

Indian Institute of Technology Delhi
Department of Chemical Engineering

Date: 30/08/2012

Ref. no: CHE/2012/WPS

The Department of Chemical Engineering invites quotations for an ultrapurification water system with the following specifications:

1. The tap water should pass through a pre-filtration unit comprising of 5 micron filter & a booster pump.
2. The water purification system should deliver pure & ultrapure water directly from tap water eliminate the need of two different systems in the same laboratory
3. The system should be comprised of a single water purification unit containing reverse osmosis, electro-deionisation with carbon beads on cathode, UV irradiation (for both pure and ultrapure), ion-exchange and activated carbon technologies on cathode and polishing device.
4. The water system should include an ElectroDeionisation (EDI) module that does not require softening pre-treatment. This is to eliminate the need of regular replacement of deionization cartridges.
5. A built-in TOC monitor (range 1ppb-999ppb) should be present.
6. The ultrapure water system should have a built-in UV lamp with emission at 185 and 254 nm wavelength.
7. The system should be able to take feed water up to 2000 microS/cm & free chlorine of 3 ppm.
8. A 50 liter reservoir should be provided.
9. The ultrapure water delivery should be from an independent dispenser displaying the water parameters like TOC, Resistivity, volume of water dispensed etc.
10. The system should produce water of the following quality

PURE

Resistivity: > 5 typically
TOC : < 30 ppb
Flow rate: 3 lit/hr

ULTRAPURE

Resistivity: > 18.2 typically
TOC : < 5 ppb
Bacteria : < 1cfu/ml.
Conductivity : < 0.055 uS/cm
Flow Rate: upto 2 lit/min
Endotoxin: < 0.001 Eu/ml.

WARRANTY: At least 12 months warranty against all manufacturing defects from the date of installation.

Terms and conditions

- The technical and commercial bids must be submitted in separate sealed envelopes subscribed with "Technical Bid" or "Commercial Bid" as appropriate. Both the technical and the commercial bids should be enclosed in an envelope subscribed "Quotation for ultrapurification water system" and should be submitted to the undersigned.
- The supplier must be an authorized dealer/distributor of the principal/manufacture and should furnish an authorization certificate from the principal/manufacture.

- CIF New Delhi prices should be quoted with all the terms and conditions i.e. applicable taxes, installation, warranty and delivery schedule.
- The supplier should provide a list of institutions in India with the details of the ultrapurification water systems supplied and with the contact details of the institution/department.
- Quotations must be valid for at least two months from the date of the NIQ.
- A special discount/rebate wherever admissible keeping in view that supplies are being made for educational purpose in respect of public institution of national importance may please be indicated.
- The institute reserves right to accept or reject any or all quotations without stating the reasons thereof.
- The quotations should reach Dr. Shalini Gupta, Block-I, Room-315, Chemical Engineering Department, Indian Institute of Technology-Delhi, Hauz Khas, New Delhi 110016 latest by 25 September 2012.

Shalini Gupta

Department of Chemical Engineering

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