

### Syringe Pump for CTVS

S.N.	Purchaser's Specifications	Bidder's Offer		
	Syringe Pump For CTVS	Yes/No	Page no.in the Datasheet	Remark's
	<b>Manufacturer</b>			
	<b>Brand</b>			
	<b>Type /Model</b>			
	<b>Country of Origin</b>			
	<b>1 Description of Function</b>			
1.1	The Syringe Pump provides uniform flow of fluid by precisely driving the plunger of a syringe down its barrel. It provides accurate and continuous flow rate for precise delivery of medication in critical medical care.			
	<b>2 Operational Requirements</b>			
2.1	The syringe pump must be programmable, user-friendly, safehouse and must have battery backup and comprehensive alarm system.			
	<b>3 System Configuration</b>			
3.1	Syringe pump should be compatible to syringes of different capacities 5ml,10ml, 20ml, 30ml, 50/60ml with battery backup alarm and with complete accessories.			
	<b>4 Technical Specifications</b>			
4.1	Shall have 4" or more display screen format LCD/TFT display.			
4.2	Flowrate programmable from 0.01 - 150.00 mL/hr. insteps of 0.1 ml/hr or better.			
4.3	Bolus rate must be programmable to 0.01–1200ml/hr or more with infused volume display.			
4.4	Should have programmable and manual bolus.			
4.5	Keep Vein Open (KVO) must be available 1.0-0.5ml/hr adjustable, insteps of 0.1ml/hr			
4.6	Syringes with accuracy of minimum $\pm 3\%$ or better.			
4.7	Pump should have feature of automatic detection of syringe size & proper fixing.			
4.8	Anti-bolus system to reduce pressure on sudden release of occlusion.			
4.9	Must have comprehensive Alarm package including: Occlusion, Battery Empty, No VTBI, Syringe Empty, Syringe Disengaged, Pressure, KVO rate flow, System Error, Reminder, Battery Low, No battery, No flow rate, Syringe Near Empty, Standby Time, Expired etc.			
4.1	Should have feature to view record history.			
4.11	Rechargeable Battery having a battery backup of 8 hrs. or more.			

4.12	Should be vertical pole mounting type and mounting pole with rack/docking station to accommodate atleast 6 pumps must be supplied as standard so as to enable to power upto 4-6 pumps with one power cord when mounted.			
4.13	System Should be user friendly with large color screen and minimal number of keys/buttons for easy operation.			
4.14	System should have drug library functions and the pumps should have the capability to integrate with the hospital information system.			
<b>5</b>	<b>Accessories, spares and consumables</b>			
5.1	All standard accessories, consumables and parts required to operate the equipment, to be included in the offer as standard. Bidders must specify the quantity of every item included in their offer (including items not specified above).			
<b>6</b>	<b>Operating Environment</b>			
6.1	The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity etc.			
6.2	Power supply: 220–240VAC,50Hz fitted with appropriate plug. The power cable must be at least 3 mtr. in length.			
<b>7</b>	<b>Standards and Safety Requirements</b>			
7.1	Must have & submit ISO13485 : 20023or better for Medical Devices AND			
7.2	European CE(93/42EECDirectives) or USFDA approved product certificate.			
7.3	Electrical Safety IEC-60601-1, IEC 60601-2-25, IEC60601-2-24 & IEC 529 level 3 & 4 (IPX3).			
<b>8</b>	<b>User Training</b>			
8.1	Must provide user training including how to use and maintain the equipment to the end user as well as servcie personnel regarding service/maintenance of the equipment.			
<b>9</b>	<b>Warranty</b>			
9.1	Comprehensive Warranty including service & parts for 2 years after the installation & acceptance.			
<b>10</b>	<b>Maintenance Service During Warranty Period</b>			
10.1	During the warranty period supplier must ensure corrective/breakdown maintenance & calibration whenever required.			
10.2	All spare parts & consumables should be available with supplier or principal for a period of atleast 10 years. Letter of commitment from the principal and supplier must be attached.			
<b>11</b>	<b>Installation and Commissioning</b>			

11.1	The bidder must arrange for the equipment to be installed And commissioned by certified or qualified personnel. Any prerequisites for installation to be communicated to the purchaser In advance in detail.			
<b>12</b>	<b>Documentation</b>			
12.1	User (Operating) manual in English.			
12.2	Service (Technical / Maintenance) manual in English.			



