राष्ट्रीय अंटार्कटिक एवं समुद्री अनुसंधान केन्द्र पृर्ध्वी विज्ञान मंत्रालच भारत सरकार) हेड लैण्ड सडा, वास्को डा गामा गोवा- ४०३ ८०४ भारत



NATIONAL CENTRE FOR ANTARCTIC & OCEAN RESEARCH

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PROCUREMENT SECTION

ENQUIRY

M/s.

Ref. No.:	LHE-20109
Date:	31.07.2013
Due Date:	19.08.2013

Dear Sir,

You are requested to send your offer for the following items as per the terms and conditions mentioned below.

SL. NO.	DESCRIPTION	Quantity
	Brand: Millipore	
1	Vacuum Manifold	01
	SS 316 STERILITY TEST MANIFOLD SYSTEM-3 STATIONS with 2	
	way valves and Air vent at each station having PTFE Luer lock	
2.	Vacuum Pressure pump kit VACPMPKI	01
	T Vacuum pressure pump kit (inclusive of vacuum pump, filtering	
	flask, silicone stopper, Silicone tubing glass tube and millex FA-50	
3	Manifold Filtration System	01
	PSS3047/2 SS 316 Manifold Alone, 3-place, 1/pkg, 2 4238 47mm	
	Magnetic Filter Funnel, 500ml capacity, 1/Pkg, 3 4402 Vacushield	
	Vent Device 0.45µ, 50mm	
4	Filter holder apparatus, 47mm, complete set (XI1504700)	01
5	Tubing ¼' I.D. x 7.6m, Tygon	01
6	Milli Q and Millipore Water Purification System	01
	Detailed specification attached as per Annexure-I	

Your offer should contain the following information:

- 1. Submit your quotation on F.O.B/C.I.F basis/F.O.R Destination.
- 2. Delivery Period:
- 3. Validity of quotation:
- 4. Quantity/Trade discounts, if any. :
- 5. Guarantee/Warranty of the product:
- 6. Taxes applicable (VAT if any):
- 7. Enclose brochure/leaflet Specification:
- 8. No advance payment will be made. Payment by irrevocable letter of credit after supply and acceptance of the equipment by NCAOR. The payment will be authorized after submission of a Bank Guarantee for 10% value of the order towards warranty guarantee. The **performance Bank Guarantee** should be furnished within 15 days from the date of placement of order from a reputed bank (scheduled bank in India **or** foreign bank operating in India) valid till 60 days after the warranty period.

- **9.** Overwriting and corrections should be attested properly. The quotaion should be complete in all respects and should be duly signed. **Incomplete and unsigned quotation will not be considered at all.**
- 10. All relevant technical literature pertain to items quoted **with full specifications** (Drawing, if any), information about the products quoted, including brochures if any should accompany the quotation.
- 11. A list of **reputed clients** to whom the firm has supplied similar items to be furnished along-with the quotation.
- 12. Quotation should be **valid for a period of 90 days** and the period of delivery required should also be clearly indicated. If the supplier fails to deliver the goods within the time to be agreed upon, for delayed deliveries and for delays in installation (wherever applicable) NCAOR reserves the right to **levy liquidated damages** at the rate of 0.5% per week or part their of upto maximum of 5%.
- 13. Warranty shall commence from the date of installation and acceptance of the complete equipment supplied under the Purchase Order / Contract. The **warranty period** and the kind of **post-warranty support** should be indicated.
- 14. Please **specify the Make/Brand** and Name of the Manufacturer with address, country of origin and currency in which rates are quoted.
- 15. Both **FOB and CIF prices upto Indian port of entry** namely <u>Goa</u> should be indicated. However quotation should contain item-wise prices including total ex-works price and cost of packing forwarding, approx. cost of air-freight charges for delivery up to Goa, India.
- 16. A technical Committee constituted by the Director will assess the product supplied/installed for their quality and their conformity to the specifications provided by the firm in their quotations. Any item(s) identified by the Committee to be not as per the specifications or are found to be of inferior quality will be rejected, and the bills towards the supply will not be processed for payment till proper replacements are provided.
- 17. Suppliers should clearly define the mechanisms of **post-warranty** maintenance or support. Supplier should undertake to support the product for a minimum period of 5 years (post-warranty). Post Warranty, AMC charges for a period of 3 years (annual bases) should also be quoted separately in the quotation.
- 18. Two sets of operational, service/troubleshooting manuals and diagrams to be supplied.

