



NIBP Simulator & Analyzer - BPA700

- ◆ Compliant with IEC 80601-2-30 standard, ensuring consistency and repeatability of dynamic blood pressure measurements
- ◆ Record and playback blood pressure raw data
- ◆ Compatible with all types of blood pressure monitors, including wrist, arm, and tunnel
- ◆ Wide display range: includes dynamic blood pressure range (10-300 mmHg) and static pressure range (20-400 mmHg)
- ◆ Dynamic pressure repeatability within 2mmHg at maximal pulse volume
- ◆ Provide Software Development Kit (SDK) to develop customized or automatic testing software
- ◆ Auto-sequence assists users in easily creating semi-automatic test procedures for more efficient and automated testing
- ◆ Optional Standard Assistant Software simplifies IEC 80601-2-30 standard testing into sequence, parameter, pass criteria and Test Report helping users keep records as HTML file
- ◆ Adjustable blood pressure envelope to simulate different blood pressure

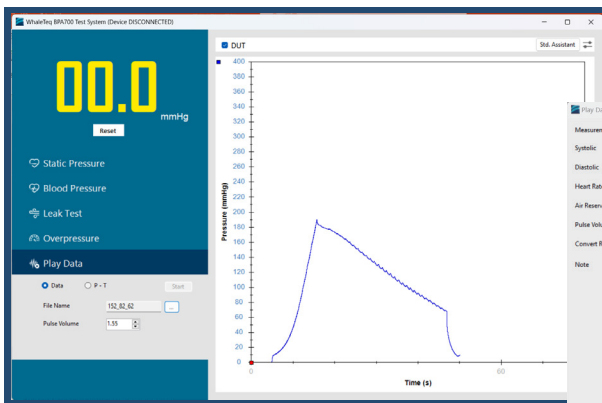


Figure 1: Record and Playback Blood Pressure Raw Data

Directly records blood pressure raw data and converts them into files for playback, optimizing BP algorithms

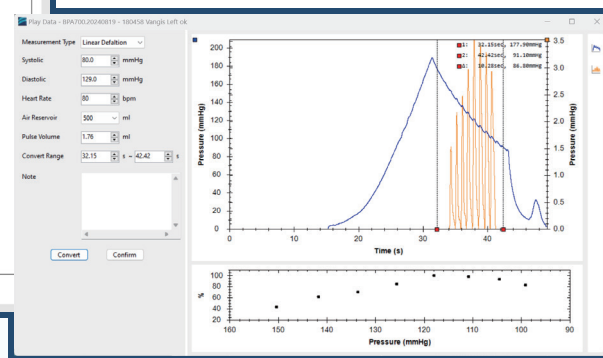


Figure 2: Pressure Dynamic Graph

Display pressure-time graph and with four adjustable cursors to view detailed pressure and time

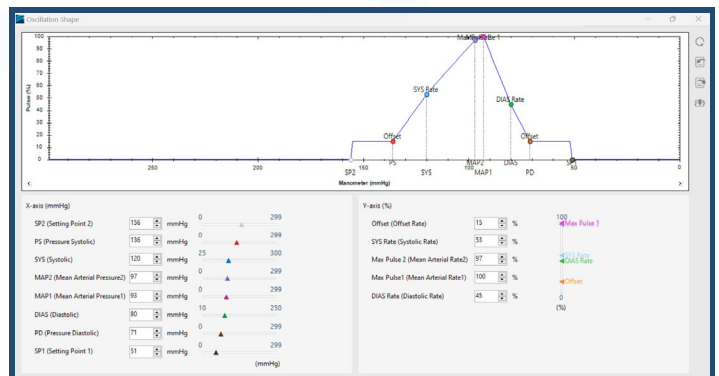
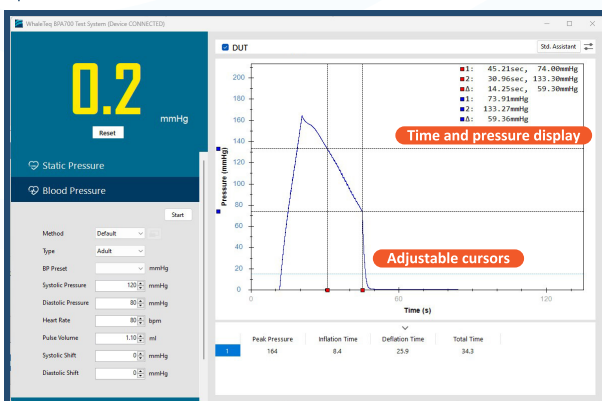


Figure 3: Adjustable Envelope

Adjustable parameters of blood pressure, and support measuring during cuff inflation and deflation

Figure 4: Standard Assistant Software

Compliance with NIBP blood pressure monitor regulations for IEC 80601-2-30:2018/YY9706.230

