



Government of Kerala
Directorate of Dairy Development Department
Pattom, Thiruvananthapuram

Notice Inviting Re-Tender

Ref : File No:DDDKER/3287/2023-F1

Dated 31/12/2024.

e-Tenders (online bids only) are invited through Kerala Government official e-Procurement portal <https://etenders.kerala.gov.in> for the **Supply of Automatic Protein analyzer** as per the details and terms and conditions given below.

TENDER DETAILS

Sl No	Description	
1.	Mode of Tender submission	Online through e-Procurement portal at https://etenders.kerala.gov.in
2.	Tender inviting Authority	Director, Dairy Development Department
3.	Date & Time of Publication of Tender	31/12/24
4	Last date with time for	13/01/2025 4 PM

	receipt of Tender		
5	Date of opening of Tenders	15 /01/2025	
6	Estimate Amount	18,00,000/-	
7	Earnest Money Deposit (EMD)	Rs.18,000/- 1% (rounded to the nearest rupees) of the total cost, subject to a minimum of ` 1,500	Online Remittance only through https://etenders.kerala.gov.in
8	Tender Fee	0.15% OF COST. ROUND TO NEAREST 100. Max. Rs.25000 Rs.2700+ GST@ 18% Rs.486= Rs. 3186/-	
9	Contact Person of Department of Dairy Development for inquiry of technical details	Smt. Sheeba Khamer Joint Director (SDL) Directorate of Dairy Development, Pattom, TVM Ph:0471 2440074	
10	Name & address where queries/ correspondence concerning this tender is to be sent	Department of Dairy Development, Pattom Palace P O, Pattom, Thiruvananthapuram . 695004 e-mail: cru.ddd@kerala.gov.in jd-sdl.dairy@kerala.gov.in Phone: 0471 2440074 Website: www.dairydevelopment.kerala.gov.in	

TECHNICAL SPECIFICATION

	TENDER SPECIFICATION		
	AUTOMATIC PROTEIN/NITROGEN ESTIMATION SYSTEM		
SI NO	MINIMUM REQUIREMENTS		COMPAILANCE YES/NO
	PARAMETERS	REQUIREMENTS	
	Should be combined unit with all units from the same		

	manufacturer and consist of Digestion unit, Distillation unit, Scrubber and Accessories		
1	DIGESTER		
1.1	POSITIONS	20 (250ml tubes)	
1.2	Heating Element	Aluminium Block	
1.3	Power Consumption	2700 Watts (Maximum)	
1.4	Temperature	Room Temperature – 450 °C	
1.5	Temperature Stability	± 0.5 °C %	
1.6	Time Range	1 – 999 Minutes or More	
1.7	Display	Graphic Display or better	
1.8	Control System	<ul style="list-style-type: none"> • Microprocessor Based System • Should have programmable time & temperature ramping and audible alarms • End of run with audible signal 	
1.9	Programme	<ul style="list-style-type: none"> • At least 25 pre programs for milk, milk products, animal feed, food products • At least 20 user programs with temperature ramp Ramping of at least 4 ramps per Programme 	
1.10	Lift and suction cap control	Automatic	
1.11	Interface	USB	
1.12	Material Of Construction	SS with chemical resistant coating.	
2	SCRUBBER		
2.1	Material of Construction	Techno polymer / Poly Propylene / Metal structure and PVC components / high endurance materials like borosilicate glass	
2.2	Features	<ul style="list-style-type: none"> • Auto Start from Digestion system • Cleaning shall include condensation, neutralization, 	

