

AMDA-Nepal
Siddhartha Children and Women Hospital
Butwal-7, Rupandehi
Technical Specification of syringe pump with stand

S.N.	Purchaser's Specifications	Bidder's Compliance (Yes/No)	Reference Page No.	Remarks Final
	Syringe pump			
	Manufacturer:			
	Brand:			
	Type / Model:			
	Country of Origin:			
1	The unit should be no more than 2 kg			
2	The unit should be with front loading design, allow easy installation of the syringe.			
3	The unit should have manual loading mechanism simultaneously with internal automatic clutching system to lock the drive when detecting a seated syringe, avoiding accidental bolus to patients when syringe loading.			
4	The unit must support fix on IV pole.			
5	The unit should have IP44 or higher grade.			
6	The screen size should be more than 3.5" and should have a color display.			
7	The screen must be capacitive touchable.			
8	The screen contrast should be adjustable with 8 levels.			
9	The unit is better with a running status light			
10	The following must be clearly displayed on the front panel under all lighting conditions: Drug name (with coding color) Syringe size Syringe 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			
11	Key infusion parameters displayed in large font should be customizable by users			

12	Customizable large-font parameters should include rate/dose rate, time, VTBI, infused volume, patient weight or body surface area etc.			
13	The unit must automatically sense the syringe size.			
14	The unit must support syringes of any manufacturers			
15	The accepted syringe sizes must range from 5-50ml.			
16	The unit must be allowed to add/modify syringe brand on pump directly.			
17	The delivery accuracy should be no less than $\pm 1.5\%$.			
18	The mechanical accuracy should be less than $\pm 0.5\%$.			
19	The unit must support Rate mode, Time mode, Dose mode, and Dose time mode, Sequential Mode, Intermittent Mode, Loading Dose Mode, Ramp Up/Down Mode, and Micro-infusion Mode.			
20	The infusion rate must be selectable in a minimum range of 0.01 to 2200 ml/h, selectable in 0.01 ml/h increments.			
21	The unit must provide user selectable infusion volume from 0.01 to 9999.99 ml, selectable in 0.01ml increments			
22	The unit should support 2 modes of bolus: automatic and manual.			
23	The unit must also include the delivery of a bolus in a rate from 0.1 to 2200 ml/h when required during the normal infusion delivery.			
24	The unit must provide user selectable automatic bolus volume from 0.01 to 9999.99 ml, selectable in 0.01ml increments.			
25	The unit must give a sound alarm when 0.5ml has been delivered under the bolus mode.			
26	The unit must provide user selectable KVO rate from 0.01-5.0ml/h, selectable in 0.01ml/h increments.			
27	The unit must provide user selectable purge rate from 0.01-2200ml/h.			
28	The unit must support finger-touch sliding to unlock the machine.			
29	The unit must have intelligent occlusion management system.			
30	The unit must have a visible and color indicator to show the real-time pressure in IV tube.			
31	The unit must display real time pressure and occlusion alarm limit in pressure number in the running interface.			

32	The unit must have a visible pre-alert when in-line pressure is increasing.			
33	The unit should reduce the in-line pressure and prevent the unexpected bolus after occlusion release.			
34	The unit should have previous self-test before starting parameter setting.			
35	It must be possible to change the flow rate while the pump is running.			
36	The unit must provide with both acoustic and visible alarm.			
37	The alarm sound should be selectable from 1-5 level.			
38	Alarm including : Occlusion / syringe empty/ Syringe disengaged/ Battery depleted/ VTBI complete/ KOV finish/System error/ No syringe/ Battery in use /Battery uses/Standby time expired/ system time error/Low battery/ Syringe near empty etc.			
39	The unit must be designed to operate from AC100-240V 50/60HZ.			
40	The unit should be equipped with internal rechargeable lithium battery.			
41	The battery operating time should be no less than 3 hours.			
42	Accessories, Spares and Consumable:			
42.1	All stander accessories, consumables and spare parts required to operate the equipment including all stander tolls and cleaning and lubrication materials, in the offer.			
43	Standards and safety requirement			
43.1	The unit should be ISO13485:2003 for medical device and CE Quality marked to medical devices directive.			
43.2	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.			
43.3	The bidder must submit recent a valid authorization letter from the manufacturer.			
43.4	Comprehensive warranty (Software, hardware/ parts maintenance labor cost etc.) for 2 years warranty and 1 years grantee after installation.			
43.5	Onsite repair & maintenance training and operational training to the hospital's Biomedical Engineer, Biomedical technicians and users.			
43.6	The machine supplied shall be brand new with the date of manufacture mentioned and the country of origin should be clearly mentioned.			
43.4	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			
43.4	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.