

Cardioline **cubestress** - key features

cubestress is a highly capable Stress ECG system developed with long clinical experience. It integrates easily into data management and Electronic Patient Record systems. It can be standalone or combined into multi-function workstations. It can include all hardware and software, or (subject to survey) may be provided to work on locally-supplied computing hardware and system software.

cubestress uses the HD+ wireless acquisition module. It supports optimum workflow with preparation of the patient, display of ECG, control of the ergometer or treadmill, real-time printout on thermal or laser printer and automatic archiving and printing of the report. It is compatible with ergometers and treadmills from leading suppliers.

Analyse

- Independent, simultaneous analysis of ST Segment on the 12 leads; maximum ST Depression and elevation, ST trends.
- Alarms for Arrhythmias, and disconnection of electrodes, HD+ module, ergometer or treadmill.

User interface

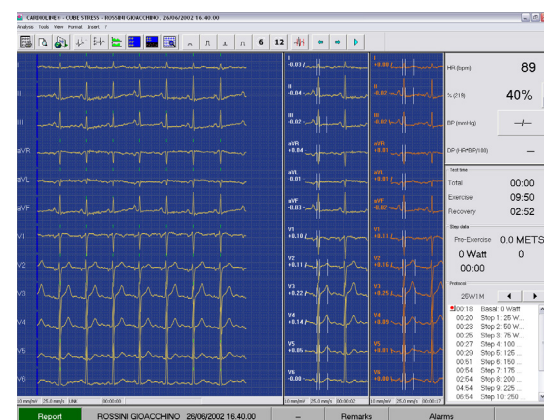
- The user interface gets the best from high-resolution graphics for clear display and to guide the user through the examination
- Menus and wizards give control and status of the test and give clinically useful and configurable viewed of the patient's vital signs.

Protocols and Stress devices

- Support of upright and prone ergometers, treadmills and mats.
- Range of protocols with the ability to customize.

Real-time views for -

- Values for HR, % max, R & S peaks, QT, QTc, QTa, QT2a, arrhythmias, BP, double product, METs, Protocol, stage, phase.
- ECG with average complexes, amplitude at J+80ms/60ms and gradient. Display of 1 - 12 leads, selectable amplitude and speed.
- Single lead with magnified average complex and a strip of rhythm, superimposed on the pre-test average.
- ST-QT for measurement on the magnified view, comparison with earlier stages and user configurable.
- Trends for HR, BP, load, double product, 12 leads ST, color coded.



Review window

- Display of the trace and full disclosure from any time in the test.

Printout -

- Automatic or manual print, 1 – 3 minutes, each step, each phase.
- 12 channels +AVG, 6+6+AVG, 12 channels, 6+6 or upon request 10-second pages or continuous printout.

**Technical Specification**

ACQUISITION HD+	
ECG leads and cables	12-lead (I, II, III, aVR, aVL, aVF, V1- V6), replaceable patient leads
CMRR & dc input impedance	115dB, 100Mohm
A/D converter	24-bit, < 1uV/LSB, 32,000 samples per second per channel
Sample rate for signal analysis	Up to 1000 samples per second
Dynamic range	+/- 400mV
Bandwidth	Performance equivalent 0.05 – 300Hz
Pacemaker detection	Hardware with digital convolution filter
Defibrillator protection	AAMI/IEC Standard
Front-end performance	ANSI/AAMI IEC 60601-2-25:2011
Data transfer	Bluetooth 2.1+ EDR with Secure-Pairing
SYSTEM AND CONNECTIVITY	
Connectivity	Launch by BDT/GDT, Patient ID embedded and worklist Automatic archiving in the connected database To Sentinel data management, SCP-PDF-XML-GDT, DICOM, HL7 option
Computer	Mini tower or all-in-one PC, Windows table. Windows 8.1 or 10, Quad core 1.6GHz or higher, 2GB RAM, 8GB disc, Bluetooth 2.1+EDR. Keypad and mouse LCD screen at least 18", 640x480
Regulatory	Class IIa, Rule 10 annex IX, TUV (1936) 510(K) - K160746, product code DPS, Class II, 21 CFR 870.2340, Risk class B
Trolley	Standard or configured to user requirement
Printer	A4 laser, colour or black & white or thermal
Isolation transformer	Optional
Workstation option	Subject to survey, may be deployed on customer-supplied workstation