		<p>adsorption and redox reactions to maintain efficiency of the equipment</p> <ul style="list-style-type: none"> • Suction should be regulated/ adjustable to achieve efficient digestion. • Capacity of Glass Tank : ≥ 2 L 	
2.3	Power Consumption	210Watts (Maximum)	
3	Automated Distillation Unit		
3.1	Programmable	for all controls like cooling water, dilution water, sodium hydroxide, receiver solution, automatic calculation, automatic emptying of tube etc.	
3.2	Pump	Calibrational pump for NaOH, Boric acid, water and other reagents	
3.3	Display	Minimum 7 " coloured and interactive touch screen	
3.4	Programme	Minimum 15 Predefined Programmes	
3.5	Analysis Time	3-5 Minutes	
3.6	MEASURING RANGE	0.1 - 200 mg or more Nitrogen	
3.7	Recovery	$\geq 99.5\%$.	
3.8	Detection Limit	0.1 mg N	
3.9	RSD	$\leq 1\%$	
3.10	Splash head	Alkali resistant techno polymer or poly propylene	
3.11	Material of Construction	Chemical and Corrosion resistant techno polymer or poly propylene (outer material)	

3.12	Interface / Connectivity	USB port or through Wi-Fi RS232 for External Titrator LAN LIMS or Equivalent	
3.13	Power Consumption	2400 Watts (Maximum)	
3.14	Other Specifications	<ul style="list-style-type: none">• There should be separation between distillation tube and segregation section either by wall or door• The system should be provided with suitable password protection to prevent tampering of programmes and data.• The system shall have the possibility to track performance of the system and warns if analysis results changes over time. It is desirable to have component traceability feature in the system for effective maintenance of the system• Cooling water regulation by programming• Automatic waste removal via tube	

		<p>drainage after distillation</p> <ul style="list-style-type: none"> • Steam output regulation between 10 % to 100% • Lever system to position the test tube • Provision for connecting External Potentiometric Titrator • Drip tray to collect spillage during steam distillation • Safety sensors for test tube sensor, cooling water flow rate detector • It should be possible for retrieving data using suitable software which is compliant to traceability. 	
4	ACCESSORIES		
4.1	Digestion Tube 250 ml	40 Nos	
4.2	Sample Rack	2	
4.3	Stand For Sample Rack	2	
4.4	Suction Cap with Drip Tray	1	
4.5	Water & Reagent Tanks with Cap	3	
4.6	Residue Collection Tank with Cap	1	
4.7	Complete Glass bottle set	1 Set	
4.8	Complete Cables and Tubing's	1 Set	
4.9	Major/Full PM Kit Digestor	1 Set	
4.10	Major/Full PM Kit	1 Set	

	Distillation Unit		
4.11	Major/Full PM Kit Scrubber	1 Set	
4.12	All other Accessories and Components for Proper Working of Equipment at Full Fledge.		
5	Method	Official approvals: AOAC,DIN and ISO Standards AOAC 984.13, EN ISO 5983-2 (AOAC 2001:11), AOAC 920.53, AOAC 950.09, AOAC 950.36, ISO-IDF 8968-1/20-1:2014, ISO 20483, ISO 8968-2, ISO 8968-3, ISO 8968-4, AOAC 979.09 EN ISO 5983-2 (AOAC 2001:11), AOAC 950.09, AOAC 978.04, EN ISO 5983-2 (AOAC 2001:11)	
6	Reference Standard	Certified Ammonium sulphate (min 80 g)	
7	Operating manuals, service manuals, other manuals	Should provide: - <ul style="list-style-type: none"> • User, technical and maintenance manuals in English language • List of equipment and procedures required for local calibration and routine maintenance • Service and operation manuals to be provided Advanced maintenance tasks documentation, if any. • Application Book is Available 	
8	Recommendations or Warnings	Any warning signs would be adequately displayed	
9	Warranty	3 year after satisfactory installation and working. With 3 Free Preventive Maintenance per Year Under Warranty Period.	

