Improving patient care under fire

Tactical Casualty Care Simulation Suite

The Tactical Casualty Care Simulation Suite is a suite of the world’s most lifelike and anatomically-accurate, high-fidelity, male and female simulators for comprehensive TCCC and medical provider level care training.

Featuring lifelike tissue and high anatomic fidelity, the TCCS and TCCS Plus line of simulators are highly ruggedized, water-resistant, fully mobile, and with over 10+ hours of battery life they are ideally suited for challenging, real-world, indoor and outdoor environments.
Tactical Casualty Care Simulator (TCCS)

Comprehensive Tactical Combat Casualty Care Preparedness

Airways
- Realistic airway - intubation capable
- Insert nasal & oral pharyngeal airways
- Manage difficult airway
- Perform advanced foreign body removal from airway
- Perform suction of the airway – nasal and oropharyngeal
- Tracheal intubation
- Supports supraglottic devices (incl. LMAs)
- Crycothyrotomy

Breathing
- Remote-controlled respiratory rate
- Bilateral and independent chest excursion
- Tension pneumothorax corrected by midclavicular and anterior axillary
- Support to external ventilation

Hemorrhage Management
- Remote-controlled pulsatile bleeding and arterial hemorrhage
- Bleeding control via pressure, elevation, and pressure points
- CAT and junctional tourniquets
- Apply tourniquets to control bleeding
- Apply junctional tourniquets to control massive hemorrhage
- Assess and treat upper and lower limb amputations
- Wound packing
- Multiple and independent bleeding sites
- Penetrating trauma wounds
- 3 liter blood reservoir

Circulation
- Remote-controlled heart rate
- Remote-controlled pulses—carotid and non-injured limbs
- Humeral and sternal intraosseous

Mannequin and Software
- Full-body, wireless and tetherless simulator
- Ruggedized and water-resistant for indoor and outdoor environments
- Realistic and lifelike 185 lb weight
- Fully-articulated limbs
- Easy-to-use instructor tablet and software (iOS, Android and Mac/PC)
- Two-way, headset communication system
- Simulation logs
- System “health” status with complete and real-time self-diagnostics
The World’s First Life-Identical Female Tactical Simulator for TCCC Training

Airways
- Assessment of oral and nasal areas
- Realistic airway - intubation capable
- Insert nasal & oral pharyngeal airways
- Manage difficult airway
- Perform advanced foreign body removal from airway
- Perform suction of the airway – nasal and oropharyngeal
- Tracheal intubation
- Supports supraglottic devices (incl. LMAs)
- Cryochothyrotomy

Breathing
- Remote-controlled respiratory rate
- Bilateral and independent chest excursion
- Tension pneumothorax corrected by midclavicular and anterior axillary
- Support to external ventilation

Hemorrhage Management
- Remote-controlled pulsatile bleeding and arterial hemorrhage
- Bleeding control via pressure, elevation, and pressure points
- CAT and junctional tourniquets
- Apply tourniquets to control bleeding
- Apply junctional tourniquets to control massive hemorrhage
- Assess and treat upper and lower limb amputations
- Wound packing
- Multiple and independent bleeding sites
- Penetrating trauma wounds
- 1.2 liter blood reservoir

Circulation
- Remote-controlled heart rate
- Remote-controlled pulses—carotid and non-injured limbs
- Humeral and sternal intraosseous

Mannequin and Software
- Full-body, wireless and tetherless simulator
- Realistic female form with less muscle mass, lighter skeleton and anatomically accurate genitalia
- Ruggedized and water-resistant for indoor and outdoor environments
- Realistic and lifelike 130 lb weight
- Fully-articulated limbs
- Easy-to-use instructor tablet and software (iOS, Android and Mac/PC)
- Two-way, headset communication system
- Simulation logs
- System “health” status with complete and real-time self-diagnostics
Tactical Casualty CareSimulator Plus (TCCS Plus)

A high-fidelity, clinically-responsive tactical trauma simulator for prolonged field care training

**Airways**
- Endotracheal tube placement
- Tongue-swelling for difficult airway
- Bag-valve-mask ventilation
- Assessment of oral and nasal areas
- Insert nasal and oral pharyngeal airways
- Supports supraglottic devices (incl. LMAs)
- Cricothyrotomy

**Breathing**
- Remote-controlled respiratory rate
- Bilateral and independent chest excursion
- Tension pneumothorax corrected by midclavicular and anterior axillary
- Support to external ventilation
- Bilateral chest tube insertion

**Medication and IV**
- Medication and Vascular Access
- Intramuscular sites for medication
- IV cannulation
- Humeral, sternal and tibial IO

