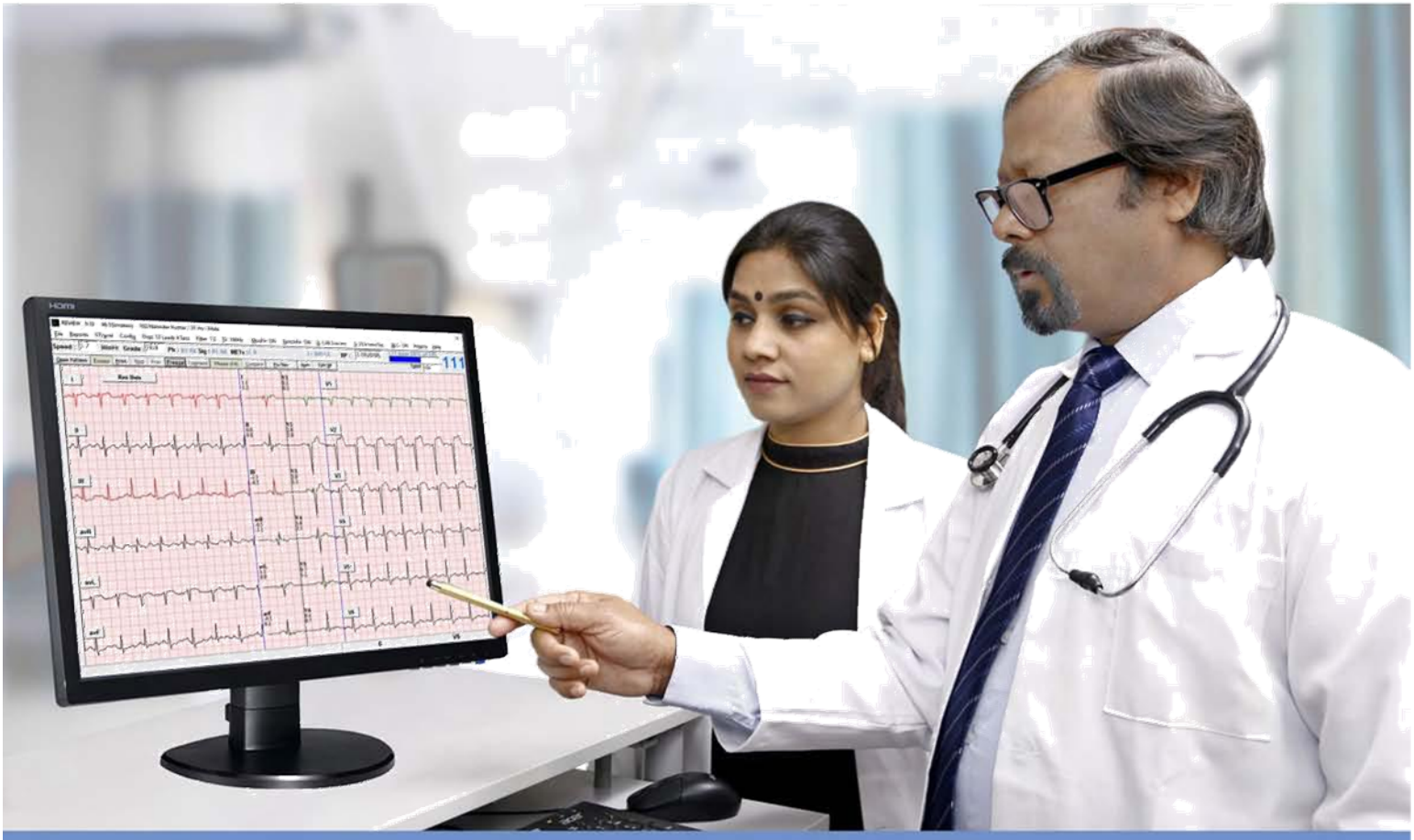
Vega 204



CARDIAC STRESS TEST SYSTEM

Enables Faster Decision and Clinical Interventions

- Assessment of inotropic competence and arrhythmias
- Evaluation of physical capacity and effort tolerance
- Evaluation of the functional severity of CAD
- Designed for heavy workload
- Evaluation of exercise-related symptoms
- Assessment of the response to medical interventions

Stress Exercise Testing System

- Standardized algorithm for R wave detection
- Realtime and retrospective J point and iso-electric identification
- Risk predicting Duke treadmill score
- Detection of leads off and arrhythmias
- User selectable multiple display and report format
- Automatic stage printout facility at the end of each exercise

