



Non-Invasive Cardiology

Product Sheet



CardioSoft Resting ECG & Exercise Stress Testing

Providing reliable information to support diagnostic decisions

The CardioSoft™ Resting ECG and Exercise Stress Testing applications transform your PC into a cardiac testing station. For both applications, the Cardiac Acquisition Module (CAM) is easily connected from the patient to your PC's standard USB port. This device provides high-quality ECG presentation for accurate cardiac assessments of your patients.

Resting ECG

CardioSoft provides physicians with the most reliable information available to support cardiac diagnostic decisions. It features GE's Marquette® 12SL™ ECG analysis program, the industry's most thoroughly documented, computer-interpreted 12-lead ECG program. Our 15-lead ECG analysis facilitates prompt detection of right ventricular and posterior myocardial infarction.

CardioSoft Resting ECG provides on-screen ECG measurements for paperless workflow, yet allows you to print multiple report formats when a hard copy is required. These flexible report formats enable you to choose the reports you find most useful. It provides multiple interpretive statements to facilitate your final diagnostic decision.

Exercise Stress

Consistent with the data provided from CardioSoft's Resting ECG application, the Exercise Stress Testing application uses the same high-quality Marquette 12SL and 15-lead ECG analysis programs the industry has come to rely on. Furthermore, Cubic Spline and Finite Residual Filter (FRF) provide ECG baseline correction and artifact resolution without sacrificing critical ST measurements. Automatic Arrhythmia Detection assists in documenting arrhythmias that occur during stress.

Data can be exported in Word, PDF or XML formats, and is able to be stored either in CardioSoft's database or archived to a CD or the MUSE Cardiology Information System, the leading electrocardiograph information system.



SPECIFICATIONS

Signal Processing

ECG analysis frequency	500 Hz
ST measurements	ST amplitudes, slope, integral, index, ST/HR slope, ST/HR loops, ST/HR index up to 15 leads
E, J and post-J point	Manual or computer selected
Signal processing technique	Incremental median updating
Baseline correction	Cubic spline or Finite Residual Filter (FRF) algorithm
QRS detection and analysis	Based on automatic or manual lead selection
ECG output	Real-time ECG/QRS beep/ITL synchronization output
Heart rate	Automatic arrhythmia detection, documentation and annotation
Full disclosure ECG	Beat-to-beat ECG record and event review
Reanalysis	Post-test medians measurements from E, J, post-J point selections
ECG interpretations	(Optional) 12SL™ adult and pediatric ECG analysis program
Additional ECG function	Vectorcardiography

Communications/Storage

MUSE systems compatible via diskette; network (optional)
MUSE Web compatible for retrieval view and printing of MUSE CV system data
Adobe® PDF export of final reports
Microsoft® Word export of configured reports
XML or Excel export of specified data

Data Acquisition (via CAM-14)

Technology	Active, "Type BF" floating isolated powered 14 channel acquisition module with built-in lead-fail detection and lead prep impedance measurement
Sampling rate	Over-sampling @ 4000 Hz, 12 leads
Dynamic range	320 mV, ± 10 mV signal superimposed on ± 150 mV DC offset
Resolution	4.88 µV/LSB @ 500 Hz
Noise	<15 µV peak-to-peak noise over 0.01 to 150 Hz (-3 dB) bandwidth
ECG analysis frequency	500 Hz

ST measurements

High pass filter	0.01 (or 0.05 Hz, special use) with DC offset control
Low pass filter	20, 40, 100, 150 Hz (selectable)
Line filter	50.0 or 60.0 Hz notch filter (selectable)
Baseline correction	Cubic spline algorithm
Artifact/baseline correction	FRF algorithm
Common mode rejection	>140 dB (123 dB with AC filter disabled)
Input impedance	>10 M Ohms @ 10 Hz, defibrillator protected
Patient leakage	<10 µA
Pace detect	Orthogonal LA, LL and V6; 750 µV @ 50 µs



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