



**Gaumard®**  
Simulators for Health Care Education



# Premie HAL® S2209

## 30-Week Premature Infant Patient Simulator

- Anatomically accurate oral cavity and airway
- eCPR™ - Real-time CPR quality monitoring
- Automatic, spontaneous chest rise and palpable pulses
- IV cannulation, umbilical catheterization, IO infusion
- Wireless and tetherless; fully functional during transport
- Includes Premie Care Simulation Learning Experiences™ scenario package



## Introducing the new Premie HAL®

The Premie HAL S2209 is a lifelike, wireless and tetherless 30-week preterm patient simulator designed to facilitate the training of residents and healthcare professionals in the areas of preterm airway management, resuscitation, stabilization, transport, and intensive care.



Realistic chest recoil, visible chest rise with PPV, and variable central cyanosis

## Real-time CPR quality feedback and performance reports

eCPR™ sensors inside Premie HAL capture ventilation and compression quality metrics in real-time, allowing educators to identify and address gaps in performance with greater efficacy.

- Compression depth, rate, and interruption duration
- Ventilation rate and duration
- Smart CPR voice coach
- Performance report summary

## The unique challenge of preterm airway management

Developed using the latest laser and 3D printing technology, Premie HAL presents participants with the most accurate airway anatomy available. High anatomical accuracy ensures participants can use standard airway intubation devices to develop technique and fine motor skills.



Supports IO infusions



IV access on dorsum of hands, dorsum of left foot, and umbilicus



Automatic, spontaneous breathing and bilateral palpable pulses



Anatomically accurate oral cavity and airway



Premie HAL connected to a mechanical ventilator using a standard patient circuit.

### Wireless and tetherless. Ready for transport, handoffs, and evac drill exercises

Premie HAL is fully functional in transit thanks to its extra-long battery life and proven wireless technology.



Premie HAL fully functioning inside a transport incubator.

### Real mechanical ventilation. Real feedback.

Premie HAL features compliant lungs that produce realistic PV waveforms on real mechanical ventilators and other respiratory equipment. This allows participants to follow guideline-recommended settings and algorithms while developing skills more directly transferable to real situations.



### A complete solution. Includes UNI® tablet PC and Simulation Learning Experiences™ scenario package.

Premie HAL includes the powerful UNI control interface and 5 outcome-focused scenarios accompanied with a printed guide for setting up, planning, and facilitating each learning experience.

- CPAP and OG Tube Placement
- Premie Early-Onset Sepsis
- Premie Resuscitation
- Respiratory Distress Syndrome
- Umbilical Catheterization

### Gaumard Vitals™ Virtual Patient Monitor

The optional Gaumard Vitals Patient Monitor simulates the functionality and look of a real patient monitor, allowing participants to practice data interpretation, documentation, and clinical decision-making skills.



## Features

### General

- Gestational age: 30-week preterm neonate
- Weight: 2.9 lb. (1.32 kg)
- Length: 15.71 inches (39.9 cm)
- Smooth and supple full-body skin
- Tetherless and wireless; fully responsive during transport<sup>1</sup>
- Internal rechargeable battery provides hours of tetherless operation<sup>2</sup>
- UNI® Tablet PC included
- Includes 5 preprogrammed SLEs and Facilitator's Guidebook

### Neurological

- Crying synchronized with breathing

### Airway

- Lifelike and anatomically accurate oral cavity and airway
- Supports NG and OG tube placement
- Supports endotracheal intubation using standard adjuncts
- Selectable upper airway sounds synchronized with breathing

### Breathing

- Automatic, spontaneous breathing
- Programmable respiratory rates and I:E ratios
- Preprogrammed respiratory patterns and grunting
- Selectable normal and abnormal lung sounds
- Compliant lungs present visible chest rise following guideline-recommended flow, PIP, and PEEP values
- Supports standard positive pressure ventilation devices including bag-valve-mask, resuscitators, mechanical ventilators, CPAP, and more
- Real-time PPV ventilation feedback via UNI control interface
- Programmable unilateral chest rise simulates pneumothorax

### Circulation

- Central cyanosis with variable discoloration
- Includes comprehensive library of ECG rhythms with customizable beat variations
- Supports ECG monitoring using real devices
- Normal and abnormal heart sounds synchronized with ECG
- eCPR™ Real-time quality feedback and reporting
  - » Time to CPR
  - » Compression depth/rate
  - » Compression interruptions
  - » Ventilation rate
  - » Excessive ventilation
  - » Smart CPR voice coach
  - » CPR performance report
- Automatic and palpable pulses
  - » Fontanelle
  - » Brachial
  - » Umbilicus
  - » Femoral
- Pulse strength is blood pressure-dependent
- Supports IV cannulation: bolus, infusion, and sampling
  - » Dorsum of hand (bilateral)
  - » Umbilical catheterization (UVC/UAC)
  - » Dorsum of foot
- Intraosseous access at right tibia supports continuous infusion
- Temperature sensor placement detection
- Supports virtual pacing and defibrillation via Gaumard Vitals™ Virtual Patient Monitor

### UNI® Simulator control interface

- Supports operation on-the-fly or by way of programmable scenarios
- 3D Patient Visualization
- Virtual patient monitor view
- Scenario designer
- Preprogrammed and editable scenario library
- eCPR™ – CPR quality monitor and trainer
- Hypoxia model
- Lab report designer
- Questionnaire form designer
- Time-stamped event logging and provider actions tracking

## Premie HAL® S2209

S2209.PK

### Package contents

Premie HAL S2209, UNI® Tablet PC, Simulation Learning Experiences scenario package, battery charger, replacement IV lower arms, IO inserts, umbilical cords, post cord-detachment navel, carrying case, user manual, One-Year Limited Warranty. Extended service plans available. Patent; other patents pending.

## Gaumard Vitals™ Bedside patient monitor

30080154B

Gaumard Vitals bedside virtual patient monitor. Simulates 20+ dynamic numerical parameters and waveforms. Customizable interface.

## Gaumard Vitals™ Mobile patient monitor

30081003A

Portable Gaumard Vitals virtual patient monitor. Simulates 20+ dynamic numerical parameters and waveforms. Customizable interface.

## Care in Motion™ Mobile Video-assisted debriefing system

CIM.PK



- Care in Motion Tablet PC
- 3 Battery-powered HD wireless cameras
- 3 Adjustable camera grips
- Transport case
- One-Year Limited Warranty
- Extended service plans available

## Request a quote

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