


5KVA Online UPS

S.N	Purchaser's Requirements	Bidder Compliance Sheet		
		Yes/No	Page No.in Catalogue	Remarks
1	General Requirements			
a.	Type: Double Conversion Online UPS (Triple Conversion design preferred).			
b.	Capacity: 5KVA			
c.	Phase: 1:1 (Singlephase input and output).			
d.	Applications: Suitable for critical environments (e.g., medical equipment, banks, broadcast stations, industrial systems).			
e.	Compliance: Must meet IEC 609501 (safety) and IEC 620402 (EMC) standards.			
2	Input Specifications			
a.	Voltage Range: 165–275V AC.			
b.	Frequency Range: 50/60Hz $\pm 5\%$ (compatible with generator input).			
c.	Input Breaker: Integrated input breaker for overload protection.			
3	Output Specifications			
a.	Voltage: 220/230V AC $\pm 1\%$ (userselectable).			
b.	Frequency Stability: $\pm 0.5\%$ (synchronized with input or battery mode).			
c.	Power Factor: 0.9 (preferred) or 0.8 (optional).			
d.	Efficiency: $>94\%$ at full load.			
e.	THD: $<2\%$ for linear loads.			
f.	Overload Capacity:			
g.	125% load for 60 seconds.			
h.	150% load for 45 seconds.			
i.	Crest Factor: $\geq 3:1$.			
j.	Transfer Time: 0 ms (AC to battery mode).			
4	Battery Specifications			
a.	Voltage: 192V DC.			
b.	Charging Current: 6A standard (12A fastcharging optional).			
c.	Configuration: 16 x 12V/7.5Ah batteries (prewired or modular).			
d.	Cold Start Function: Must operate without AC input.			
e.	Battery Management: Advanced floating charging technology to extend battery life.			
5	Protection & Safety			
a.	Protections: Overload, shortcircuit, overtemperature,			

	battery under/overvoltage, and overcharge.			
b.	Isolation Transformer: Built-in for enhanced noise immunity.			
c.	Static Bypass: Automatic transfer to bypass mode during UPS failure.			
d.	Self-Diagnosis: Pre-startup self-test to prevent operational risks.			
6	Communication & Monitoring			
a.	Interfaces: RS232, SNMP adapter (included or optional), dry contact (optional).			
b.	Software: Compatible with monitoring software for real-time parameter tracking.			
c.	Remote Management: SNMP support for network integration.			
7	Environmental Conditions			
a.	Operating Temperature: 0°C to 40°C.			
b.	Humidity: 0–95% (noncondensing).			
c.	Noise Level: <45dB at 1 meter distance.			
8	Additional Requirements			
a.	Warranty: Minimum 2-year manufacturer warranty.			
b.	Documentation: User manuals, compliance certificates, and installation guides.			

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Water Distillation System

S.N.	Purchaser's Specifications		Bidder's Compliance Sheet		
			Yes/No	Page No. in Catalogue	Remarks
1	Manufacturer				
2	Brand				
3	Type / Model				
4	Country of Origin				
5	Description of Function	Laboratory Water Purifier for DI Water Production			
6	Operational Requirements	RO+DI Purification Process			
7	System Configuration	Complete unit with filtration cartridges and control system			
8	Technical Specifications				
8.1	Water Output Type	DI Water			
8.2	Water Output Speed	15 LPH			
8.3	Water Supply Requirement	Tap Water with TDS < 200PPM, 5-45°C, Pressure 1.0-4.0KGF/cm ²			
8.4	Purification System	Special Spun fiber filter X2, Active carbon block filter X2, 75GPD RO Unit, Mix bed resin Cartridge X2			
8.5	Desalination Rate	Less than 99%			
8.6	TDS	DI Water 0-4 PPM			
8.7	Conductivity	0.1-4μS/cm			
8.8	Control System Water	Automatic cut-off when pump stops, 24-hour non-stop operation			
8.9	Quality Monitor	TDS Meter			
9	Accessories, Spares, and Consumables	Should includes all necessary accessories for operation			
10	Operating Environment	Should designed for laboratory conditions			
11	Standards and Safety Requirements	Compliance with industry standards			
12	User Training	Supplier must provide user training			
13	Warranty	Comprehensive Warranty for 2 years			
14	Maintenance Service During Warranty Period	Preventive and corrective maintenance support			
15	Installation and Commissioning	Installation by qualified personnel			
16	Documentation	User and service manuals in English			

