

– Biomedical

BP Pump 2

The BP Pump 2 is a second-

Non-Invasive Blood Pressure Simulator



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generation non-invasive blood pressure (NIBP) monitor analyzer that efficiently verifies oscillometric adult and neonatal NIBP. The BP Pump 2's unique feature set includes tests to accurately interrogate wrist-cuff monitors, internal cuff volumes, and optional 5-lead synchronized ECG simulations for spot checks on the monitor. The simulated peripheral pulse is synchronized with this electrical ECG signal for testing NIBP monitors utilizing gated measurement for noise/ artifact rejection.

Specifications

Pressure generation/	Static-pressure range: 50 mmHg to 400 mmHg (53 kPa)
measurement	Difference between target pressure and actual pressure: < 5 mmHg
	Pressure leak/relief test
	Normal sinus rhythm (BP and ECG)
	Healthy heart, weak pulse, mild exercise, strenoue exercise, obese subject, geriatric subject, tachycardia, bradycardia
	Irregular pulse (BP and ECG)
	PAC1, PAC2, PVC, atrial fib
	Four respiratory artifacts
	Three adult wrist-cuff simulations
	User-definable simulations
	Neonatal internal cuff simulations
	Autosequences: Nine for four tests; up to five simulations
Display	Bright, large 4-line x 40-character alphanumeric display with backlighting
Electrical ECG	Signals: RA, LA, RL, LL, V
	Amplitude: 1 mV peak (\pm 10 %) NIBP peripheral pulse synchronized with ECG signal
Pressure measurement	Units: kPa, mmHg, cmH ₂ O, cmH ₂ O and psi (user selectable)
	Range: 0 mmHg to 400 mmHg
	Resolution, BP Pump 2L (basic model) 0 mmHg to 300 mmHg: \pm 0.5 % of reading \pm 1 mmHg 301 mmHg to 400 mmHg: \pm 2 % of reading
	Resolution, BP Pump 2M (high-accuracy version) < 0.8 mmHg (0.1 kPa)
Dimensions (WxDxH)	23.6 cm x 24.9 cm x 12.2 cm (9.3 in x 9.8 in x 4.8 in)
Weight	3.2 kg (7.1 lb)

Product comparison chart

Model	BP Pump 2	CuffLink	
Wrist cuff simulations	Yes	No	
ECG syncronized	Option	No	
Leak test	Yes	Yes	
Over pressure test	Yes	Yes	
Manometer	Yes	Yes	
medTester compatible	No	Yes	

Key features

- Dynamic BP simulators for arm- and wrist-cuff monitors
- ECG and arrhythmia simulation synchronized with BP (optional)
- Internal pump for highand low-pressure release verification, leak testing, and pressure sourcing
- · Internal adult/neonatal cuffs elimates need for external cuffs
- · Four respiratory artifacts, including spontaneous breathing and controlled ventilation
- Multiple arrhythmia simulations, including premature atrial contractions #1 and #2, atrial fibrillation, and PVCs

Optional accessories

2755836 Ansur BP Pump 2 Plug-in 2222822 Soft-sided Vinyl Carrying Case

2391894 ECG Adapter Block (allows simulation of 5-lead ECG waveforms)

2248899 Printer, Seiko DPU-414-30 B, 120 V power supply 2399531 Printer, Seiko DPU-414-30B, 200 V power supply 2238659 Serial Cable, D9M-D9F 2392328 Neonatal/external cuff mandrel (truncated plastic cylinder diameters: 7.6, 10, and 14 cm) 2391875 Wrist cuff mandrel (adult)

Included accessories

2391882 Accessory Kit (tubings and fittings) User Manual Power Cord (country specific)

Ordering information BP Pump 2_L (standard pressure

transducer) BPPUMP2_t-US 120 V BPPUMP2_L-AUS 250 V BPPUMP2_L-DEN 250 V 2394912 BPPUMP2,-SHK 250 V BPPUMP2,-ISR 250 V BPPUMP2_L-ITAL 250 V

2394947 BPPUMP2,-IND 250 V **2394958** BPPUMP2_L-SWZ 250 V

2394964 BPPUMP2,-UK 250 V

BP Pump 2_M (high-accuracy pressure transducer)

2249049 BPPUMP2_M-US 120 V **2394973** BPPUMP2_M-AUS 250 V 2394986 BPPUMP2_M-DEN 250 V **2394999** BPPUMP2_M-SHKO 250 V 2395003 BPPUMP2_M-ISR 250 V 2395015 BPPUMP2_M-ITAL 250 V **2395026** BPPUMP2_M-IND 250 V 2395032 BPPUMP2_M-SWZ 250 V **2395044** BPPUMP2_M-UK 250 V