

AMDA-Nepal

Siddhartha Children and Women Hospital

Butwal-7, Rupandehi

Technical Specification of Infusion pump with Stand

S.N.	Purchaser's Specifications	Bidder's Compliance (Yes/No)	Reference Page No.	Remarks
	Infusion Pump			
	Manufacturer:			
	Brand:			
	Type / Model:			
	Country of Origin:			
1	The unit should be more than 2 kg			
2	The unit should be with vertical loading design, allow easy installation of the IV sets			
3	The unit should have manual door and anti-free flow clamp for easy and safe IV set loading			
4	The unit should be designed with large alarm light with visibility at long distance			
5	The unit must support drip mode and be equipped with drop sensor (optional) (Should quote drop sensor in optional)			
6	The unit must support fix on both IV pole and bed rail			
7	The unit should have IP44 or higher grade			
8	The unit should visible handle for easy carrying			
9	The screen size should be more than 3.5" LCD touch screen and should have a color display			
10	The screen must be capacitive touchable			
11	The screen contrast should be adjustable with 8 levels			
12	The unit is better with a running status light			
13	The following must be clearly displayed on the front panel under all lighting conditions: Running status Drug name(with coding color) IV type IV brand Infusion rate			

	Volume to be infused Volume has been infused Alarm condition AC power condition Current pressure indication with both number and dynamic panel			
14	Key infusion parameters should be displayed in larger font than normal letters after screen lock, so that the users can more easily get key infusion details during infusion.			
15	Key infusion parameters displayed in large font should be customizable by users			
16	Customizable large-font parameters should include rate/dose rate, time, VTBI, infused volume, patient weight or body surface area etc.			
17	The unit must support IV sets of any manufacturers			
18	The unit must be allowed to add/modify IV sets brand on pump directly			
19	The delivery accuracy should be no less than $\pm 5\%$ with universal IV set after calibration			
20	The delivery accuracy should be no less than $\pm 4.5\%$ with high quality IV sets			
21	The unit must support Rate mode, Dose Mode, Dose Time Mode, Time mode, Sequential Mode, Intermittent Mode, Loading Dose Mode, Ramp Up/Down Mode, Micro-infusion Mode, Drip mode			
22	The infusion rate must be selectable in a minimum range of 0.1 to 15000 ml/h, selectable in 0.01 ml/h increments			
23	The unit must provide user selectable infusion volume from 0.109999.99 ml, selectable in 0.01ml increments			
24	The unit should support 2 modes of bolus: automatic and manual			
25	The unit must also include the delivery of a bolus in a rate from 0.1 to 1500 ml/h when required during the normal infusion delivery.			
26	The unit must provide user selectable infusion volume from 0.019999.99 ml, selectable in 0.01ml increments			
27	The unit must give an sound alarm when 0.5ml has been delivered under the bolus mode			
28	The unit must provide user selectable KVO			

	rate from 0.1-5.0ml/h, selectable in 0.01ml/h increments			
29	The unit must provide user selectable purge rate from 0.1-1500ml/h			
30	The unit must support finger-touch sliding to unlock the machine			
31	The unit must have intelligent occlusion management system			
32	The unit must have an visible and color indicator to show the real-time pressure in IV tube			
33	The unit must have a dynamic pressure progressing panel, the pointer will be reaching to the high level end when pressure in IV tube increase			
34	The unit must display real time pressure and occlusion alarm limit in pressure number in the running			
35	The unit must have an visible pre-alert when in-line pressure is increasing			
36	The unit must automatically restart the infusion after in-line pressure is shortly produced and quickly reduced			
37	The unit must provide with downstream occlusion during the infusion, the pressure limit is selectable from 50-1125mmhg, 1mmHg as increment, e.g. 451 mmHg			
38	The unit should reduce the in-line pressure and prevent the unexpected bolus after occlusion release			
39	The unit should have previous self-test before starting parameter setting			
40	When turn on the unit, the unit can remember the last infusion therapy parameter			
42	It must be possible to change the flow rate while the pump is running.			
43	The unit must have up to 5000 history records			
44	The unit must have patient management including discharging/admitting a patient, editing/exporting/importing patient information, accepting and performing the prescription			
45	The unit must provide with both acoustic and visible alarm			
46	The alarm should be visualized with intuitive graphic information, current status reminder and operation guidance			

47	The alarm sound should be selectable from 1-8 levels			
48	The unit must provide with air-in-line detection from 15uL-800uL in 6 levels			
49	The unit must provide with accumulated air-in-line detection from 0.1-1.0 ml/15min			
50	The unit must give alarm when the infusion set is disengaged			
51	Alarm including: Air in Line / Accumulated Air / Empty / Drop Error / Downstream Occlusion/ No Infusion Tube/ Infusion Set Disengaged / Infusion Set Error / No Drop Sensor / Battery Depleted / VTBI Complete / KVO Finish / System Error / KVO Running / Battery in Use / Battery Error/ Standby Time Expired / System Time Error / Time Near End / Reminder / Low Battery			
52	History records data should be possible to be transmitted to PC			
53	The unit must support import and export information or file through USB			
54	The unit must be designed to operate from AC100-240V, 50/60HZ			
55	The battery charger and power supply must be built in internally to the unit			
56	The unit should be equipped with a internal rechargeable Lithium battery			
57	The battery operating time should be no less than 5.5 hours@25ml/h			
58	The battery recharging time should be no more 5 hours for 100% charging.			
59	Accessories, Spares and Consumable:			
59.1	All stander accessories, consumables and spare parts required to operate the equipment including all stander tolls and cleaning and lubrication materials, in the offer.			
60	Standards and safety requirement			
60.1	The unit should be ISO13485:2003FOR MEDICAL DEVICE and CE Quality marked to medical devices directive.			
60.2	The supplier should fill the technical tender form and clearly mention the manufacturer, model no. and country of origin/Made in, else technically will be disqualified.			
60.3	The bidder must submit a valid authorization			

	letter from the manufacturer.	
60.4	Comprehensive warranty (Software, hardware/ parts maintenance labor cost etc.) for 2 years warranty and 1 year grantee after installation.	
60.5	Onsite repair & maintenance training and operational training to the hospital's Biomedical Engineer, Biomedical technicians and users.	
60.6	The machine supplied shall be brand new with the date of manufacture mentioned and the country of origin should be clearly mentioned	
60.7	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	
60.8	One (hard and softcopy) of service & Operating manual in English should be provided at the time of installation.	

Note:

- I. The bidder must completely fill the technical specification form (TSF). Only Yes/ No /All complies should not be written.
- II. Commitment letter and documents must be provided in separate letter head also.
- III. Evaluations, will be done on the basis of documents submitted by the bidder. All sorts of documents, brochures, certificates , letters, manuals will be cross checked and verified in internet browsers, clarifications (if needed) .Failure in doing so may lead to rejection of bid from technical committee.