

Caesar™ Trauma Patient Simulator

When ruggedization isn't an option



Exceptionally rugged, incredibly tough, Caesar lets you simulate extreme scenarios for trauma patient care. Military and first responders can perform water-based decontamination operations and perfect high-angle rescue operations. Furthermore, Caesar prepares medics for the most extreme situations with a 1.4L on-board blood tank capacity and six bleeding ports.

Caesar is engineered for maximum strength to withstand performance in environments where most other simulators fail. Harsh climates, challenging terrain, and ground evacuations, Caesar endures every obstacle with the most consistency in performance and technology.



Technical Specifications

Standard Equipment

Caesar wireless mannequin base unit is available with one healthy left leg and one amputated right leg or with two healthy legs

Instructor's tablet PC

Muse operating software

3 patients

10 Simulated Clinical Experiences (SCEs)

4 SCE development licenses

Electronic user guide

CAE Assurance with Free Training for Life



Optional Equipment

Tablet PC battery and charger

Additional mannequin battery and charger

Tablet PC case

Left leg with blast injury

Healthy right leg

Left leg with below the knee amputation

Left arm multiple shrapnel wound

Left leg below the knee shrapnel wound

Right arm multiple shrapnel wound

Right leg below the knee shrapnel wounds

Wound kit with:

- Right hand GSW
- Wrist injury
- Facial wound

Mannequin

6-foot-4, 150 pounds

Electrical

Input: 100-240V, 50/60Hz, 2.3A

Internal batteries: 14.4V, Lithium ion battery

Run time: 6 hours

Ambient Temperature Range

Operation: 36°F to 109°F

Humidity

0% to 90% noncondensing

Key Features

Trauma

- Bleeding and fluid drainage linked to physiology
- Six bleeding ports: upper body, abdomen, arms and legs
- 1.4L on-board blood tank capacity
- High pressure dramatic bleeding
- Tourniquet sensors are located bilaterally in the upper thighs and upper arms to support hemorrhage control
- Option to choose military or civilian set of SCEs
- All limbs can be removed to simulate multiple scenarios
- Eyes and speech reflect simulator's state of consciousness, medical conditions
- Mannequin has full range of motion in the neck, back, shoulders, elbows, forearms and wrists. Caesar can be posed sitting upright or lying in the recovery position
- Caesar's eyes and speech reflect his states of consciousness and pain level. Speech patterns change if a medic is nearby and as treatment is administered
- Voice can be heard 400 feet away

Ruggedization

- Supports water-based decontamination operations (up to 6 inches). Caesar has an IP-539 rating, which is issued to electronic enclosures that are not impacted by water sprayed at a maximum 60 degree angle.
- Supports tactical patient movements with full range of motion in the neck, back, shoulders, elbows, forearms and wrists
- Impact resistant and validated with shock testing, vibration testing, drop testing, drag testing
- Supports high-angle rescue operations and extrication
- Resistant to harsh temperatures, humidity, exposure to dirt, dust, and sand

Airway

- Upper airway designed from CT scan data of a real human patient
- Articulated mandible
- Intubation: orotracheal, nasotracheal, ET tubes, retrograde, fiber optic, right mainstem
- Combitube, LMA, and other airway adjunct placement
- Bag-valve-mask ventilation
- Needle cricothyrotomy



Neurological

- LED blinking eyes with directional eye movement
- Automatic changes based on inadequate respiratory and cardiovascular conditions

Breathing

- Bilateral and unilateral chest rise and fall
- Spontaneous breathing
- Bilateral needle decompression sites tied to physiology and verbal responses

Cardiac

- 12-lead dynamic ECG display

Circulation

- Bilateral carotid, radial, and femoral touch sensed pulses
- Dorsalis pedis touch sensed pulse on healthy leg

Vascular Access

- Bilateral IV cannulation with flashback in forearms
- Sternal Fast IO with confirmation capability and fluid bolus ready

Pharmacology System

- Pharmacology system models automatically calculate the pharmacokinetics and pharmacodynamics for 13 intravenous and inhaled medications
- All patient responses to drugs are automatic, dose dependent and follow appropriate time course

Sounds

- Pre-recorded sounds and voices

Articulation

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