Please enclose documentary proof such as latest purchase order copies etc., to substantiate the reasonability of price. Also confirm that the "the rates quoted by you are reasonable and lowest charged to any of your customer".

Director, NCAOR reserves the right to reject any quotation received without assigning any reasons.

Yours faithfully

Executive (Procurement) For and on behalf of Director, NCAOR

Specifications As Per Annexure-I

Sr.	Description
мо. 6	Milli O and MilliPore Water Purification System Specification
	Single Integrated System should be capable of producing type II (10-15 Megaohm resistivity) and type I (18.2 megaohm resistivity) with pretreatment cartridge, Reverse Osmosis, Electro Deionization, two UV lamps (one with 254 nm Wave length at stage I & other with both 185 and 254 nm Wave length at Stage II), Mixed bed ion exchange resin, inbuilt TOC monitor and Final optional membrane filter with feed water acceptance upto 2000 micro Siemens conductivity, Fouling Index (SDI)<12, Total Chlorine<3 ppm.
	2000 micro Siemens conductivity, Fouling Index (SDI)<12, Total Chlorine<3 ppm. STAGE 1 2 Stage pretreatment system PREFILTER 5 micron and 1 micron wrapped type depth filter, Less than 50 Db noise levels, Automatic low/high pressure cut off, DC pump with 0-2 pressure at 120L/hr, Inlet screen filter to DC pump, Optional filters: Activated carbon STAGE 2 Pretreatment cartridge with anti scaling compound, Pump with unique temperature feed back mechanism, High flux Thin film composite polyamide RO membrane with 94-99% rejection, The system should provide 15 Ltr/Hr Type 2 grade (Resistivity:10-15 Mega Ohms) water dispensed in the external Tank, Recirculation loop with capillary tube and diaphragm valve, Mixed bed ion exchange resin filled electro deionization module with auto regeneration by a weak electric current, eliminating the need for chemical regeneration or replacement of DI resin cartridges. EDI (ElectroDeIonisation) module that should not require softening pre- treatment. Carbon beads at cathode of the EDI module to prevent scaling of the module on a long run. Reverse osmosis Permeate divert valve which will divert low quality water to the drain automatically. Coaxial resistivity cell with a flow through design and a cell constant of 0.01 cm- ¹ UV lamp 254 nm to remove germicidal effect before entering the tank, Display both compensated and non-compensated temperature accurate within ±0.1°C, The system should have optional facility to deliver Type II Water flow rate @21/min using Volumetric dispensing arm with 0.22 micron filter which can be put at 3 Feet distance long. STAGE 3 A blow molded, cylindrical PE reservoir with a conical bottom and opaque walls with a 30 liter capacity RESORVIOR Sensor rod float switch, programmed to have high and low level cutoff based on water level in the tank. The tank should fill from the bottom, should possess a tank vent filter made of soda lime, activated carbon and 0.22 micron hydrophobic membrane to trap contaminants present in atmospheric air. STAGE 4 17wat
	unit with 1. Adjustable height and rotating arm-adjustable to any glass ware. 2. Multi colour monitor displaying: resistivity, TOC level of water in reservoir, volume dispensed and other alarms, printing to be directly accessible from the point of delivery unit. Pure (Type II) Water: Particulates<0.22µm (/mL)<1, TOC (ppb) <30, Flow Rate (L/min) 0.05 to 2 (Programmable flow rate) (Using optional Dispensing Unit), Bacteria <1cfu/ml (with remote dispensing arm), Resistivity 10-15 Mega Ohms, Pyrogens< 0.001 EU/ml (With optional biopak)
	UltraPure (Type I) water : Ultrapure Water (Type 1) Flow Rate (L/min) 0.05-2 (flow rate)
	Ultrapure Water Resistivity (MΩcm at 25°C)18.2, Microorganisms (cfu/mL)<1, Particulates <0.22μm (/mL)<1, Pyrogen Levels (EU/mL)<0.001, RNase Level

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(ng/mL)..<0.01, DNase Level (pg/ μL)...<4, TOC (ppb) ...<5