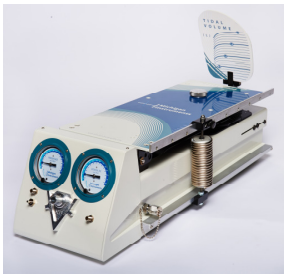
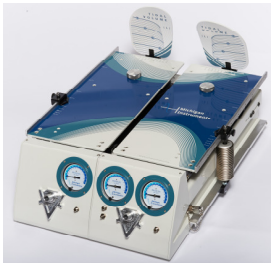
MedicalSimulator
INNOVACIÓN EN EDUCACIÓN

Michigan Instruments

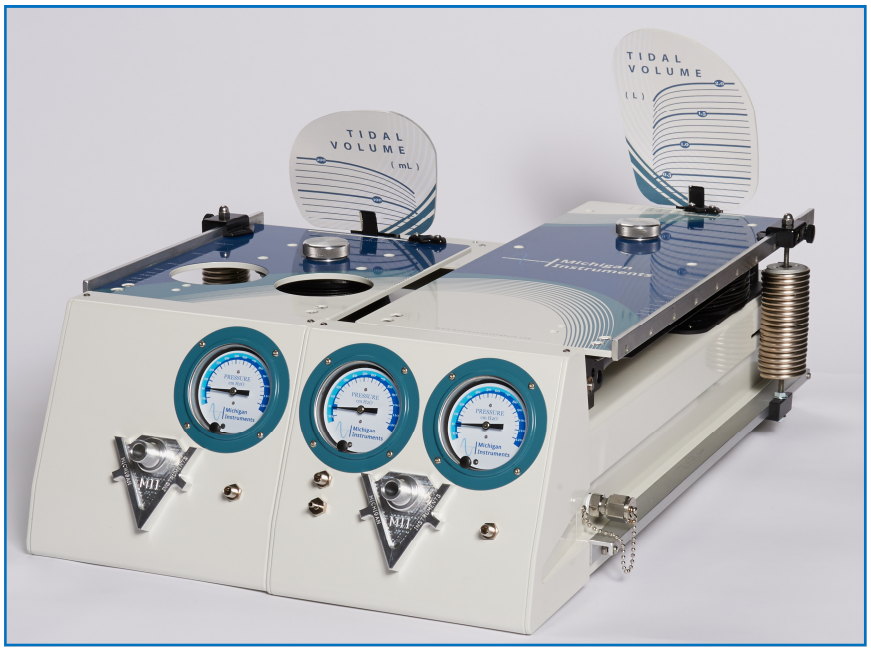
Available Models



Single Adult—
Models SLN and SL3*



Dual Adult—
Models DAN and DA3*



Adult Infant Lung Simulator Models AIN & AI3*

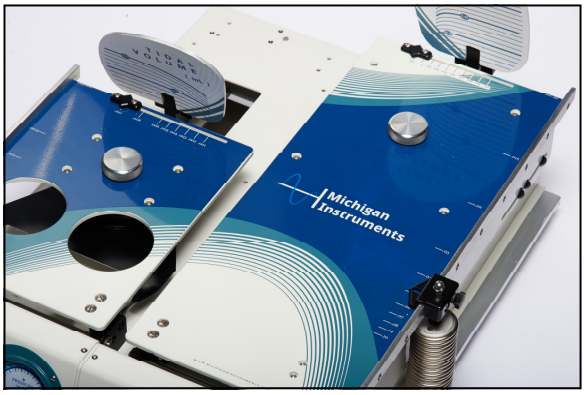
**Includes the PneuView®3 Software*

Our Training Test Lung (TTL) and PneuView3 products provide a range of realistic simulations and are particularly useful for training, testing and demonstration of devices and therapies intended for use across a wide range of patient populations.

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

What is the Adult Infant TTL®?

- A portable analog dual lung (one adult and one infant) system which accurately simulates human pulmonary function for testing ventilators or training under simulated load conditions.
- The lungs visually demonstrate a variety of normal and pathological pulmonary conditions.
- The adult lung holds a residual capacity typical of an adult human. The infant lung's residual capacity is typical of an infant, 6 to 12 months of age.
- The system provides an accurate measure of volumes, pressures and flow rates of medical equipment and replaces several measuring instruments at a fraction of their combined costs.



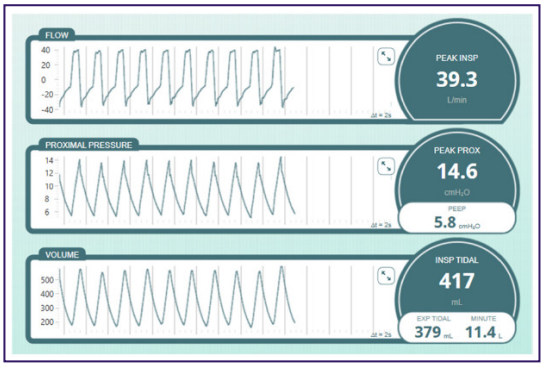
How does the TTL® work?

- The TTL® uses two lungs, each with a range of compliance settings to simulate the pulmonary system.
- The Pneuflo® resistors offer accurate simulation at both upper and lower airway resistance in exact accordance with ASTM standards. These resistors represent the parabolic flow characteristics of the human airway.
- The pressure corrected volume measurements match spirometer volumes measured on an actual patient with the same pulmonary compliance and airway resistance.

PneuView®3 Software*

Combine lung simulation with the versatility of a personal computer

PneuView®3 Software



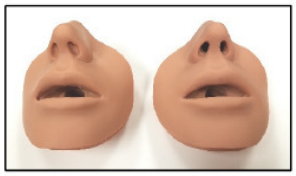
- Visually demonstrates, in real-time, the relationship between pressure, volume, and flow waveforms.
- Record a run of live ventilation data.
- Tracks ventilator performance trends for up to 1,000 hours.
- Measures pressure, volume, flow and timing parameters.
- Is compatible with High Frequency Ventilation.
- Provides FiO_2 and ambient temperature measurements
- Multiple ways to capture and review data.

PneuView®3 Software CALCULATIONS:

Breath Rate—Inspiratory Time—Expiratory Time—I:E Ratio—Tidal Volume—Minute Volume—Baseline Pressure—And many more

Head Simulation Modules

Expand the range of applications



HSM-A—Adult

HSM-I—Infant

Designed with open cavities and ideal for testing:

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

Specifications

Tidal Volume Capacity:
- Adult Lung .100 to 2.0 L
- Accuracy: +/- 3% or 20 mL
- Infant Lung .005 to 200 mL
- Accuracy: +/- 5% or 5 mL

Residual Lung Volume:
- Adult Lung 1.02 L
- Infant Lung 70 mL

Approximately 20”x25”x8”
- 37 lbs. (16.8kg)

Lung Compliance (adjustable):
- Adult Lung .01 to .10 L/cmH_2O
- Infant Lung .001 to .01 L/cmH_2O
- Accuracy: +/- 3% (at calibration volumes)

Airway Resistance (adjustable):
- Adult Lung Rp5, 20 or 50 cmH_2O/L/sec
- Infant Lung Rp50, 200 or 500 cmH_2O/L/ sec
- Accuracy: +/- 5% (at calibration flows)

Our Devices are manufactured in the USA, at our Grand Rapids, Michigan facility. Partnerships with leaders in respiratory care training, research, product development and education continue to influence the evolution of our TTL and PneuView3 products.