		<p>The Warranty Includes all the Parts Except Consumables. **</p> <p>Provision should be there to extend the warranty up to 2 years (at least)</p>	
10	AMC	Amc Quote for next 7 years after warranty	
11	List of Spares and Accessories	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached	
12	Training	The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on-site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction (no additional cost has to be charged)	
13	Quality Requirement	<ul style="list-style-type: none"> • Should be compliant with the requirements of FDA/CE/BIS Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard) • Should have necessary certification for safety and quality standards from national /International bodies 	
14	IQ/PQ/OQ	On site IQ, OQ, PQ of instrument along with document to be provided &	

		supplier to assist till satisfactory PQ of instrument	
15	After sales service/ Post warranty	<ul style="list-style-type: none"> • Contact details of manufacturer, supplier and local service persons, Application specialist to be provided, including toll free/ Landline Number; and mobile number • Details of Service centres in INDIA and Minimum 3 service Engineers in South India with their names and mobile numbers • Should have a good after sales service/technical support capable of reaching at short notice the places where instrument is installed. Visits and unlimited breakdown calls by service/application support, engineers should attend immediately without fail. • Service and spare availability of brand for 10 years to be given as agreement on stamp paper 	
16	Compliance statement	The quote should also include a compliance statement vis-à-vis specifications in a “tabular form” clearly stating the compliance and giving justification, if any supported by technical literature. This statement must be signed, with the company seal, for its authenticity and acceptance that any incorrect or ambiguous information found	

		submitted will result in disqualification.		
17	Outage conditions	<p>After 3 years of warranty period, 7 years of AMC shall be undertaken by the supplier. This would also include:</p> <ul style="list-style-type: none">• Preventive maintenance service: The seller will provide a minimum of 3 Preventive Maintenance Service visits during a year to the operating base to carry out functional check-ups and minor adjustments/tuning as may be required.• Breakdown Maintenance Service: In case of any breakdown of the equipment/system, on receiving a call from the buyer, the seller is to provide maintenance service to make the equipment/system serviceable.• Response time: The response time of the seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.• Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system.• The Supplier /brand should be reputed with atleast 10 users for Automatic Protein		

		<p>Analyzer Machine in India and able to produce atleast 5 performance certificate of same quoted machine from users including Government NABL Labs/Reference labs (to be submitted along with technical bid)</p> <ul style="list-style-type: none">• Company/Brand should have an experience of 10 years in the supply of Automatic Protein Analyzer Machine.• Bid specific OEM authorization certificate is required• The delivery challan shall indicate the model number & serial number of items delivered• All equipment's should be from a reputed OEM of non-Chinese origin as per MHA guide lines• Bidder must have minimum 10 cores or above Turnover for the last 3 years(Attach Proof)• Buyer reserves the right to reject/accept the items based on the market survey• The bidder should clearly mention the make and model number in BOQ compliance	
	Additional Requirements	<ul style="list-style-type: none">• The bidders must show technical demonstration of the quoted model onsite or other labs at the time of Technical evaluation of bids .This is an Essential requirement.(Companies has to arrange the demonstration by their own cost. Department will not bear any additional	

		<p>expenses)</p> <ul style="list-style-type: none"> • Digestor, Scrubber, Distillation Unit and Accessories should be from the same manufacturer . • The instrument shall be delivered with a Verification Test document that certifies that instrument has been performance tested in factory (confirming analysis performance). • The Instrument shall strictly confirm to the specifications with relevant brochure and photograph and website information of the product • Sample will be given to the bidders during Technical evaluation and Companies either at the customer site or any other mutually convenient Lab , same sample should be analysed for 6 times for repeatability for not more than 5 % between test results .Repeatability and reproducibility has to be proved and will be technically verified.This is an important requirement <p>The System must be compliant to ISO 17025:2017 ; Certificate from the manufacturer should be submitted</p>	
18	Payment	Payment only after installation, validation and performance	
Tender- 1 - Dairy Development Department			
Supply of Automatic Protein analyzer (1no)			

Mandatory documents required to be uploaded

Proposed product specifications shall be included as scanned signed copies in the e portal along with Tender