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Refrigerator

S.N.	Purchaser' Specifications	Bidder's Compliance Sheet		
		Yes/No	Ref.Docs Page No.	Remarks
	Refrigerator			
	Manufacturer			
	Brand			
	Type/Model			
	Country Of Origin			
1	Description of Function			
1.1	Refrigerator is used to store samples, reagents etc. under controlled temperature conditions.			
2	Operational Requirements			
2.1	Refrigeration system: CFC-free refrigerant cooling system, 220-240V/ 50 Hz			
2.2	Capacity of storage: Minimum 385L			
3	System Configuration			
3.1	The system consists of: Double Door Refrigerator for reagent of minimum capacity 200L.			
4	Technical Specifications			
4.1	Interior light to operate when door is opened.			
4.2	Locking door supplied with minimum two keys.			
4.3	Adjustable shelves. (Min. 3)			
4.4	Low energy consumption.			
4.5	Low Noise Level			
5	Accessories, spares and consumables			
5.1	Accessories: Digital Thermometer-1			
5.2	All standard accessories / consumables/parts required for the proper operation of the above item shall be included in the offer.			
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 input to be 220-240VAC, 50Hz fitted with appropriate plug. The power cable must be minimum 3 metres long.			
7	Standards and Safety Requirements			
7.1	Must submit ISO 9001			
8	User Training			
8.1	Not applicable.			
9	Warranty			
9.1	Comprehensive warranty for 2 year			
10	Maintenance Service During Warranty Period			

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10.1	During the warranty period supplier must ensure corrective/breakdown maintenance whenever required.				
11	Installation, Inspections and Commissioning				
11.1	Must supply preassembled unit, ready to use.				
11.2	Inspections to verify the compliance of the offered equipment as per specifications will be conducted by the technical team appointed by the purchaser.				
12	Documentation				
12.1	User (Operating) and Service (Technical/Maintenance) manuals to be supplied in English.				
12.2	List of important spare parts and accessories with their part numbers and costing.				

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Chemiluminescence Immunoassay Analyser

S.N.	Purchaser's Specifications	Bidder's Compliance Sheet			
		Yes	No	Page No. in Catalogue	Remarks
	Chemiluminescence Immunoassay Analyser				
	Manufacturer				
	Brand				
	Type / Model				
	Country of Origin				
1	Description of Function				
1.1	A diagnostic equipment based on the highly specific interaction between an antibody and an antigen. Electro-Chemiluminescence (ECL) Immunoassay analyser is used to perform serological tests to detect or measure specific proteins or other substances through their properties as antigens or antibodies.				
2	Operational Requirements				
2.1	Fully automated analyser to perform the immunoassays from serum or plasma.				
3	System Configuration				
3.1	Eleetro-Chemiluminescence (ECL) Immunoassay Analyser, complete unit with inbulit color touch screen and with pre-loaded software.				
4	Technical Specifications				
4.1	System shall be based on latest "Eleetro-Chemiluminescence (ECL) based on Biotin and Streptavidin labelled antigen/antibodies with Ruthenium electron based electrochemsitry principle" technology for measuring the assays with very high sensitivity and linearity and micro superparamagnetic beads particle separation.				
4.2	System shall have batch, random or continuous random access.				
4.3	System shall have provision of emergency/STAT samples.				
4.4	Sample Position: Minimum 30 continous loading.				
4.5	System shall have throughput of minimum 80 tests/hr.				
4.6	RFID card based reagent system.				
4.7	Shall have minimum 2 dedicated probes for reagent and sample handling with liquid detection, clot detection, air detection, needle blocking and Anti-collision. The reagent parameters must have expiry of 18 months, open stability should be both upto 56 days (kit inserts should be provided for verification), this will help the run utlise instrument in low volume labs of PPHL-madhesw with various testing parameters.				



