

# MouseOx *Plus*

## Pulse Oximeter for Mice and Rats

### General

The MouseOx® is the world's first and only patented **non-invasive** vital signs monitor, for small laboratory animals; specifically designed for mice, it can be used on larger rodents too!

The MouseOx and The MouseOx Plus® are being used by over 1,500 researchers and veterinarians from Universities, Pharmaceutical Companies, and CRO.

It is fully controlled by PC with a **user-friendly interface**.

The new **MouseOx Plus®** uses the same technology as the original MouseOx® but also includes significant improvements:

- the enhanced signal processing ability improves response to the motion of conscious subjects; the pulse signal is maintained and quickly re-acquired following significant movement.
- the modular software design allows the end user to purchase only the functionality that is needed.
- measurement of core body temperature is now available
- the optional Multiplexer makes it possible to monitor up to 16 animals (or 8 animals with temperature), using 1 MouseOx Plus.



Anesthetized Subjects

Conscious Subjects

MRI Compatible

**SMALL  
ANIMAL  
VITAL SIGNS  
MONITOR**

### Main Features

- Simple non-invasive sensor clips for mice and rats
- Monitor data in real time while recording
- USB plug-and-play, user-friendly interface
- High accuracy at heart rates up to 900 BPM
- Works on neonates through adults

## General

The **MouseOx Plus Small Animal Vital Signs Monitor** provides the following measurements:

- Arterial Oxygen Saturation
- Heart Rate
- Breath Rate
- Temperature (optional)
- Pulse Distention
- Breath Distention

MouseOx Plus® works with both mice and rats; there are 16 variations of the MouseOx® sensor available to accommodate various sensor placement options on mice and rats, ranging in size from neonatal mice to rats over 500gm. The subject must have a heart rate of at least 90 BPM and no greater than 900 BPM.

The MouseOx® oxygen saturation measurement has only been validated with mice and rats, but the instrument is being used in many research projects on subjects other than mice and rats. Some examples include Guinea pigs, hamsters, rabbits and small primates such as marmosets.

## Cardiopulmonary Data Recorder

When used as a Cardiopulmonary Data Recorder, the MouseOx Plus provides:

- Quick Check of Vital Signs
- Real-time Changes in Heart Rate, Breath Rate & O2 Saturation
- Oxygen Saturation During Hypoxemia
- Analog Data Output

## Surgery Monitor:

When used as a Surgery Monitor MouseOx Plus:

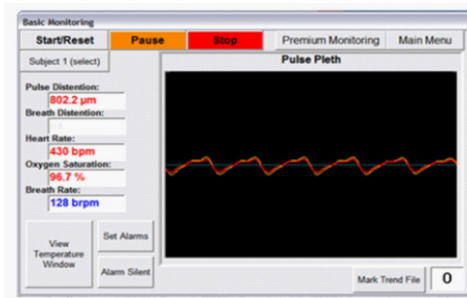
- Prevents Hypoxia During Surgery
- Titrates Mechanical Ventilation
- Ensures Proper Depth of Anesthesia
- Titrates Supplemental Oxygen

## Features:

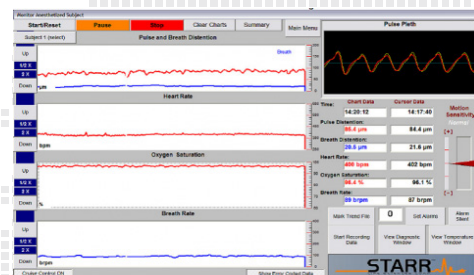
- Immediate responding, beat-by-beat measurements
- High accuracy at heart rates up to 900 BPM and breath rates up to 600 BrPM
- Drawing of blood is not required for any reason
- Simple non-invasive sensor clip enables quick and easy attachment to the subject
- USB plug-and-play technology easily turns your Windows based PC into a low cost physiologic monitor
- Monitor data in real-time, while recording to a file
- Experiment event markers allow the user to mark important events in the data file
- Enhanced signal processing ability improves response to the motion of conscious subjects

## Standard Software and Options

The **Standard software** includes basic monitoring and parameter alarms for all of the vital signs provided by the MouseOx Plus; it is included with all MouseOx Plus systems and is intended for basic monitoring applications.



The **Premium Monitoring & Recording Software** includes trending charts, real time recording options, file markers for noting important events, and a quick averaging diagnostic feature for spot-checking



The **Conscious Applications Software** includes enhanced filters and control algorithms to allow the MouseOx® Plus to monitor conscious unrestrained subjects, and provides a subject activity measurement

**MRI software** allows for the use of the MRI sensor.

## Ordering Information

- 015000** MouseOxPlus System, Operation 110V \*
- 015001** MouseOxPlus System, Operation 230V \*
- 015007** Premium Monitoring & Recording Software
- 015017** MRI Module, including Software, 20' Sensor with 15' Copper Wire and 5' Fiber Optic, 2 Mouse Thigh Clips, 2 Rat Foot Clips
- 015002** Conscious Applications Module

### Sensors

\* Two sensors, selectable when ordering, are included free of charge with each MouseOxPlus System:

**CollarClip™** available in XS, S, M, L, XL, 2XL size

**ThroatClip™** available in XS, S, M, L, XL, 2XL size

**Mouse Thigh sensor, Rat Foot Sensor**

### Physical

Dimensions	16x12x4(h)cm
Weight	2Kg
Shipping Weight	5Kg approx.
Packing	50x39x17cm

**NOTE:** Manufacturer's warranty for MouseOx & accessories is limited to 12 months.