1. Covering Letter.
 2. General Information of the company and company profile, Company Registration details ,Legal identity.
 3. Detailed component wise technical specification of Automatic Protein analyzer with specific quoted model brochures and photographs and website information.
 4. Experience pertaining to supply of Automatic Protein analyzer for at least 10years.
 5. No. of installations of protein analyzer supplied nationwide during last 5 years with Customer reference list.
 6. . No. of installations of protein analyzer supplied to Government firms / institutions last year.
 8. Copy of work orders of protein analyzer (at least 5 nos for last 2 years).
 9. Bid specific OEM authorization certificate is required.
 10. Bidder must have minimum 10 cores or above Turnover for the last 3 years
- (Attach latest Proof along with technical bid)

Important Terms and Conditions:

1. Buyer reserves the right to reject/accept the items based on the market survey
2. The bidder should clearly mention the make and model number in BOQ compliance
- 3.The firm should clearly satisfy the warranty terms and the quoted items should meet all the technical specifications.(will be verified physically during technical evaluation)
4. Quoted price should be inclusive of all taxes ,installation, training, freight loading and unloading
5. The bidders must show technical demonstration of the quoted model onsite or other labs at the time of Technical evaluation of bids .This is an Essential requirement.(Companies has to arrange the demonstration by their own cost. Department will not bear any additional expenses)
6. Digester, Scrubber, Distillation Unit and Accessories should be from the same manufacturer .
7. The instrument shall be delivered with a Verification Test document that certifies that instrument has been performance tested in factory (confirming analysis performance).
8. The Instrument shall strictly confirm to the specifications with relevant brochure and photograph and website information of the product
9. Sample will be given to the bidders during Technical evaluation and Companies either at the customer site or any other mutually convenient Lab , same sample should be analysed for 6 times for repeatability for not more than 5 % variation between test results .Repeatability and reproducibility has to be proved and will be technically verified.This is an important requirement
10. The System must be compliant to ISO 17025:2017 ; Certificate from the manufacturer should be submitted
11. The delivery chalan shall indicate the model number & serial number of items delivered
12. All equipment's should be from a reputed OEM of non-Chinese origin as per MHA guide lines
13. Bids and Tender Documents, signed physically and/or digitally with a valid Digital Signature Certificate, are to be submitted online only in the designated covers on the official web portal of e Tenders Kerala.
14. Bidders who apply for Automatic Protein analyzer will only be considered for technical tender evaluation. Others will be rejected.
15. Financial Bids should be uploaded only in the specific BOQ form available on the web portal against this Tender. Tenders, which are not in the prescribed BOQ form, are liable to be rejected.
16. Payment of the Total amount of EMD & Tender Fee should be made through Online Payment mode as a Single Transaction only.
17. Payment terms :- 100 % payment shall be made to the supplier (e payment) only after effective installation, testing and trial run of the testing unit, training to the Officers and acceptance of the same by the end users.
18. payment will be made after the performance evaluation by Director Dairy Development Department.
19. Price reduction on delayed delivery :- In case of delayed delivery, price reduction shall be applicable at the rate of 1% of the order value per week or part there of delay subject to a minimum of 10 % of the total order value.
20. Any litigation regarding the supply of equipment shall be subjected to Thiruvananthapuram district.

21. Successful bidder should remit an amount equal to 5% of the total contract value as performance security.
22. An agreement should be executed and signed by the Tenderer in the Kerala Stamp Paper of value Rs.200/-. A specimen form of agreement is given in the Tender Documents. Hard Copy of this agreement should be send to the Tender Inviting Authority on award of contract.
23. Online Opening of the Tenders will be done on the specified Date and Time through the official web portal of Tenders Kerala.
24. All items quoted must comply with the respective Specifications mentioned in the Tender notice and Bidders should upload the details and specifications of their items quoted.
25. **The final total rates of Automatic Protein analyzer will be considered for selection of L1 bidder. No separate item will be considered.**
26. The successful tenderer should supply the Items within 60days of execution of agreement of contract.
27. The Tender Inviting Authority (TIA) will not be responsible for any sort of the delay or the difficulties faced during the submission of bids through online by the bidders.
28. In addition to these all other General Conditions annexed in the Stores Purchase Manual of Government of Kerala are also applicable to this tender.

DIRECTOR