**Circulation**
- Remote-controlled heart rate
- 4 lead ECG
- Unilateral blood pressure measurement
- Carotid, brachial, radial, femoral, popliteal, dorsals and posterior sensed pulses
- Defibrillation, cardioversion and pacing*

**Hemorrhage Management**
- Remote-controlled pulsatile hemorrhage
- Bleeding control via pressure, elevation, and pressure points
- CAT and junctional tourniquets
- Wound packing
- Multiple and independent bleeding sites
- Penetrating trauma wounds

**Neurological**
- Blinking eyes with tri-state pupils

**Sounds**
- Airway sounds
- Heart sounds
- Lung sounds

**Mannequin and Software**
- Full-body, wireless and tetherless simulator
- Ruggedized and water-resistant for indoor and outdoor environments
- Realistic and lifelike 185 lb weight
- 3 liter blood reservoir
- Fully-articulated limbs
- Easy-to-use instructor tablet and software (iOS, Android and Mac/PC)
- Student vital signs and monitoring tablet
- Two-way, headset communication system
- Simulation logs
- System “health” status with complete and real-time self-diagnostics

*requires iSimulate patient monitor software
Tactical Casualty Care Simulator Female Plus (TCCSF Plus)

High-Fidelity Medical Provider Level
Prolonged Field Care for the Female Combatant

Airways
Endotracheal tube placement
Tongue-swelling for difficult airway
Bag-valve-mask ventilation
Assessment of oral and nasal areas
Insert nasal and oral pharyngeal airways
Supports supraglottic devices (incl. LMAs)
Cricothyrotomy

Breathing
Remote-controlled respiratory rate
Bilateral and independent chest excursion
Tension pneumothorax corrected by midclavicular and anterior axillary
Support to external ventilation
Bilateral chest tube insertion

Circulation
Remote-controlled heart rate
4 lead ECG
Unilateral blood pressure measurement
Carotid, brachial, radial, femoral, popliteal, dorsalis and posterior sensed pulses
Defibrillation, cardioversion and pacing*

Hemorrhage Management
Remote-controlled pulsatile hemorrhage
Bleeding control via pressure, elevation, and pressure points
Combat Application Tourniquets, and junctional tourniquets
Wound packing
Multiple and independent bleeding sites
Penetrating trauma wounds

Neurological
Blinking eyes with tri-state pupils

Patient Monitoring
ECG monitoring
Patient vital signs
Multiple waveform display

Sounds
Airway sounds
Heart sounds
Lung sounds

Mannequin and Software
Full-body, wireless and tetherless simulator
Ruggedized and water-resistant for indoor and outdoor environments
Realistic and lifelike 130 lb weight
1.2 liter blood reservoir
Fully-articulated limbs
Easy-to-use instructor tablet and software (iOS, Android and Mac/PC)
Student vital signs and monitoring tablet
Two-way, headset communication system
Simulation logs
System “health” status with complete and real-time self-diagnostics

*requires iSimulate patient monitor software
TCCS Wound Configurations
Available for male and female simulators

1. GSW right side of the face
   Left back GSW exit wound
   GSW right side of the chest
   Left inguinal wound
   Right tib/fib open fracture

2. GSW left chest entrance wound
   GSW exit wound to the right back
   Left axillary wound
   Bilateral below the knee amputations

3. Right chest GSW entrance wound
   Left back GSW exit wound
   Left lower arm amputation
   Left tib/fib below the knee amputation
   Right inguinal wound
4. 2nd degree burns to the chest
   3rd degree circumferential
   Closed right leg fracture

   Airway compromise
   Electrical wound bottom of foot

5. Seat belt injury
   Pelvic injury with bruising/swelling
   Closed lower arm fracture
   Right tib/fib open fracture

6. Healthy body
   No visible wounds
Technical Specifications

Full-body wireless mannequin

Water resistant

Male: 76" H x 28" W x 12" D (192 cm x 70 x 30)
   185 lbs (82 Kg)

Female: 65" H x 23.6" W x 11" D (165 cm x 60 cm x 28 cm)
   130 lbs (59 kg)

(Simulator weight can vary +/- 5%)

Fully-articulated limbs

Internal batteries – dual pack

Li-Ion 18.5V, 6400 mAh

6A rate with built in thermal protection

UN38.3 certified

Run time: 10+ hours

Electrical Input: 110v – 240v

Two-Way communication system

Line of sight two-way communications headset

Range up to 100 yards

Instructor Control Interface tablet

Patient monitor tablet (Plus models only)

Instructor Control Interface Software and License

(iOS, Android, Windows 10, Mac OS 10.12 or greater)

Rugged carry case

One gal. concentrated antimicrobial, antifungal, antifreeze simulated blood

Contact your Operative Experience representative for more information about all our training products.