HKMedQC
Wellcome Technology Co., Limited
Email:ivylin@hkmedqc.com
web:http://www.hkmedqc.com
19H Maxgrand plaza,No.3 Tai Yau Street, San Po Kong,Kowloon,hk

NIM-DA-1 Cardiac Defibrillator Analyzer



NIM-DA-1
Discharge waveform display; capable of testing all items specified in relevant specifications

The main functions of the defibrillator analyzer consist of three parts: delivered-energy measurement, ECG signal simulation, and transcutaneous pacing testing. It complies with technical requirements of JJF 1149-2014 *Calibration Specification for Cardiac Defibrillators* and WS/T 603-2018 *Safety Management of Cardiac Defibrillators* (performance testing).

12-lead simulation: RA, LL, LA, RL, V1~V6 with independent outputs. Variable load: (50 ~ 1500) Ω, step size 50 Ω, maximum permissible error ±1 %.

Technical Features

- Large-size color LCD display with touch-screen operation. Sinus rhythm heart-rate range: 27 bpm ~ 300 bpm.
- Sinus-rhythm amplitude range: +0.5 mV ~ +3 mV, −0.5 mV ~ −3 mV. Preset points: +0.5 mV, −0.5 mV, +3 mV, −3 mV.
- AED measurement signals: ventricular fibrillation, atrial fibrillation, sinus rhythm, ventricular tachycardia (monomorphic, polymorphic), asystole, supraventricular tachycardia, PVC left-ventricular focus, sine wave, atrial flutter, Pace A, Pace V, Pace D.
- Sine-wave frequency: 1 Hz ~ 25 Hz, including frequency sequence with interval ≤ 2 Hz and covering 1 Hz, 25 Hz; 1 Hz ~ 60 Hz, including frequency sequence with interval ≤ 5 Hz and covering 1 Hz, 60 Hz. - Discharge waveform can be displayed after defibrillation pulse output.
- High-level ECG and defibrillation-pulse waveforms can be output to oscilloscope for synchronous-mode testing.

Technical Specifications

Load Resistance	**50 Ω; Accuracy: ±1 %, non-inductive (< 2 µH)**
Defibrillation Energy	(0.1 ~ 360) J: ±(1 % of reading + 0.1 J);(360 ~ 600) J: ±(1 % of reading + 0.1 J).Note: For biphasic-pulse defibrillators, specified accuracy for both ranges is ±(1.5 % of reading + 0.3 J).
Synchronization Time	(−120 ~ 380) ms; Resolution: 1 ms; Accuracy: ±1 ms
Square-wave Signal	Amplitude: (0.1 ~ 5) mV; Accuracy: ±2 % of set value (Lead I).Frequency: 0.1, 0.125, 1, 2, 2.5 Hz; Accuracy: ±1 % of nominal value
Sine-wave Signal	Amplitude: (0.1 ~ 5) mV; Accuracy: ±2 % of set value (Lead I).Frequency: (0.05 ~ 200) Hz; Accuracy: ±1 % of nominal value
Sinus-rhythm Signal	Amplitude: (−0.1 ~ −5) mV and (0.1 ~ 5) mV; Accuracy: ±2 % of set value (Lead I).Heart rate: (27 ~ 300) bpm; Accuracy: ±1 % of nominal value
Pacing-current Amplitude	(2 ~ 250) mA; Accuracy: ±(1 % of reading + 0.02 mA)
Pacing-pulse Width	(1 ~ 120) ms; Accuracy: ±(0.5 % of reading + 0.01 ms)
Pacing-pulse Frequency	(5 ~ 800) PPM; Accuracy: ±(0.5 % of reading + 0.1 PPM)

Product Configuration

Main unit, discharge electrode paddles, power-supply adapter, protective case