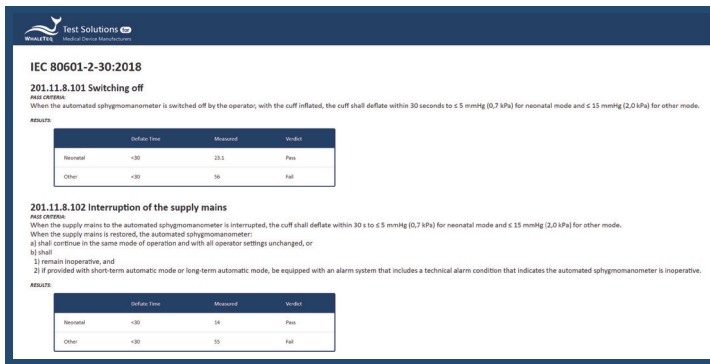
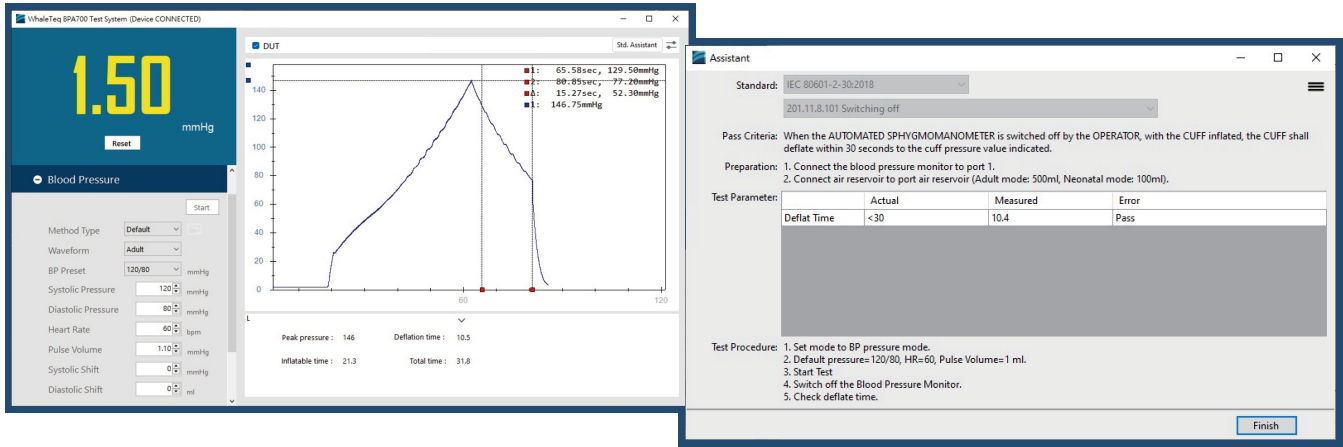


Figure 5: Test Report

Generate test report automatically to keep records as HTML file

Specifications

Parameters	Specifications
Pressure Unit	mmHg, kPa
Manometer	Range: 0 to 400mmHg Resolution: 0.1mmHg Accuracy: ± (0.3% of reading + 0.5mmHg)
Pressure Source	Target Pressure: 20 to 400mmHg Settle time: 5seconds Resolution: 1mmHg Accuracy: ± 0.5mmHg
Pulse Rate	Range: 30 to 300bpm Accuracy: ± 1bpm Pulse Amplitude: 2mmHg max (500ml air reservoir) Pulse Volume: 0 to 2ml
Waveform	Support: Oscillometric Resolution (sample rate): 5ms (200Hz)
Leak Test	Leak Test Time: 0 to 999seconds Target Pressure: 20 to 400mmHg Range: 0 to 300mmHg/min
Overpressure Test	Release Time: 0 to 999seconds Range: Automatic inflation Instantaneous: 0 to 400mmHg
BP Envelope Shift	Systolic Range: ± 20mmHg Diastolic Range: ± 20mmHg
BP Dynamic Range	Diastolic Range: 10 to 250mmHg Systolic Range: 25 to 300mmHg
Dynamic NIBP Simulation Repeatability	±2mmHg 0.05mmHg (Standard deviation)
Self-Leakage	<1mmHg/min (500ml air reservoir volume)
Environment	Operating Temperature: 10°C to 40°C Storage Temperature: 0°C to 50°C Humidity: 0 - 90% RH (Non-condensing)
Shape	Dimensions: 326.4 x 315 x 88mm Display: Graphic LCD Resolution 320 x 240 pixels Weight: 4.5kg
Communication	USB
Power	AC 100-240V, 50/60Hz

IEC80601-2-30 Test Clauses

Test Clause	
201.11.8 Interruption of the power supply/supply mains to ME Equipment	●
201.12.1.101 Measuring and display ranges	●
201.12.1.102 Limits of the error of the manometer from environmental	●
201.12.1.103 Internal electrical power source	●
201.12.1.104 Maximum pressure in normal condition	●
201.12.1.105 Maximum pressure in single fault condition	●
201.12.1.106 Manometer test mode	●
201.12.1.107 Reproducibility of the blood pressure determination	●
201.101.2 Pressurization	●
201.104 Maximum inflating time	●
201.105.1 Automatic cycling modes for LONG-TERM	●
201.105.2 Automatic cycling modes for SHORT-TERM	●

