

1) Description of Function

Defibrillator is required for reviving the heart functions by providing selected quantum of electrical shocks with facility for monitoring vital parameters.

2) Operational Requirements

Should be compact, Light weight, easy to use, Bi-Phasic Defibrillator with Manual (with easy 1-2-3 operation)

Should monitor ECG and display them

Should be able to print the ECG on thermal papers

Should be capable of doing synchronized cardio version

Can be operated from mains as well as battery

3) Technical Specifications

Should be a Low Energy Biphasic defibrillator monitor with Recorder, having capability to deliver shocks from 2 Joules to 200 Joules.

Should monitor ECG through paddles, pads and monitoring electrodes and Defibrillate through pads and paddles.

Should compensate for body impedance for a range of 25 to 150 ohms

Should have a built in 50 mm strip printer

Should have charging time of less than 5 seconds for maximum energy.

Should have High resolution more than 8 inch Colour display for viewing monitoring parameters like ECG, SpO₂, NIBP and etCO₂ with 4 waveform capability of 4 seconds.

Both Adult and pediatric paddles should be available.

Should have event summary facility for recording and printing at least 55 events.

Should have a battery capable of usage for at least 5 hours of monitoring.

Should be capable of printing Reports on Event summary, configuration, self test, battery capacity etc.

Should have facility for self test/check before usage and set up function.

Should have facility to monitor parameters like SpO₂, NIBP and etCO₂ along with non invasive pacing (Demand & Fixed mode) facility.

Should be able to upgrade the defibrillator for 12 lead ECG monitoring and ECG transmission.

4) System Configuration Accessories, spares and consumables

Defibrillator with AED and External Pacemaker – 01

Adult with Built in Paediatric External Paddles - 01

Patient cables - 01

ECG Rolls – 50

Adult SpO₂ reusable Sensor – 01

Adult NIBP Cuff and Hose – 01

etCO₂ Tubing (box of 20) – 01 box

AED Multifunction Pads for Adults - 10 pairs with Each unit

5) Environmental factors

The unit shall be capable of operating continuously in ambient temperature of 5 – 45 deg C and relative humidity of up to 95%

Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

6) Power Supply

Power input to be 120-240VAC, 50-60 Hz

Should have a battery capable of usage for at least five hours.