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Technical Specifications for all SimCube Configurations

Physical Dimensions	**SC-5**	**SC-3/4**	**SC-1/2**
Size	3”x 3” x 3.5” (7.6cm X 7.6cm X 8.9cm)	3”x 3”x 3.5” (7.6cm X 7.6cm X 8.9cm)	3”x 3”x 3.5” (7.6cm X 7.6cm X 8.9cm)
Weight	2.5 Lbs	2.5 Lbs	2.5 Lbs
Power	External A/C Adaptor (Output: 6VDC / 2amps, 2.1mm, center positive connector) or 4 AA Batteries (with Battery Boost Option)	External A/C Adaptor (Output: 6VDC / 2amps, 2.1mm, center positive connector) or 4 AA Batts (with Battery Boost Option)	External A/C Adaptor (Output: 6VDC / 2amps, 2.1mm, center positive connector)
NIBP Connection	Quick Disconnect	Quick Disconnect	Quick Disconnect
ECG/Resp Connection	10 ECG snaps	10 ECG snaps	10 ECG snaps
IBP Connection	Mini-DIN		
Manometer			
Range	– 400 to + 400 mmHg	0 to +480 mmHg	0 to +480 mmHg
Precision	0.1 mmHg	0.5 mmHg	0.5 mmHg
Accuracy	+/-1 mmHg	+/-1% of reading	+/-1% of reading
User Interface			
Single Button Operation			
Operating Modes	Adult NIBP Neo NIBP Hypertensive NIBP Hypotensive NIBP Manometer Peak Detect / Overpressure HR Seq. Alarm Test ECG Asystole ECG Resp OFF ECG Pace ON Arrhythmia Sequence Invasive BP Zero Invasive BP 100, 200 Invasive BP Sequence	Adult NIBP Neo NIBP Hypertensive NIBP Manometer Peak Detect / Overpressure Alarm Test (SC-4) ECG Asystole (SC-4) ECG Resp OFF (SC-4) ECG Pace ON (SC-4)	Manometer Adult NIBP Neo NIBP Hypertensive NIBP ECG Asystole (SC-2) ECG Resp OFF (SC-2) ECG Pace ON (SC-2)
NIBP Adult Simulation			
Simulated Pressure	120/80 (97) mmHg	120/80 (97) mmHg	120/80 (97) mmHg

Simulated Heart Rate	70 bpm	70 bpm	70 bpm
Simulated Pulse Volume	1 ml	1 ml	1 ml
NIBP Neonatal Simulation			
Simulated Pressure	70/40 (51) mmHg	70/40 (51) mmHg	70/40 (51) mmHg
Simulated Heart Rate	95 bpm	95 bpm	94 bpm
Simulated Pulse Volume	0.25 ml	0.25 ml	0.25 ml
NIBP Hypertensive Simulation			
Simulated Pressure	190/120 (142) mmHg	190/120 (142) mmHg	190/120 (142) mmHg
Simulated Heart Rate	70 bpm	70 bpm	70 bpm
Simulated Pulse Volume	1 ml	1 ml	1 ml
NIBP Hypotensive Simulation			
Simulated Pressure	80/40 (58) mmHg		
Simulated Heart Rate	70 bpm		
Simulated Pulse Volume	1 ml		
ECG Simulation		**(SC-4 only)**	**(SC-2 only)**
Isolated	Yes	Yes	Yes
Synchronized with NIBP	Yes	Yes	No
R Wave Size	1mV (lead I) +/- 5%	1mV (lead I) +/- 5%	1mV (lead I) +/- 5%
R Wave Width	35 ms	35 ms	35 ms
Wave Shape	QRS wave	QRS wave	R wave only
Connection	10 Snaps	10 Snaps	10 Snaps
Simulation Rates	70, 95, Asystole, Arrhythmia, Pacer, HR seq.	70 bpm (95 bpm for neonatal), Asystole, Pacer	70 bpm (94 bpm for neonatal), Asystole, Pacer
HR Sequence (Alarm Test)		**(SC-4 only)**	
	30 seconds each of: 30, 60, 90, 120, 45, 160, and 220 bpm	30 seconds each of: 30, 60, 90, 120, 45, 160, and 220 bpm	
Pacer Simulation		**(SC-4 only)**	**(SC-2 only)**
Isolated	Yes	Yes	Yes
Synchronized with NIBP	Yes	Yes	No
Pacer Size	3 mV	3 mV	3 mV
Pacer Width	1.2 ms	1.2 ms	1.2 ms
Respiration Simulation		**(SC-4 only)**	**(SC-2 only)**
Isolated	Yes	Yes	Yes
Wave Shape	Square Wave	Square Wave	Square Wave
Size	4 Ohm	4 Ohm	4 Ohm

Rate	20 bpm (40 bpm for neonatal)	35 bpm (47 bpm for neonatal)	35 bpm (47 bpm for neonatal)
Simulation rates	30 seconds each of: Apnea, 30, 45, 60, 22, 80, 110.	30 seconds each of: Apnea, 30, 45, 60, 22, 80, 110.	
Arrhythmia Simulation			
	Cardiac failure sequence: 90 seconds of normal beats interspersed with PVCs and Runs, followed by 30 seconds of VTAC, followed by 30 seconds of VFIB, concluding with 30 seconds of asystole.		
Peak Detect			
Precision	1mmHg	1mmHg	
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	100-240 VAC, 50-60 Hz	100-240 VAC, 50-60 Hz