



# Vega 201

TREADMILL TEST (TMT)



## Cardiac Stress Test System

with 12 Leads

- PC based cardiac workstation combines Resting and Exercise ECG
- Compact, light weight with quiet operation and safe start
- Requires minimal maintenance
- In-bulit voltage protection

# Features

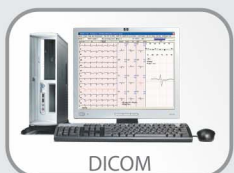
- Equipped with high torque motor and digitally controlled drive system
- Audio-visual alarms in case of malfunction of treadmill
- Offers frequency response from 0.05 Hz to 100 Hz
- Smooth noise free elevation
- Accurate computation of ST levels, assuring excellent correlation with angiography
- Clean ECG without muscle tremor noise
- Emergency stop with alarm



Emergency Stop Switch



Anti skid side strips



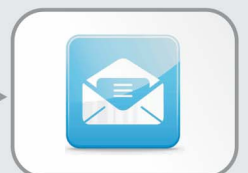
PACS Interface \*



Network Storage \*



PDF



E-mail

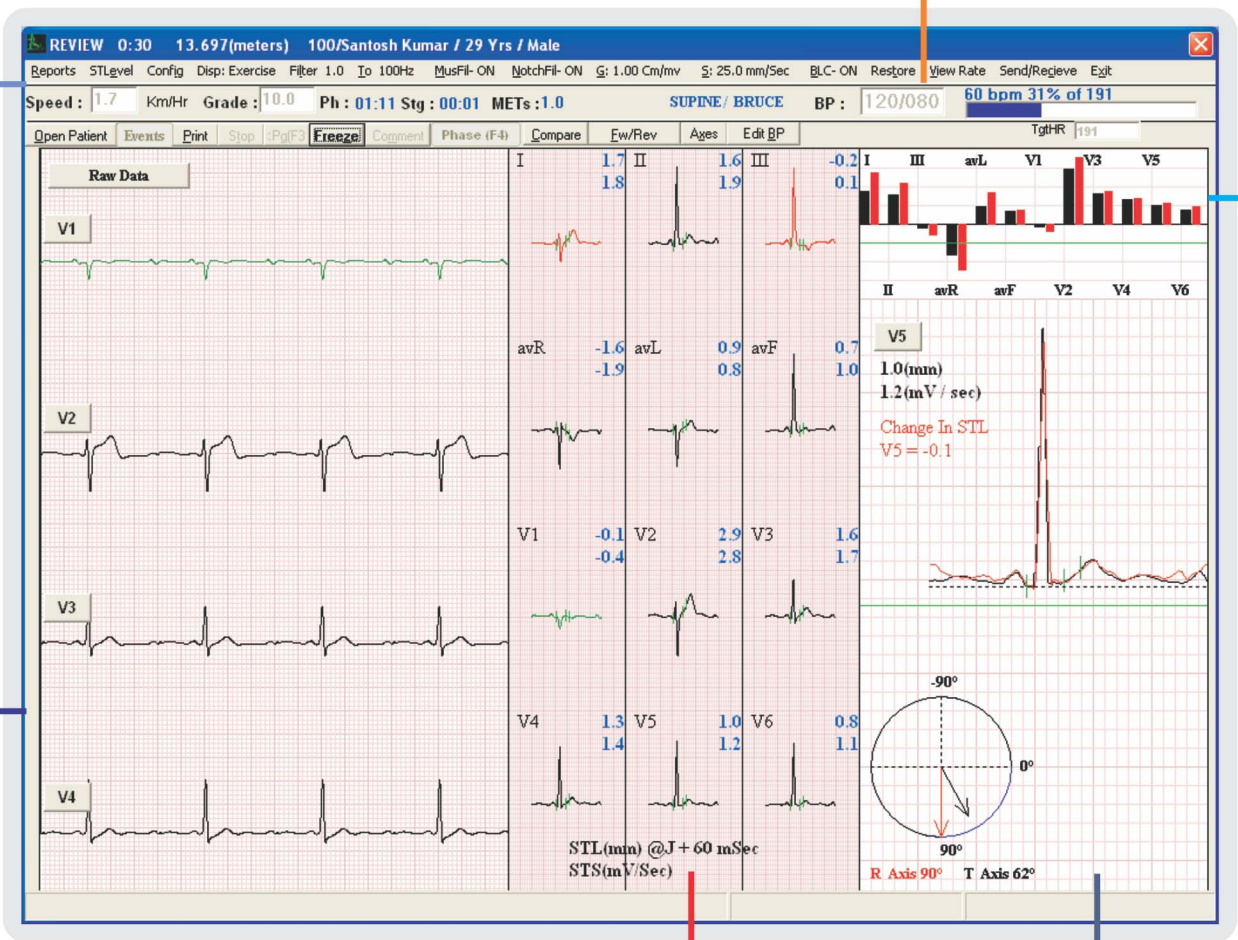
# Cardiac Stress Test System

- Enlarged median can be selected manually, online linked median printing
- Simultaneous acquisition and display of 12-lead Raw ECG
- Standard and user programmable treadmill protocols
- Maximum ST level depression or elevation lead display
- Risk predicting Duke treadmill score
- Full disclosure data enables review and re analysis of every beat
- Detection of leads off and arrhythmias
- User configured multiple display and report format
- System generated auto report

Acquisition and Documentation

Vitals Dashboard

ST display



ECG data

Continues QRS averages

ECG Axis

ECG & STL comparison of Current stage with Pre-Exercise stage



# Vega 201 - Technical Specifications

## ECG

Acquisition	Simultaneous 12 leads, 14 bits
Sampling Rate	2700 samples/sec
Input Impedance	> 100M ohms
Time Constant	3.2 Sec
CMRR	> 100dB
Patient Leakage	< 10 $\mu$ A
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 & 100mm/sec
Sensitivity	0.25, 0.5, 1.0, 2.0 & 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, Ellested, 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 (3.2/10sec.)

Data display	HR, Target HR, BP, Stage Time, Test Time, Speed, Grade, METS, Protocol Name, Protocol Stage, STL, STS & Patient Information etc.
--------------	--

Full Disclosure	Beat-to-beat ECG record
-----------------	-------------------------

Event Marker	Yes
--------------	-----

## 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
---------	--

## Printing

Printer	Laser or DeskJet
---------	------------------

Paper Size	A4 size
------------	---------

## Connectivity

Export/communication protocol/ format	TCP/IP; DICOM, PDF
