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**Calibration Specification for Multiparameter Physiological
Simulators**
(English Translation)

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Introduction

This specification based JJF 1071-2010 "National Calibration Specifications writing rules", JJF 1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement"

establishment.

This specification more physiological parameters of a typical analog instrument metrological characteristics with reference to the domestic market mainstream brands Technical Specifications determine.

The specification for the first time to develop.

Multi-parameter simulation Calibration physiological norm

1 Scope

This instruction applies to multi-parameter physiological simulation instrument calibration.

2. References

This specification refers to the following documents.

GB 9706.25-2005 Medical electrical equipment - Part 2-27. ECG monitoring equipment safety requirements for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 terminology and units of measurement

3.1 Terms

3.1.1 Multi-parameter physiological simulator multiparametersimulators Simulated human ECG, respiration, invasive blood pressure, cardiac output and medical testing equipment, body temperature and other physiological parameters, the main Parameters to be used for multi-parameter monitors and other medical equipment for testing.

Lead lead [3.1.2] GB 9706.25-2005,2.102 Electrodes for ECG recording of a connection.

3.1.3 arrhythmia an exception occurred site of origin of heart rate, cardiac frequency and rhythm and conduction.

3.1.4 sinus sinusrhythm Electrical impulses emitted by the heart rhythm caused by sinus node activity.

3.2 units of measurement Units of measurement and reference ECG waveform amplitude is mV, the reference waveform frequency unit Hz; respiratory group Base impedance measurement unit is generally ohm.

4 Overview

Multi-parameter physiological simulator is mainly used for multi-parameter patient quality control and technical training monitor can output sine Wave, square wave and triangular wave reference waveform, and can simulate human ECG, respiration, invasive blood pressure, cardiac output, body temperature and many other electrophysiological

parameters. Various waveforms required by the digital to analog converter and physiological signals generated by the input signal amplitude and frequency into the digital control. ECG signal generated by the microcontroller control DAC, via a resistor network attenuated by a guide Union Distribution network output; analog signals through analog breathing respiratory impedance changes, with ECG output; blood pressure Analog signal generated by the resistive bridge sensors, and the applied voltage is proportional to the excitation; cardiac output analog signals using heat the relationship between resistance and temperature-sensitive indirect simulation; analog temperature thermistor resistance value at a specified temperature Simulation.