

# STRESS ECG SYSTEM

## ECG acquisition module

- Cost effective stress ECG system
- ECG acquisition module with CARDIPIA ECG
- Real time ECG display on CARDIPIA ECG
- Easy operate CARDIPIA ECG with color and touch screen
- Automatic ECG analysis and ST measurement
- Automatic arrhythmia detection and alarm
- Copy or print analysis report
- Editing and creation treadmill protocol

## Treadmill

- Less maintenance and long life cycle
- Silent and smooth movement
- Maximum speed : 20 Km/hour
- Gradient : 25 % ( step 0.5 % )
- Patient loading weight : max. 150 Kg
- Running belt : 1460 x 500 mm
- Control : via Bluetooth or USB
- Emergency stop push button



Stress ECG Display ECG Data Analysis



Treadmill

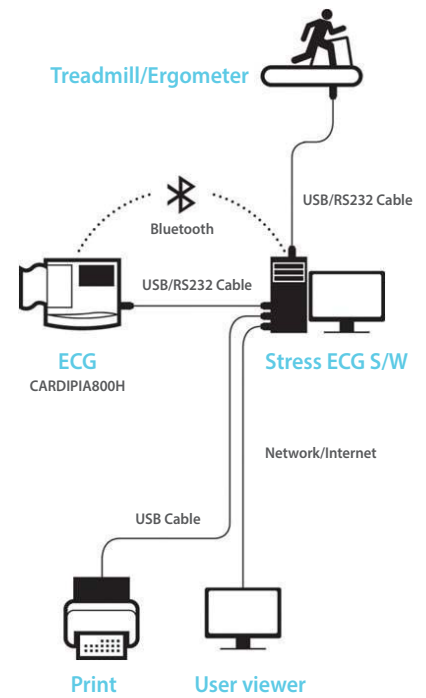


CARDIPIA800HS

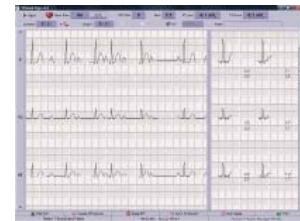
Model(ECG)	CARDIPIA800HS
ECG acquisition leads	12
Recording channel	12/6/3
Displaying channel	12
Recording paper	216 mm x 30 m roll
LCD	7" color TFT
Key	Alphanumeric touch screen

