Technical Specification of Biochemistry Analyzer

S.N.	Purchaser's Specifications (f/y-082/83)	Bidder's Compliance Sheet			
	Fully Automatic Biochemistry Analyzer	**Yes**	**No**	**Page No. in Catalogue**	**Remarks**
	Manufacturer				
	Brand				
	Type/Model				
	Country of Origin				
1	**Description of Function**				
1.1	Must be able to analyze serum, plasma, urine, cerebrospinal fluid, hemolysate and whole blood.				
2	**Operation Requirements (Measured Parameters & Criteria):**				
2.1	Must be a brand new fully automated random access continuous loading clinical chemistry analyzer, with minimum 20 dedicated refrigerated STAT capability, automatic-rerun, automatic reflex testing and complete with all standard reagents, consumables and accessories.				
3	**System Configuration**				
3.1	Must be capable of doing at least 270 tests/hr without ISE				
4	**Technical Specification**				
4.1	**Optical Requirement**				
4.1.1	Absorbance range should be within 0~3A				
4.1.2	Multi-wavelength grating photometer with at least 12 different wavelengths must be available				
4.1.3	Light source shall be Halogen tungsten lamp				
4.2	**Reagent Handling System:**				
4.2.1	Reagent position must be at least 50 positions				
4.2.2	Maximum reagent consumption volume shall be 10~350µl				
4.2.3	Reagent probe shall have Liquid level detection, collision protection and inventory check.				
4.2.4	In Built Reagent Cooling System				
4.2.5	Reagent Probe cleaning shall be automatic with internal and external washing				
4.2.6	Must have internal reagent barcode reader system.				
4.3	**Sample Handling**				
4.3.1	Sample loading capacity of at least 40 samples at a time with continuous loading facility.				
4.3.2	The sampling volume shall not be more than 1~45µl and step by 0.1µl.				
4.3.3	Shall have separate sample probe				
4.3.4	Sample probe must have Liquid level detection, Clot detection and collision protection.				
4.3.5	Sample probe shall be automatic with internal and external probe washing				
4.3.6	Shall have separate sample mixer.				
4.3.7	Must have internal sample barcode reader system.				
4.3.8	Auto-dilution and pre-dilution for sample				
4.4	**Analytical Requirement:**				
4.4.1	Reaction disk must have at least 72 cuvette position.				
4.4.2	The reaction cuvette must be lifelong and must be permanent hard glass type				
4.4.3	Cuvette re-washing must be equipped with auto cuvette washing system with 12 phase				

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4.4.4	Reaction disk temp shall be 37.C and temp fluctuation ±0.1.C				
4.4.5	Reaction volume shall be 100-350 ul.				
4.4.6	Water consumption used should not be more than 6L/H				
4.5	**Calibrator and QC**				
4.5.1	Calibration mode: Real Time, Individual and cumulative quality control. Automatic QC programming required				
4.5.2	· Quality control rules: Interactive L-J Charts, Daily, Monthly with data archiving, Automatic QC and Automatic calibration.				
4.5.3	System should have re-run function				
4.5.4	Must be capable of doing HbA1c test in same system.				
5	**Accessories, spares and consumables**				
5.1	Shall provide sufficient kits as a start-up kit complete with reagents, controls, calibrators, accessories, washers etc.				
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above)				
6	**Operating Environment**				
6.1	The product 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: 220-20 VAC, 50Hz fitted with appropriate plug. The power cable must be approx. 3 meter in length.				
6.3	Should supply at least 30-45 minute power backup.				
7	**Standard and Safety Requirements**				
7.1	Must submit ISO 13485 for Medical Devices				
7.2	CE (93/42 EEC Directorate)				
8	**User Training**				
8.1	Must provide user training and technical training (including how to use and maintain the equipment.				
9	**Warranty**				
9.1	Warranty for 2 years after acceptance.				
10	**Maintain Service During Warranty Period**				
10.1	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.				
11	**Installation and Commissioning**				
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.				
12	**Documentation**				
12.1	User (Operating) manual in English.				
12.2	Service (Technical/Maintenance) manual in English.				

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