

SECG 5.0 AIO



ECG Performance Tester

The most advanced ECG simulator with the capabilities of adding noise, respiration and lead-off simulations. Designed for R&D and compliance testing.

- Built-in test circuits per defined in ECG standards
- Adjustable parameters and selectable options enable to verify DUT with flexibility
- Multiple noise simulations - EMG/Motion/Baseline drift
- Various Signal Simulations - Impedance Type Respiration, Wave Modulation Type (Baseline/Amplitude/Frequency) Respiration and lead-off simulation
- Auto-sequence function assist to conduct semi-automated tests
- Load and play recorded or programmed waveforms
- Software Development Kit (SDK) allows to develop customized or automated test software with less efforts.



IEC 60601-2-25, IEC 60601-2-27, IEC 60601-2-47, AAMI EC11, AAMI EC13, YY1079, YY1139, YY0782, YY0885, JIG 760, and JIG 1042





SECG 5.0 AIO Specifications

Parameter	Specification	System Capability / Notes
Main output voltage accuracy	±1% for amplitudes of 0.5mVpp or higher	±0.3%
Main output voltage resolution (DAC resolution)	N/A	2.5μV
Frequency / pulse repetition rate accuracy	±1%	±0.1%
Pulse duration / timing accuracy (excluding pacing)	±1ms	±0.2ms
Pacing pulse width accuracy	±5μs	±1μs
Pacing pulse amplitude accuracy, range	±2mV pulse: ±1% >2mV pulse: ±10% Range: ±2mV to ±700mV	±2mV pulse: ±0.3% 100mV pulse: ±1% or ±5mV
Pacing pulse characteristics	Rise/fall time 5μs Overshoot <1% Settling time <1%	
Pacing pulse overshoot (intentional)	Method A according to IEC 60601-2-27	
Resistor tolerance	±1%	±0.5%
Capacitor tolerance	±5%	±5%
Precision 250:1 divider	±0.1%	±0.05%
Sample rate	5kHz ± 0.1%	10kHz ± 0.05% (50ppm)
DC offset (fixed, noise free, sourced from internal super capacitor)	300mV ± 1%	300mV ±0.1%
DC offset (variable, up to 1000mV, may include up to 50μVpp noise)	Setting ±1% or ±3mV	Setting ±1% or ±3mV
Environment	15 ~ 30°C (by design) 30 ~ 80% RH (by design)	5 ~ 40°C 50 ~ 80% RH altitude < 2000M Overvoltage CAT II

