

iStan® Patient Simulator

Maximum mobility, ultimate performance



There's high fidelity, tetherless technology. Then there's high fidelity, tetherless technology on another level. iStan set a precedent for patient simulation by combining true physiological modeling with high fidelity, wireless technology. This remarkably innovative simulator delivers more mobility, more features, more scenarios, and more battery life.

Engineered for ultimate performance, iStan is certified for inflight use aboard major military aircraft and boasts high quality features including flail chest, trismus, cyanosis, central IV lines, and decreased range of cervical motion. When it's time for simulation iStan gives you more possibilities, so you have the freedom to do amazing things.



Technical Specifications

Standard Equipment

iStan wireless mannequin
Instructor's laptop
Muse operating software
TouchPro wireless patient monitor
6 patients
14 Simulated Clinical Experiences (SCEs)
4 SCE development licenses
4 CO₂ canisters
Mannequin tool kit
Electronic user guide
CAE Assurance plan with Free Training for Life



Optional Equipment

Ruggedized, metal bones mannequin
Tablet PC
Additional battery pack
Additional CO₂ canisters
FX Simulated Wound Kit
ICP
Hands-free cable kit

Optional Software

Learning Applications (More than 15 modules available)
Pharmacology Editor

Mannequin

6-foot, 124 lbs

Electrical

AC Input: AC 90-240VAC, 50/60Hz
Internal batteries: 16.8V 100-watt-hour lithium-ion, rechargeable
Run time: 7 to 8 hours

Ambient Temperature Range

Operation: 40°F to 104°F

Humidity

0% to 90% noncondensing

Key Features

Airway

- Upper airway designed from CT scan data of a real human patient
- Trismus
- Head tilt/chin lift
- Sensed jaw thrust
- Tongue swelling with variation of swollen, semi-swollen
- Intubation: orotracheal, nasotracheal, ET tubes, retrograde, fiber optic, right mainstem
- Gastric distention with esophageal intubation
- Combitube, LMA, and other airway adjunct placement
- Bag-valve-mask ventilation
- Surgical cricothyrotomy
- Needle cricothyrotomy

Breathing

- Bilateral and unilateral chest rise and fall
- Measures the presence or absence of carbon dioxide exhalation
- Spontaneous breathing
- Integrated SpO₂ finger probe with patient monitor
- Bilateral chest tube insertion with fluid output
- Bilateral needle decompression

Cardiac

- Defibrillation and cardioversion using live defibrillators
- Pacing (use of hands-free pads)
- 12-lead dynamic ECG display

CPR

- Correct hand placement, depth, and rate of compressions are reflected in physiological feedback rather than virtual target on instructor's workstation
- Adequate chest compressions result in simulated circulation, cardiac output, central and peripheral blood pressures, carbon dioxide return

Circulation

- Bilateral blood pressure measurement by auscultation and palpation
- Bilateral carotid, brachial, radial, femoral, popliteal, posterior tibial, dorsalis pedis pulses
- Cyanosis and capillary refill



Neurological

- Reactive pupils and blinking eyes
- Convulsions

Urinary

- Urinary catheterization
- Interchangeable genitalia

Vascular Access

- Bilateral peripheral IV ports
- Right jugular and left femoral central IV access
- Sternal and tibial IO site
- Bilateral thigh auto injection sites

Pharmacology System

- Automatically calculates 68 intravenous and inhaled medications
- Responses are automatic, dose dependent and follow appropriate time course

Trauma

- Flail chest
- Bleeding and fluid drainage linked to physiology
- Diaphoresis and secretions from eyes, ears, nose, mouth
- Two simultaneous bleeding/moulage sites with 1.8 L blood tank capacity

Sounds

- Pre-recorded sounds and voices
- Customized sounds and voices via the provided wireless microphone

Articulation

- Range of motion in the wrists, elbows, knees and ankles