Full Disclosure

Total disclosure with full test stored beat to beat review and analysis for enhanced clinical confidence

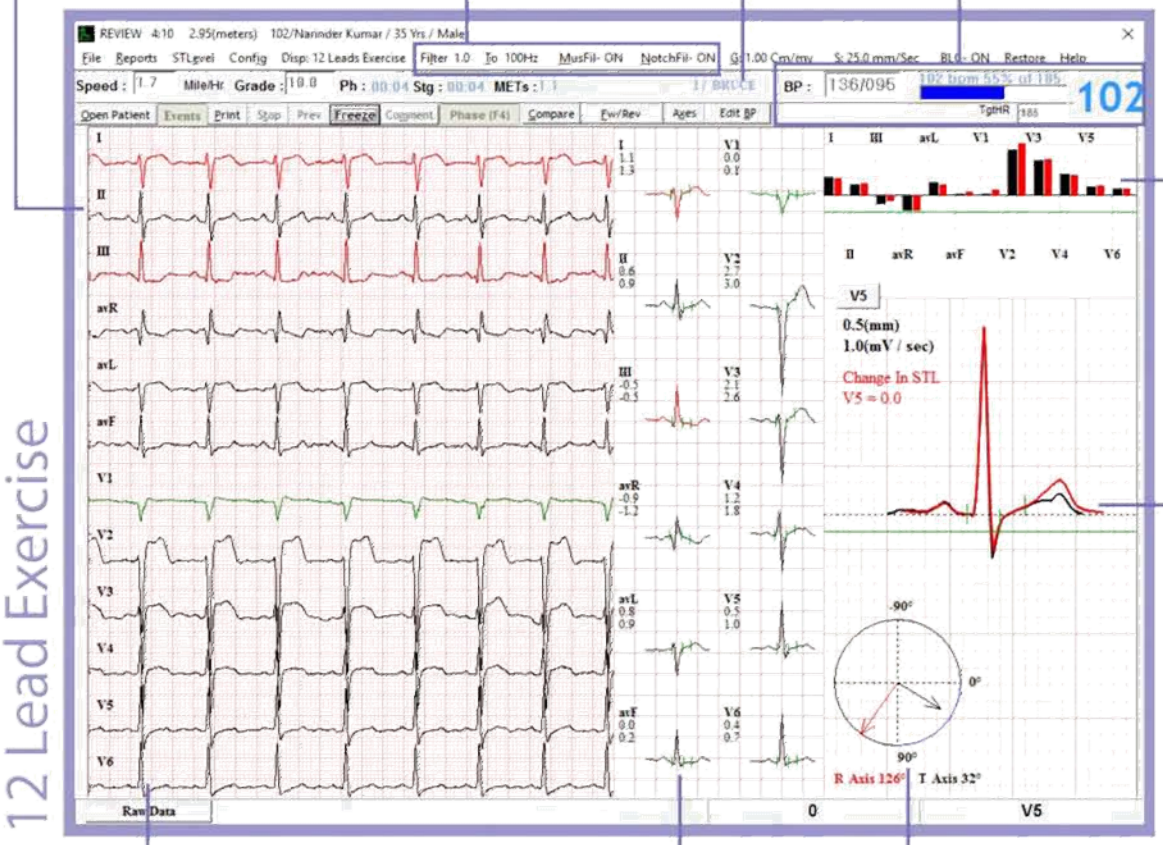
Superior quality ECG waveform

Baseline wander and motion artifact filter

Standard, user defined exercise protocols

Vital Signs Dashboard

ST level of all leads with reference QRS Complex



Simultaneous acquisition and display of 12-lead Raw ECG

12 Leads Medians

Realtime P-QRS-T axis

4X Enlarge comparison with Reference Median

Grid display helps in analyzing ECG on the monitor, just like viewing it on paper