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S.N.	Purchaser's Specifications	Bidder's Compliance Sheet			
		Yes	No	Page No. in Catalogue	Remarks
	Chemiluminescence Immunoassay Analyser				
4.8	must have inbuilt bar code reader for sample along with primary sample tube loading facility.				
4.9	must have automatic sample dilution facility.				
4.10	Must have inbuilt thermal printer for printing of calibration, QC and test result data.				
4.11	Both the Calibrator and QC should be internal from the company, and should be provided at free of cost everytime with purchase of reagent. Additionally, the third party QC must be available from Randox and Biorad both with ranges.				
4.12	Every test parameter must have maximum 2 point calibrator with master calibration curve/data from manufacturer company, with purpose of less reagent consumption during calibration.				
4.13	Must have facility to load minimum 100 fresh reaction cuvettes in the incubation position of the system.				
4.14	The reagent must be available in smaller pack size of 50 T to avoid expiry and sustain running of less moving test items.				
4.15	Following tests should be available:				
	a) Tumor markers				
	b) Hormones.				
	c) Bone Metabolism and Anti CCP				
	d) Fertility including AMH(Anti-mullerian hormone)				
	e) Hepatic Fibrosis				
	f) Cardiac Functions.				
	g) Gastric cancer Function				
	h) Vitamin B12 And Vitamin D				
	i) Cardiac,emergency parameters including ctni, hs-tnt, CK-MB, NT proBNP				
	j) Covid items like IL-6, D dimer, PCT, Neutralization antibody				
4.16	Computer: Must have in built (not the external PC to save lab space) color touch screen computer display, with complete software loaded in wondws 7/10.				
4.17	Must have facility to collect both liquid and solid waste for better disposal.				
4.18	Reagent storage and expiration reminder to avoid waste				
4.19	The routine parameter (including complete panel of thyroid fT3, fT4, and TSH) must be reportable in maximum 20 minutes and emrgency parameters like CK-MB, Troponin, NT ProBNP, D-dimer etc in less than 10 minutes. Kit insert				



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S.N.	Purchaser's Specifications	Bidder's Compliance Sheet			
		Yes	No	Page No. in Catalogue	Remarks
	Chemiluminescence Immunoassay Analyser				
	should be provided to verify reporting time.				
4.20	The kits must have calibrator and QC inside the reagent box, no need to purchase separately to be cost effective for hospital on operation cost perspectives.				
5	Accessories, spares and consumables				
5.1	Accessories: • Shall provide sufficient kits for at least three parameter as a start-up kit complete with reagents, controls, calibrators, accessories, etc. free of cost.				
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.				
6.2	Power supply: 220 - 240 VAC, 50Hz fitted with appropriate plug. The power cable must be approx. 3 metre in length.				
7	Standards and Safety Requirements				
7.1	Must submit ISO13485:2003/AC:2007 for Medical Devices and CE or USFDA approved product certificate..				
7.3	Shall meet IEC 61010-1 safety requirements for electrical equipment for measurement, control, and laboratory use.				
8	User Training				
8.1	Must provide user training (including how to use and maintain the equipment).				
9	Warranty				
9.1	Comprehensive Warranty for 2 years.				
10	Maintenance Service During Warranty Period				
10.1	During warranty period supplier must ensure preventive maintenance and 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.				

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S.N.	Purchaser's Specifications	Bidder's Compliance Sheet			
		Yes	No	Page No. in Catalogue	Remarks
	Chemiluminescence Immunoassay Analyser				
11.2	There must be atleast 20-40 units of same model from same manufacturer in Nepal, for smooth assurance of reagents/consumables supply chain, application support and after- sales service. The customer list should be provided.				
12	Documentation				
12.1	User (Operating) manual in English.				
12.2	Service (Technical / Maintenance) manual in English.				
12.3	List of important reagents, consumables , spare parts and accessories with their part numbers and costing.				

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Fully Automatic Bio-Chemistry Analyzer

