

# SECG 4.0

## 心電性能測試儀

涵蓋國際及國內最新版標準：

IEC 60601-2-25、IEC 60601-2-27、IEC 60601-2-47、AAMI  
EC11、AAMI EC13、AAMI EC38、AAMI EC57、YY1079、  
YY1139、YY0782、YY0885、JJG 760、JJG 1042



專為符合 ECG 醫療標準設計的綜合性能測試儀

### 功能與特色

- 可供心電診斷、可攜式心電設備及監護儀完成單通道性能測試
- 內建標準要求之測試線路 and 自選開關
- 良好的遮罩及接地設計可輕鬆完成嚴格的測試要求，輸出振幅及頻率精度  $< \pm 1\%$
- 多參數可調的直流偏移及起搏訊號
- 可載入及播放客制化波形
- 可由外部任意波形發生器輸入訊號
- 軟體開發套件 (Software Development Kit) 可供用戶開發全自動化測試軟體



## SECG 4.0 Specifications

Parameter	Specifications
Main output voltage accuracy	$\pm 1\%$ for amplitudes of 0.5mVpp or higher
Main output voltage resolution (DAC resolution)	2.5 $\mu$ V
Frequency / pulse repetition rate accuracy	$\pm 1\%$
Pulse duration / timing accuracy (excluding pacing)	$\pm 1$ ms
Pacing pulse width accuracy	$\pm 5$ $\mu$ s
Pacing pulse amplitude accuracy, range	$\pm 2$ mV pulse: $\pm 1\%$ >2mV pulse: $\pm 10\%$ Range: $\pm 2$ mV to $\pm 700$ mV
Pacing pulse characteristics	Settling time <1% Overshoot <1% Rise/fall time 5 $\mu$ s
Pacing pulse overshoot (intentional)	Method A according to IEC 60601-2-27
Resistor tolerance	$\pm 1\%$
Capacitor tolerance	$\pm 5\%$
Precision 1000:1 divider (100K $\Omega$ :100 $\Omega$ )	$\pm 0.1\%$
Sample rate	5kHz $\pm 0.1\%$
DC offset (fixed, noise free, sourced from internal super capacitor)	300mV $\pm 1\%$
DC offset (variable, may include up to 50 $\mu$ Vpp noise)	Setting $\pm 1\%$ or $\pm 3$ mV
Power supply	USB +5Vdc supply (no separate power supply required) 0.5A (high power mode)
Environment	15 ~ 30° C 30 ~ 80% RH