



**SHRI SAIBABA HOSPITAL, SHIRDI**

**ANNEXURE "A"**

**Technical Specification of Syringe Pump for ICU of our**  
**Shri Sainath Hospital.**

Sr. No.	Description	Qty.	Rate Per in Rs. (Incl. of all Taxes & Duties)	Total Amt. in Rs.
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<ul style="list-style-type: none"> <li>● Graphic LCD display for Running Mode message display ,Syringe Type/Size, Delivery Rate, Infused Volume, Mains/Battery Operation, Real time pressure curve to detect occlusion of venous line, Remaining battery time</li> <li>● <b>Syringe type-</b> 5ml,10ml,20ml,30ml,50ml/60ml and setting for all type syringe brands</li> <li>● <b>Syringe Loading Technique:</b> Front Bottom loading technique</li> <li>● <b>Flow Rate Range-</b> Min 0.01ml/Hr. to 200ml/Hr. or more</li> <li>● <b>Accuracy-</b>Driver accuracy +/- 2 %</li> <li>● <b>Infusion Modes:</b> Rate Mode, Time Mode, Body Weight Mode, Night Mode</li> <li>● <b>Rapid Mode for Purge or Bolus-</b> 1-1200 ml/Hr. (User Selectable)</li> <li>● <b>Volume infused Pre-selection-</b> 1 to 999.9 ml in 0.1 ml increments.</li> <li>● <b>Occlusion Detection-</b> 3 Selectable Occlusion pressure limit for different therapy up to 1.2 bar</li> <li>● <b>Alarms -(Audible &amp; visible alarms ):</b> Occlusion Pressure alarm , Syringe Empty &amp; Volume infused alarm , Internal Malfunction , Battery Charge Low , Syringe Disengaged &amp; Incorrectly place alarm</li> <li>● <b>Classification:</b> Type CF – protected against defibrillation, Protection class II &amp; (IP 22) Splash Proof and EMC EN60601-1 or better</li> <li>● <b>Battery :</b> Ni-Cd rechargeable battery with back-up time of min 10</li> <li>● <b>Power supply:</b> 170-250 V, 50/60 HZ</li> <li>● <b>Weight:</b> less than 2 Kg</li> <li>● <b>Additional Features:</b> History of infusion data, operational alarms and device alarms must be available Up gradable to Fluid management system In-built maintenance counter Automatic bolus reduction system to avoid accidental bolus delivery after occlusion incident Vertical Stacking of 3 pumps together, for clearly structured fixation, must be possible with locking mechanism for optimum space management Option for RS-232 Connection for PDMS Option for ambulance power supply connection</li> <li>● After selection of parameter key pad locking available for security purpose with option to keep it off. Have facility to set time duration for enabling keypad locking</li> <li>● Operators should be given training for its regular use &amp; maintenance training should be given to Biomedical Engineer free of cost.</li> <li>● All Technology should be mandatorily with safety approval- FDA / UL &amp; CE for Device Safety approval. Approval certificate must be submitted for the total unit.</li> <li>● The product should be time tested, branded and should be OEM</li> <li>● The life of the equipment should be mentioned</li> <li>● <b>Warranty-</b> 1 Year. It Should include PMS visits-4 Nos. and unlimited Breakdown call and calibration whenever necessary.</li> <li>● <b>AMC/CMC Cost-</b> AMC/CMC cost should be including Taxes. It should be fixed for next 5 years.</li> <li>● Cost of Consumables to be fixed for warranty period.</li> </ul>			
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**Medical Director**  
**& Civil Surgeon**  
**Shri Saibaba Sansthan Trust's**  
**Hospital, Shirdi**