PACS Interface*

Network Storage*

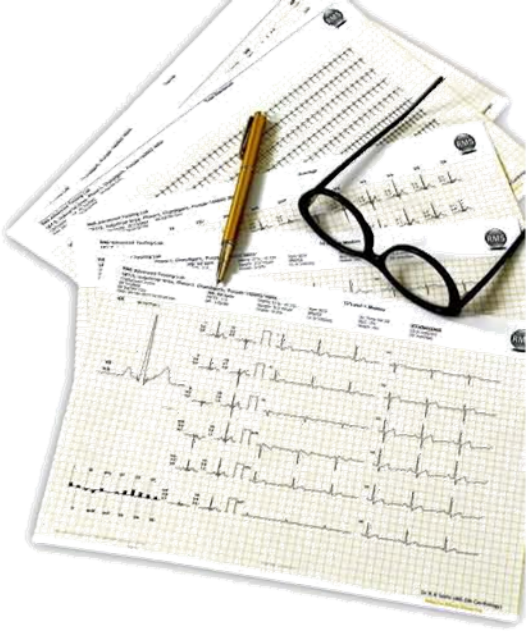
PDF

E-mail

* Optional

Unbeatable Waveform Accuracy

Offers frequency response from 0.05 Hz to 100 Hz with proprietary hardware conforming to stringent international specifications for noise level, CMRR and linearity with most sophisticated Right Leg Circuitry supported with complete optical isolation and strong software algorithms give unbeatable waveform accuracy.



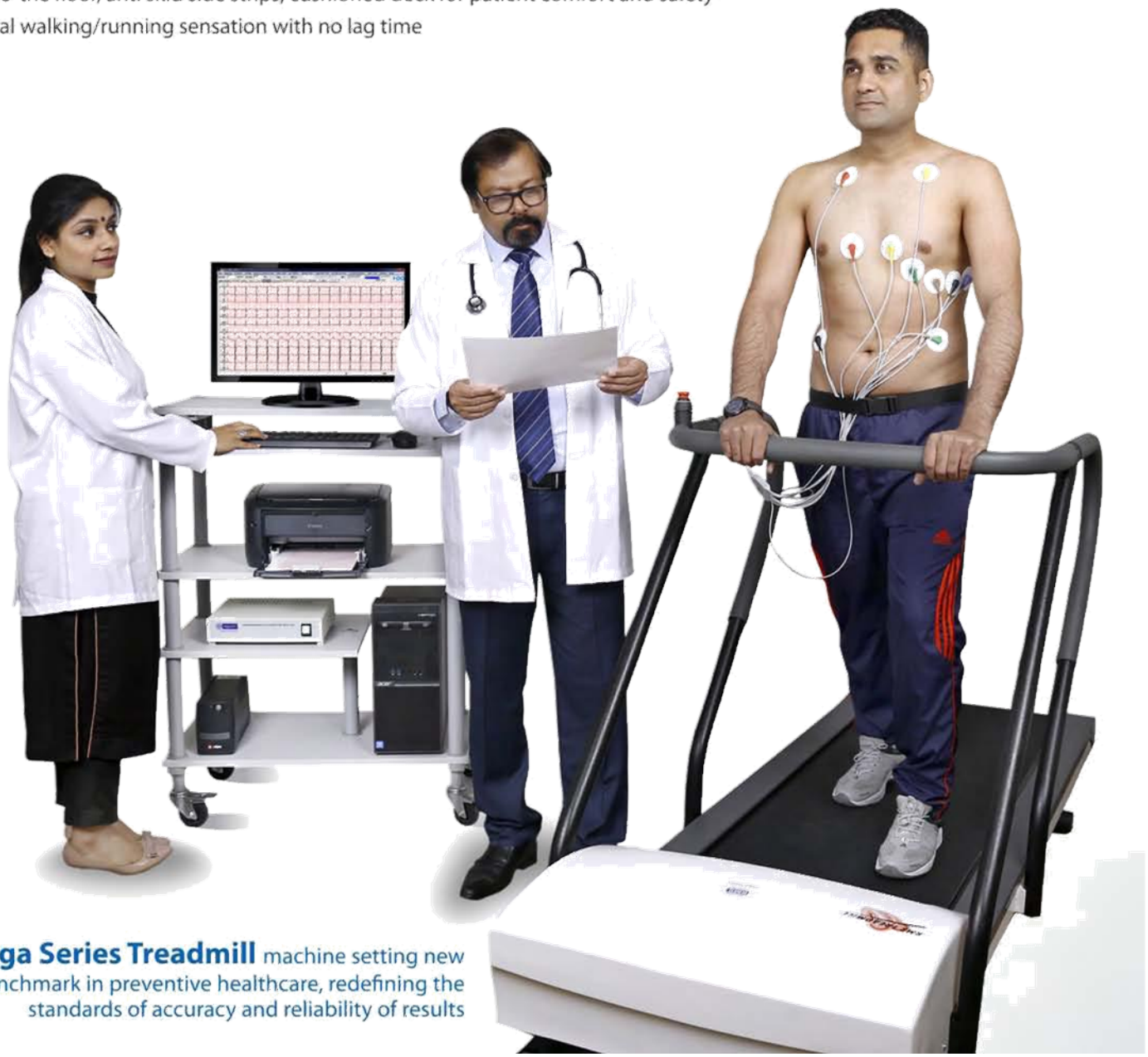
True Medians

True Statistical Medians updated every 10 seconds using our proprietary Infinite Time Correlated Response (ITCR) Algorithms.