# CARDIPIA800HS Technical Specifications

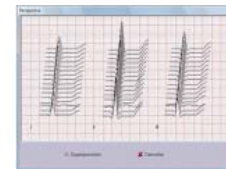
Recording ECG Leads	12 standard leads: I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6			
Recording Channel	12-ch x 1, 6-ch x 2, 6-ch x 2+1R, 3-ch x 4, 3-ch x 4+1R, 3-ch x 4+3R (R: Rhythm)			
Lead Group	Standard / Cabrera / User pre-defined group			
Recording Mode	Auto, Manual, Rhythm, Periodic, Auto Start, Elapsed, Calibration(1mV), Copy, TPH test			
Full Disclosure Report	Min. 10 sec ~ Max. 10 min. by user set / Manual mode			
Recording Length	Min. 3 sec ~ Max. 85 sec. by user select (Auto mode only)			
Recording system	Thermal printer head ( 8 dots/mm) / 203 (vertical) x 508 (horizontal) dpi			
Recording Thermal paper	Roll type		Z-folder type (option)	
	Standard	Fax paper	210 mm (L) x 60 mm (W) x 400 sheets	
	216 (or 210 mm x 30 m		Grid record	
Sensitivity (mm/mV)	2.5, 5, 10, 20, 40, Auto			
Interpretation (option)	Adult / Pediatric, Mean cardiac cycle with segment and measurement			
Stress ECG I/F (option)	Wire (RS232) / Bluetooth, Note : Treadmill/Ergometer and PC stress ECG S/W are required			
Recording Speed (mm/sec)	Auto record		Manual record	
	5, 10, 12.5, 25, 50, 100		25, 50	
Display	Color TFT 7" LCD (Viewing area : 154.08mm x 85.92mm), Dots : 800 x 400			
Display Channel (Ch)	12 (6-ch x 2), 6 (3-ch x 2), 3 (3-ch x 1), 4 (2-ch x 2), 2 (2-ch x 1), 1 (1-ch x 1)			
QRS Beat Display & Sound	30 ~ 240 bpm on real time.			
Alarm Display and Sound	Lead-off detection for each 10 lead, Battery level, Paper empty			
Key Operation	Alphanumeric key by membrane and LCD touch screen			
Calibration Signal	Sensitivity and frequency response test by using internal 1 mV			
Language	English / Spanish / Russian / Turkish / Mongolian / others by user request			
ECG Data Acquisition	Simultaneous 12-lead ECG			
Input Impedance	Greater than 100 MΩ per 10 Hz			
A/D Resolution	16 bits (0.17 μV/bit)			
A/D Sampling Rate	500 Hz (4,000 samples/sec) / 1000 Hz (8,000 samples/sec), 500Hz I Input Unit:8,000 samples/s			
CMRR	Greater than 100 dB			
Frequency Response	0.05 ~ 200 Hz ( -3dB unfiltered )			
Time Constant	Greater than 3.2 sec.			
Digital Filter	Drift filter	Muscle Filter	AC filter	High frequency filter
	0.5 Hz	25 / 35 Hz	50 / 60 Hz	75 / 100 / 150 / 200 Hz
Pace Maker Detection	Option			
Arrhythmia Detection	Auto extend recording time to 20 ~ 60 sec by Ventricular Tachycardia and Bradycardia			
Data Management	Save / Delete/ Copy / Review / Transfer / Measure			
Performance	AAMI standard requirements			
Data Transfer I/F	USB memory stick / (RS232) USB port / LAN / Bluetooth (option) / Wifi (option)			
Data Save Memory (10 sec)	Internal memory: Standard 4,000 records / Optional SD card (12,000 records per 1GB) Optional USB memory stick (12,000 records per 1GB)			
TRISMED PCNet S/W	Via Wire USB / Bluetooth / USB memory / Ethernet to PC			
HIS Data I/F	HL7 / XML / SCP / PDF / PNG / DICOM + PACS			
External Device I/F	Barcode Reader / Magnetic card reader / Color printer (HP psc1311 : option)			
Patient Leakage Current	Less than 10μA			
Electrical Safety	Class I (Degree of protection against electrical shock)			
	Defibrillation proof (5000VDC) based on type CF applied part Complied IEC60601-1 : 2005 (3 <sup>rd</sup> edition), IEC60601-2-25			
Operation Power	AC	100 ~ 240VAC ±10 % ~50/60 Hz free voltage		
	Battery	Built-in rechargeable battery, NiMH19.2V (2200mA) / 420 reports (150 min) per 12-ch x 1 (5 sec) auto record with fully charged battery		
Dimension (mm)	333 (L) x 310 (W) x 105 (H)			
Weight	3.3 Kg with battery			
Temperature	Operating : +10 ~ +40 °C / Transport or Storage : -20 ~ +60 °C			
Relative Humidity	Operating : 30~75 % (non-condensing) / Transport or Storage: 10~90 % (non-condensing)			
Atmosphere	Operating : 70 ~ 106 kPa / Transport or Storage: 50 ~ 106 kPa			



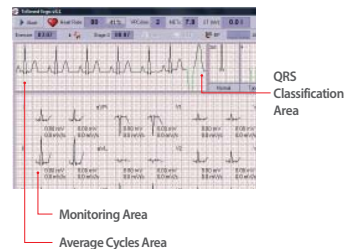
## Ergometer Screen



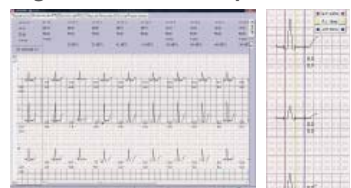
## Evolution of average cycles



## Average Cycles Page



## STsegment evolution report



# Stress ECG S/W Technical Specification

Lead system	12 standard leads
Recorded signal frequency range	0.05 ~ 75 Hz
ECG amplifier	Input from CARDIPIA800HS
A/D converter	12 bits
Paper speed	25 mm/sec
Protocol	USB port for Wellnesstrack Treadmill (WT3000TSM) Computer control treadmill speed and incline
PC	Pentium IV / 1GB RAM memory / Hard disk with at least 40GB of free space SVGA display / USB port Compatible ECG

# WT3000TSM Treadmill Technical Specification

Length and width	2070 (L) X 800 (W) X 1340 (H) mm
Weight	180 kg
Incline range	0% to 25% in 1% increment
Speed range	0.5 km/h to 20 km/h
Running area	1350 (L) X 500 (W) mm

※ Contents and specification subjects change without notice



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