle allows for rising edges of less than 50 ms so that olfactory evoked potentials can be obtained and tactile evoked potentials are avoided. The device can also be used with MRI-Scanners because a 12 m connection hose is available. This hose contains no ferro-magnetic materials. The special design of the hose connection makes it possible to feed the hose through a hole of 50 mm diameter.

The base flow rate is normally 8lpm. This flow rate can be adjusted to customer's needs.

## Features

The modular design permits an easy upgrade and maintenance. The olfactometer offers a lot of space for additional odorant channels which can be mixed and diluted via software and independent birhinal stimulation is possible as well. Advanced electronics in the modules ease the handling of the device dramatically compared to the previous types of olfactometers (OL006 and OL010).

The new graphic user interface facilitates intuitive handling. The controlling PC and the olfactometer are connected via a standard-USB connection. The OL023 provides an interface to transmit class data and timing information to external recording devices. The olfactometer can also trigger external devices or can be triggered externally, e.g. by a PC with E-Prime.

## Approval

The Olfactometer OL023 is approved according to 93/42/EC.