

## Appendix:

**Table 1: Provision of software to STEMI team**

<b>STEMI Software</b>	<b>Paramedic</b>	<b>STEMI coordinator</b>	<b>On- Call Cardiologist</b>	<b>STEMI coordinating Centre</b>
Hand held device	Android 4.0 – ‘Ice Cream Sandwich’ , 2G or 3G connectivity	Android 4.0 – ‘Ice Cream Sandwich’ , 2G or 3G connectivity	Samsung Galaxy Tab 2 P 310, 2G or 3G connectivity	-
ECG Device/Monitor	connected via USB cable to the hand held device	-	-	-
Transmitting device	Intel® Atom™ processor N450 at 1.66G Hz	Intel® Atom™ processor N450 at 1.66G Hz	-	-
Data Server	-	-	-	Hosted application: Windows 2008 R2 Standard, SQL Server 2008 R2 Standard Edition

**Table 2: ECG signal specifications:**

Electrodes / leads	Standard 10 lead patient cable / 12lead ECG
Frequency response	0.05 to 125 Hz
Leakage current	< 10 micro amps
CMRR	> 100 dB
Input impedance	> 4 M ohms
Filter	To suppress supply frequency fluctuations
A/D conversion resolution	12 bit
Sampling rate	500 samples/sec
Defibrillator protection	Pulse characteristics of 5kV potential , pulse duration (5 to 20 ms), carrying energy of 360 joules

**Table 3: Arterial saturation (SaO<sub>2</sub>) signal specification:**

Method	Pulse oximetry with finger clip sensors
Range	0-100%
Accuracy	SaO <sub>2</sub> > 70% +/- 2% Pulse rate: +/- 2 bpm
Time required for calculation	<10 seconds
Refresh rate	10 seconds

**Table 4: Blood pressure (BP) signal specification:**

Operating mode	Non-supervised continuous operation
Type of measurement	Oscillometric
Pressure range	0-300 mmHg
Pressure accuracy	±3 mmHg
Measurement ranges for adults – Systolic BP Diastolic BP Mean arterial BP	25 - 280 mmHg 10 - 220 mmHg 15 - 260 mmHg
Air leakage rate of the system	< 3 mmHg / minute
Time required for BP measurement	within 30 seconds, and upto maximum of 90 seconds.

**Table 5: Battery details**

Type	Rechargeable Lithium Ion 7.4V – 4000 mA
Typical working hours	Upto 6 hours of backup
Charging time	8 hours for full charge in standard charging mode
Indicator	Charging and full charge indicator

**Table 6: Display Device Specifications**

(Make : Connoi SmartBook Convertible ST10160)

Processor/chipset	Intel® Atom™ processor N450 at 1.66G Hz Chipset: Intel® NM10 Express
Memory	1GB / 2GB
Storage Device	2.5" SATA HDD (Supports 32G/16G/8G SATA Flash)
Operating System	Android 4.0
LCD	10.1" 1024 x 600 water resistant touch screen <ul style="list-style-type: none"> <li>• 10.1" 1366x768 optional display</li> <li>• Convertible: traditional or touch-optimized tablet mode</li> <li>• Palm-resting feature allows to write and draw comfortably</li> </ul>
Connectivity	10M/100M Ethernet 802.11b/g/n WLAN <ul style="list-style-type: none"> <li>• 3G</li> <li>• GPS</li> </ul>
Keyboard/touch Pad	<ul style="list-style-type: none"> <li>• Water resistant keyboard</li> <li>• Water resistant touch pad (integrated vertical scrolling)</li> <li>• Anti-microbial keyboard</li> </ul>
Battery	4-cell battery (4.8 hrs) (2200mAh cell)
System I/O	2 x USB 2.0 ports, 1 SD slot, VGA port ,1 half sized mini-card slot and 1 full sized mini-card slot, dual audio jacks
Built-in 1.3MPX rotating Camera	30fps (640 x 480) 1.3MP rotatable
Accelerometer	Tilt the Intel-powered convertible classmate PC and the display switches smoothly from portrait to landscape HDD Protection
Handle	Integrated retractable handle to support micro-mobility
Custom Mini-Chassis	<ul style="list-style-type: none"> <li>• Size including handle: 268mm x (39.5~32mm)</li> </ul>

	x 214mm • Weight: 1.52–1.74Kg
Drop Test	Flash 70cm/HDD 60cm

**Table 7: Carry case specifications**

Weight	< 4.5 Kg
Carry case size	330 mm x 210 mm x 110 mm
Material	Industrial grade ABS