

Technical Specifications for SimCube SC-5

Physical Dimensions	
Size	3"x 3" x 3.5" (7.6cm X 7.6cm X 8.9cm)
Weight	2.5 Lbs
Power	External A/C Adaptor (Output: 6VDC / 1.8amps, 2.1mm, center positive connector) or 4 AA Batteries (with Battery Boost Option)
NIBP Connection	Quick Disconnect, Male
ECG/Resp Connection	10 ECG snaps
IBP Connection	Mini-DIN
Manometer	
Range	- 400 to + 400 mmHg
Resolution	Pos pressures +/-0.1 mmHg, Neg pressures +/-1 mmHg
Accuracy	+/-1.0 mmHg
User Interface	
Single Button Operation	
Operating Modes	Adult NIBP Neo NIBP Hypertensive NIBP Hypotensive NIBP Manometer Over Pressure (Peak Detect) HR Seq. / Alarm Test ECG Pacer ON Arrhythmia Sequence Invasive BP Zero Invasive BP 100, 200 Invasive BP Sequence
NIBP Adult Simulation	
Simulated Pressure	120/80 (97) mmHg
Simulated Heart Rate	70 bpm
Simulated Pulse Volume	1 ml
NIBP Neonatal Simulation	
Simulated Pressure	70/40 (51) mmHg
Simulated Heart Rate	95 bpm
Simulated Pulse Volume	0.5 ml
NIBP Hypertensive Simulation	
Simulated Pressure	190/120 (142) mmHg
Simulated Heart Rate	70 bpm
Simulated Pulse Volume	1 ml
NIBP Hypotensive Simulation	
Simulated Pressure	80/40 (58) mmHg
Simulated Heart Rate	70 bpm
Simulated Pulse Volume	1 ml
ECG Simulation	
Isolated	Yes
Synchronized with NIBP	Yes
R Wave Size	1mV (lead II) +/- 10%
R Wave Width	35 ms
Wave Shape	QRS wave
Connection	10 Snaps
Simulation Rates	70bpm, (95 for neo), Asystole, Arrhythmia, Pacer, HR seq.

HR Sequence / Alarm Test	
	30 seconds each of: 30, 60, 90, 120, 45, 160, and 220 bpm
Pacer Simulation	
Isolated	Yes
Synchronized with NIBP	Yes
Pacer Size	3 mV
Pacer Width	1.2 ms
Respiration Simulation	
Isolated	Yes
Synchronized with NIBP	Yes
Wave Shape	Square Wave
Size	4 Ohm
Simulation rates	20bpm, (40 bpm for neonatal), Apnea, Sequence = 00, 30, 45, 60, 22, 30, 80, 110
Arrhythmia Simulation	
	Cardiac failure sequence: approximately 90 seconds of normal beats interspersed with PVCs and Runs, followed by approx. 30 seconds of VTAC, 30 seconds of VFIB, and 30 seconds of asystole.
Peak Detect/Overpressure	
Resolution	1 mmHg
Invasive Blood Pressure Simulation	
Isolated	Yes
Synchronized with NIBP	Yes
Excitation Voltage	DC range = 3.3 to 5.7 AC range = 6.65 to 11.4p-p
Pressure range	0-250 mmHg
Simulated Pressure accuracy	+/- 1 mmHg
Wiring	+ Excit = pin 1, - Excit = pin 4, + Sig = pin 3, -Sig = pin 6
Simulation rates	Dynamic = 120/80, 70/40, 190/120. Static = 0, 100, 200. Step = 0,25,50,100,150,200, 250
Environmental	
Voltage Range	100-240 VAC, 50-60 Hz
Operating	Temperature: 10°C to 35°C (50°F to 95°F), Relative Humidity: 10 to 80% non-condensing, Altitude: 3,000m (9,843ft)
Storage	-20°C to +60°C (-4°F to +140°F)