---------------------------------------	--------------------

Network Interface	File storage, Distribution and E-mail
-------------------	---------------------------------------

## Treadmill

Speed	0.1 to 9.3 mph
-------	----------------

Elevation	0 to 22 %
-----------	-----------

Belt drive motor power	3HP
------------------------	-----

Conveyer Belt	Anti skid
---------------	-----------

Safety	Optical isolation, Emergency stop
--------	-----------------------------------

Communication	RS 232
---------------	--------

User capacity	250 Kg
---------------	--------

Walking area	1,321 x 508 mm
--------------	----------------

Dimension	1900 x 710 x 1200 mm (L x W x H)
-----------	----------------------------------

Weight	120Kg
--------	-------

## Automatic NIBP (optional)

Technique	Auscultatory with linear deflation
-----------	------------------------------------

Accuracy	Designed to meet ANSI/AAMI SP10-2002.
----------	---------------------------------------

Protection	Independent safety circuitry monitors cuff pressure, measurement time as well as the operation of the main microprocessor.
------------	--

Measurement Range	Adult Systolic 50-250 mmHg,
-------------------	-----------------------------

Adult Diastolic	20-150 mmHg
-----------------	-------------

Pulse Rate	40 to 200 BPM
------------	---------------

Inputs/Outputs	Bi-directional RS232, microphone
----------------	----------------------------------

Power requirements	200 to 240 VAC, 50Hz & single phase, 10 Amperes
--------------------	---

## 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
----------------	------------------------------

Minimum Computer configuration	OS: Windows XP Pro/Windows7 Professional 32bit, Processor: Core2Duo or higher, RAM: 2GB or higher, 40 GB harddisk or higher, CD/DVD Optical Drive, Screen Resolution 1024x768 or higher
--------------------------------	---

<b>Standard Kit</b>	Treadmill, Acquisition Box, Patient Cable, A4 size paper set, Disposable Electrodes, User Manual, Software CD, Trolley, Voltage Stabilizer
<b>Options</b>	Automatic NIBP module, PC Workstation, Printer, UPS for PC, DICOM output.

## Remote Service Program

Online technical support is available from RMS Head office. Customer has to provide internet connection.

Since R&D is a continuous process, to make changes in product features, specifications, aesthetics and/or to discontinue the same at any time without notice or obligation



Certified ISO 9001:2015, EN ISO 13485:2016 company  
Recorders & Medicare Systems (P) Ltd.