S.N.	Purchaser's Specifications	Bidder's Compliance (Yes / No)	Reference Page No.	Remarks
	Fully Automated Biochemistry System			
	Manufacturer			
	Brand			
	Type/Model			
	Country of Origin			
1	Description of Function			
1.1	For biochemical analysis of Serum, Plasma, Urine, Cerebrospinal Fluid (CSF) and other body fluids.			
2	Operational Requirements			
2.1	A discrete patient prioritized automated random Access benchtop clinical chemistry analyzer, for chemistries, enzymes, proteins, drug assays, electrolytes etc. in serum, plasma, urine and other.			
3	System configuration			
3.1	Fully Automated Bio-Chemistry Analyzer with complete accessories.			
4	Technical Specifications			
4.1	On Board Parameters: Minimum 30 or more parameters.			
4.2	Water Consumption: No more than 4 L/hour.			
4.3	Throughput: The System should have 240 tests per hour without ISE.			
4.5	Reagent Position: Minimum 40 refrigerated reagents position.			
4.6	Sample Position: Minimum 40 positions with continuous loading.			
4.7	Reaction Cuvette Position: Minimum 56 position for semi disposable cuvettes.			
4.8	Reaction System: Cuvette path length of 5mm with temperature maintained at 37 °C ± 0.1 °C			
4.9	Optical System: <ul style="list-style-type: none"> a) Detector Method: Direct absorbance in cuvette (bichromatic or monochromatic). b) Filters: Min. 12 nos. Between 340–8000 nm Wavelengths. c) O.D. Range: 0 to 3.3 d) Light Source: 12 volt 20 watt Halogen lamp e) Should have Grating Photometers system. 			
4.10	<ul style="list-style-type: none"> a) Sample Probe system: Should have multifunction reagent/sample polished probe with liquid level detection and collision protection. b) Sample Volumes should be as low as 2ul. 			
	<ul style="list-style-type: none"> c) System should have on board refrigeration for reagents. d) Teflon coated stirrer with triple speed mixing mechanism. e) Pre and post dilution facility should be provided. 			

	f) Should be able to perform HbA1C, ASO, CRP, RF etc. g) Should have auto rerun facility. On board laundry system should be available. Should have degassing technology.			
4.11	Calibration: Linear/Non-Linear/Multipoint.			
4.12	Quality Control Module: Levey-Jennings, SD, CV% (minimum 2 Quality levels per parameter).			
4.13	Stat Facility: Provision for urgent samples.			
4.14	Detection Facility: Bubbles, Reagent Levels.			
4.15	Communication and host interface: Must have Laboratory Information System (LIS) Interface.			
4.16	Computer Specification: Branded PC with configuration: CPU standard Pentium, Standard size RAM, Standard size hard disk drive, High Speed DVD ROM; Keyboard, Mouse and Mouse Pad; Preloaded latest MS Windows Versions activated ; standard size Monitor.			
5	Accessories, spares and consumables			
5.1	Should quote the fixed reagent price for minimum 2 years for all the tests available in the machine.			
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: 220-240V/50Hz AC or universal input fitted with appropriate plug to meet purchaser's country requirements.			
	Standards and Safety Requirements			
7.1	This unit shall be certified to meet ISO 13485:2003/AC:2007.			
7.2	Shall meet IEC 61010-2 for electrical safety requirements.			
7.3	CE (98/79 EC Directives) approved certificates.			
8	User Training			
8.1	Must provide user training (including how to use and maintain the equipment).			
9	Warranty			
9.1	Comprehensive warranty for 2 years.			
10	Maintenance Service during Warranty Period			
10.1	During warranty period supplier must ensure corrective/breakdown maintenance whenever required.			
11	Installation and commissioning			
11.1	Supplier must accomplish proper installation & commissioning of the equipment on site.			

12	Documentation			
12.1	User(Operating)manualinEnglish.			
12.2	Service(Technical/Maintenance)ManualinEnglish.			
12.3	Validmanufacturerauthorizationorsubauthorizationoftheproduct must be submitted			

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भजनी नगरपालिका

नगर कार्यपालिकाको कार्यालय

भजनी, कैलाली

नीलमल्लुमार न्यौपाने
प्रमुख प्रशासकीय अधिकृत

Bhajani Municipality Lab Equipments BOQ

s.no.	Name of products	strength	Quantity	rate	total amount
1	Fully automated biochemistry analyzer with reagent	USFD /IFCC/ISO/CE	1 set		
2	CLIA analyzer (Thyroid) With reagent	USFD /IFCC/ISO/CE	1 set		
3	Distilaation Machine		1 set		
4	Online ups	5 KVA	1 set		
5	Lithium Battery for invertor		2 set		
6	TDS meter		1 set		
7	PH meter		1 set		
8	Revolving chair with suspension		1 set		
9	Stools with suspension and support		5 set		
10	Cupboard ILR Refrigerator		1 set		
total amount					
vat 13%					
Sub Total					