Facility for Marking Events such as chest pain, leg pain, dyspnea, angina etc.

Treadmill

- Equipped with high torque AC motor and digitally controlled drive system
- Smooth noise free elevation
- Emergency stop with alarm
- Low-to-the floor, anti skid side strips, cushioned deck for patient comfort and safety
- Natural walking/running sensation with no lag time



Vega Series Treadmill machine setting new benchmark in preventive healthcare, redefining the standards of accuracy and reliability of results

Cardiac Stress Test System - Vega 204

ECG	
Acquisition	Simultaneous 12 leads, 14 bits
Sampling Rate	3600 samples / sec
Input Impedance	> 100M ohms
Time Constant	3.2 Sec
CMRR	> 100dB
Patient Leakage	< 10µA
Frequency Response	0.05 Hz to 100 Hz
Digital Filters	50Hz, muscle tremor 20, 35 or none
Base line Correction	DSP technique to remove ECG wandering
Sweep Speed	5, 12.5, 25, 50 and 100mm / sec
Sensitivity	0.25, 0.5, 1.0, 2.0 and 4.0 cm / mV

ECG Computations	
Calculated Parameters	ST-Level, ST-Slope, HR, METS, Axis etc.
Fiducial Points	Auto / Manual
Enlarged median lead	Configurable
Median update Interval	10 seconds
HR Computation	6 beats, updated every second

Protocol	
Standard	Bruce, Modified Bruce, Balke, Ellestad, Naughton
Custom	Unlimited customized protocols can be created

Display	
Display Resolution	1024 x 768 pixels
ECG Display format	4 leads + medians + enlarge median, 6x2 leads + medians, 12 leads + medians + Enlarge median, 3x4 + R lead, Static linked medians + R, 12leads (3.2 / 10 sec)
Data display	HR, Target HR, BP, Stage Time, Test Time, Speed, Grade, METS, Protocol Name, Protocol Stage, STL, STS and Patient Information etc.
Full Disclosure	Beat-to-Beat ECG record
Event Marker	Yes

Printing	
Printer	Laser or DeskJet
Paper Size	A4 size

Reports	
Online	12L + Medians, Linked Medians, 3x4 + R, 12 Linked Medians + Enlarge Median, Summary
Auto report	Online Reports, 6L Frontal, 6L Precordial, 12L Rhythm, Average, 12L+ Comparison, Trends, ST Tables, Comparison
Offline	All of the above, Linked Medians Summary, Total Disclosure

Connectivity	
Export / communication	PDF, TCP / IP, DICOM (optional)
Network Interface	File storage, Distribution and E-mail

Treadmill	
Speed	0.1 to 9.3 mph
Elevation	0 to 22 %
Belt drive motor power	2 HP AC Motor
Conveyer Belt	Anti skid
Safety	Optical isolation, Emergency stop
Communication	RS 232
User capacity	250 Kg
Walking area	1520 x 510 mm
Dimension	2180 x 815 x 1165 mm (L x W x H)
Weight	145Kg

Operating conditions	
Operating Temperature	10°C to 50°C
Storage Temperature	0°C to 40°C
Relative Humidity	15 to 90% non condensing
Cart dimension	1070(H) x 780(W) x 435(D) mm

Standard Kit	Treadmill, Acquisition Box, Patient Cable, A4 size paper set, Disposable Electrodes, User Manual, Software CD and Trolley
Options	PC Workstation, Printer, UPS for PC
Minimum Computer	OS: Windows7 Professional 32bit/64bit, Processor: Core2Duo 2.5GHz or higher, RAM: 2GB or higher, 500 GB harddisk or higher, CD/DVD Optical Drive, Screen Resolution 1024 x 768 or higher
Remote Service Program	Online technical support is available from RMS Head office. Customer has to provide internet connection.

Wireless Acquisition (optional)

Tele Enabled Review System Software (optional)

Automated blood pressure monitoring Tango M2 (optional)