

## Salient Characteristics

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### **Pronk SC-5 Advanced SimCube Patient Simulation Kit (Brand Name or Equal)**

#### **1. General**

The SimCube Patient Simulation Kit is diagnostic equipment used by Biomedical Engineers to assess medical equipment to insure their proper function. The different simulation equipment pieces are essentially plugged into various medical equipment to simulate human rhythms, beats, pulses so that the medical devices can be calibrated, tuned, or fixed.

#### **2. Warranty Requirements**

- a. Manufacturer must offer a 4-year warranty that product is free from defects in materials and workmanship. All defects will be replaced or repaired by the manufacture at no cost to the buyer.

#### **3. Distinctive Features – NIBP (Non-Invasive Blood Pressure) Simulator**

- a. NIBP Simulations:
  - Adult (120/80 mmHg)
  - Neonatal (70/40 mmHg)
  - Hypertensive (190/120 mmHg)
  - Hypotensive (80/40mmHg)
- b. Digital Manometer
- c. 12-lead ECG simulations
- d. Arrhythmia
- e. Respiration
- f. Invasive Blood Pressure Dynamic values (120/80, 70/40, 190/120)
- g. Static Invasive Blood Pressure values (0, 25, 50, 100, 150, 200, 250)
- h. Heart Rate/Respiration sequence
- i. Pacer
- j. Over Pressure Test Mode
- k. Leak Rate Test Mode

#### **4. Distinctive Features – SpO2 Simulator (Pulse Oximeter)**

- a. 5-Presets of Simulations:
  - o Mode 1
    - Saturation: 85%
    - Heart Rate: 80 bpm
    - Perfusion Index: approx. 2.0
  - o Mode 2
    - Saturation: 95%
    - Heart Rate: 40 bpm
    - Perfusion Index: approx. 2.0
  - o Mode 3
    - Saturation: 98%
    - Heart Rate: 80 bpm
    - Perfusion Index: approx. 2.0
  - o Mode 4
    - Saturation: 98%
    - Heart Rate: 140 bpm

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- Perfusion Index: approx. 2.0
  - o Mode 5
    - Saturation: 99%
    - Heart Rate: 80 bpm
    - Perfusion Index: approx. 0.2
  - b. One-button operation
  - c. Battery Life: minimum 8-hours

**5. Distinctive Features – Multi-Parameter Patient Simulator**

- a. 12 Lead ECG (for respiration and arrhythmia) with built in banana plug interface
- b. 4-channels of Invasive Blood Pressure
- c. Cardiac Output
- d. YSI 400/700 temperature