

Michigan Instruments continues to be a leader and innovator in the respiratory care and emergency CPR industries. While our company began to revolutionize these industries in the 1960s we continue to forge ahead today, developing medical devices to serve a global base of users in respiratory care and training, and emergency medicine, specifically automated CPR devices.

These devices are all made in the U.S.A. at our Grand Rapids, Michigan facility. Partnerships with leaders in respiratory training, education and emergency medicine continue to influence our product development and enhancements.

Stay connected to our latest news and application information at [michiganinstruments.com](http://michiganinstruments.com).



## Automated CPR Devices

Both the Thumper and Life-Stat automated CPR devices provide exceptional value and ease of use in administering CPR. These devices provide users critical advantages compared to others on the market, including:

- Ability to move from Manual to Automated CPR in seconds
- High impulse compressions resulting in higher systolic pressure
- Hands-free, high quality, consistent CPR with fewer interruptions
- Better distribution of force with the massager pad, prevents patient injury
- Battery-free operation\*
- Provides greater access to patient chest
- Accommodates a wider-range of patients, including bariatric patients
- Options with devices that can administer 100 or 120 compressions per minute
- Option for built-in, coordinated ventilator

\*Use Oxygen to operate compressions



**1008 Life Stat® \$7,995**

**Thumper 1007CC® \$6,457**

**\*Includes: CPR Unit, Backboard, Carrying Case OHIO and DISS Adaptors**

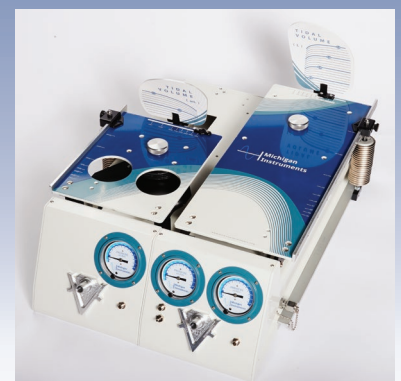
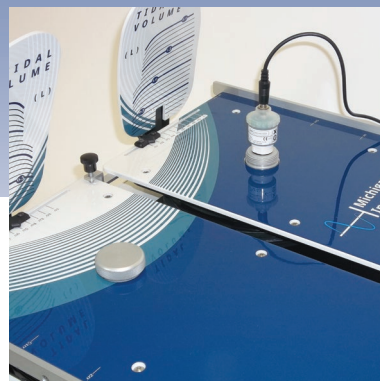
## Lung Simulation & Test Lungs

With a range of calibrated lung compliance and airway resistance settings, our lung simulator devices can replicate a wide variety of healthy and diseased human pulmonary conditions, providing accurate measurements of key respiratory parameters.

Unlike more basic test lungs, our Training Test Lungs and PneuView systems offer residual lung volumes and a dynamic response to therapy that more realistically represent the human pulmonary system. Our systems are available in Adult, Dual Adult and Adult/Infant models.

These lung simulation products provide a range of simulations and are particularly useful for training, testing, and demonstration of devices and therapies intended for use across a wide range of patient populations. Applications include:

- Classroom Instruction
- Product Evaluation
- Pulmonary Research
- Design Engineering
- Ventilator Testing
- Product Demonstration
- Quality Control
- Clinical Intervention



### TEST LUNG DEVICES

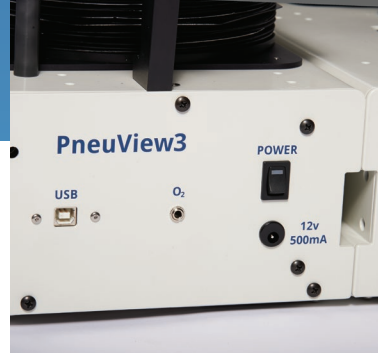
<b>Adult Infant</b>	<b>\$5,999</b>
<b>Dual Adult</b>	<b>\$5,799</b>
<b>Single Adult</b>	<b>\$4,699</b>

# PneuView®3 Software

The PneuView®3 Software is utilized with our Training & Test Lungs. Together, these items visually demonstrate, in real-time, the relationship between pressure, volume, and flow waveforms.

PneuView Systems add electronics and software to the Training Test Lung package. The PneuView electronic module is built into the Test Lung assembly and incorporates pressure transducers, environmental sensors, signal conditioning and analog-to-digital converter circuitry. This module communicates with PneuView software installed on a host computer. Users can display several respiratory parameter measurements and waveforms in real time. This data can be graphed, tabulated, or digitally recorded, then retrieved for later review and analysis.

- Recording a run of live ventilation data.
- Tracking of ventilator performance trends for up to 1,000 hours.
- Measurement of pressure, volume, flow and timing parameters.
- FiO2 and ambient temperature measurements.
- Is compatible with High Frequency Ventilation.
- Multiple ways to capture and review data.



## TEST LUNG DEVICES with PNEUVIEW®3

- Adult Infant PneuView3 System \$9,499**
- Dual Adult PneuView3 System \$8,999**
- Single Adult PneuView3 System \$7,199**

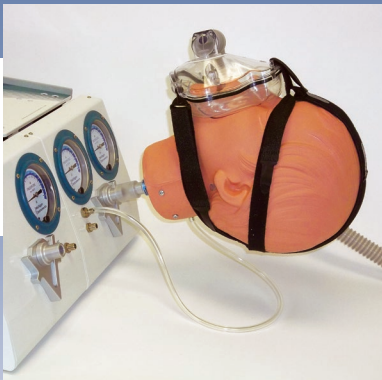
## Head Simulation Modules

The HSM™ Head Simulator Modules expand the applications for the Training Test Lung and PneuView Systems.

Available in Adult or Infant configuration, these head simulator modules provide secure and simple connection to the test lung. These can be used with the BSM Breathing Simulator Module to create a spontaneous breathing patient simulation with a face.

Ideal for testing and training:

- CPAP and BiPAP Systems
- Manual Resuscitators
- Non-Invasive Ventilators and Ventilation Modes
- Oxygen Delivery Systems



**Head Simulation Module - Adult & Infant \$500.00**

## Breath Simulation Module \$1,899 (Designed for use with the Dual Adult Versions)



## Breath Simulation Module

The Breath Simulation Module is a cost-effective device that turns the Dual Adult Model of our Training Test Lungs into a spontaneous breathing lung system. The breath rate, volume, and inspiratory flow-rates can be varied to produce a wide range of spontaneous breathing simulations.

Spontaneous breathing simulations are especially useful for designing, demonstrating, testing and providing training on non-invasive and supportive modes of ventilation and oxygenation.

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