

INDIAN INSTITUTE OF TECHNOLOGY DELHI
Department of Civil Engineering
Notice Inviting Quotations

NIQ No. IITD/Civil (Store)/2012-13

February 01, 2013

Deadline: February 15th, 2013 (5:00PM)

Department of Civil Engineering wishes to purchase **Aerosol Spectrometer/ Environmental Dust Monitor** as per the specifications given below.

Technical & Commercial bids (in two separate sealed envelopes) clearly labeled with note as “**Quotation for Aerosol Spectrometer/Environmental Dust Monitor**” should reach the following address on or before **February 15th, 2013 by 5PM.**

Technical Specifications:

A Portable battery operated system for Indoor & Outdoor Dust Measurement in following user selectable modes:

S.No..	Specifications	Requirement
1	Number distribution	Particle count concentration in 15 or more channels shown as particles/liter
2	Mass Fractions	Occupational (inhalable, thoracic, alveolic) in $\mu\text{g}/\text{m}^3$ in conformity with standard EN 481. Environmental (PM ₁₀ , PM _{2.5} , PM ₁) in $\mu\text{g}/\text{m}^3$ Mass distribution in 15 channels in $\mu\text{g}/\text{m}^3$
3	Measurement	Light scattering based Real-time measurement of aerosol in ambient air in different size channels.
4	Size channels	15 or more size channels <ul style="list-style-type: none"> • 5 Channels or more for particle size diameter $\geq 0.3 \mu\text{m}$ & $< 1.0 \mu\text{m}$ • 5 Channels or more for particle size diameter $\geq 1.0 \mu\text{m}$ & $< 5.0 \mu\text{m}$ • 5 Channels or more for particle size diameter $\geq 5.0 \mu\text{m}$ & $\leq 20 \mu\text{m}$
5	Data Collection Mode	User selectable in following modes * 15 channel COUNT Mode in Particles/ltr * 15 channel MASS Mode in $\mu\text{g}/\text{m}^3$
6	Count range	1 to 2,000,000 particles/litre
7	Mass range	100,000 $\mu\text{g}/\text{m}^3$
8	Sensitivity	1 particle/ltr in Count and 1 $\mu\text{g}/\text{m}^3$ in MASS
9	Sample flow rate	1.2 ltr/minute – volumetric controlled
10	Operating temp	0 – 40 °C
11	Dust collection	On removable 47 mm PTFE filter paper
12	Auto Calibration	Auto zero at start-up
13	Averaging	User programmable data averaging from 1minute to 1 hour in user selectable steps.
14	Data Logging	Built-in data logger for storage of 1 month data of 5 min averaged value on removable storage cards.
15	Power	220 V +/- 10%, 50 Hz & Rechargeable battery with charger for minimum 5 hours operation
16	Diagnostics	Self-diagnostics at the start
17	Outputs	RS 232 Com port
18	Weight	< 3 Kg with battery
19	Software	Window based software for PC to read out data from storage card and data processing for presentation in numeric and graphic mode with statistical package for min, max, mean, range, variation, deviation, etc.

20	Temperature and Relative Humidity sensor required	Temperature and Humidity Sensor compactible with Aerosol Spectrometer with simultaneous facility for data logging
21	Accessories required	Battery with charger, Radial symmetrical sampling head, PTFE Filter 47 mm (25 pcs.), Cable for data transfer on USB port, Carrying case, Power cable
22	Optional items required	Battery (1 no.), PTFE Filter 47 mm (25 pcs.), Zero Filter for zero check (1) Pump Protection filter (1), O-rings (set), Tubings (set), Spare Sampling Pump
23	Calibration Facility	Bidder must have Calibration Facility in India and should provide details on the Calibration facility available with them
24	Bidder Credibility	The Bidder should be a reputed manufacturer with minimum 10 years of experience and they have Exclusive/Authorized Agent in India since last 5 years or more.

For any queries, please do not hesitate to contact undersigned.

Terms & Conditions:

- Detailed specifications, catalogue/literature and authorization certificate of all items quoted should be supplied with quotation.
- Bidder should provide user list for the said item in India and Performance Certificate from minimum 5 users in India
- Bidder must specify Customs Tariff Code and Custom Duty applicable for IIT Delhi in their quotation.
- If the items quoted are proprietary in nature, please enclose proprietary certificate from the principals stating “Certified that ----- is a proprietary item of M/s ----- and no other manufacture make these items”.
- Please quote prices at FOB basis in case of prices in foreign currency
- Price in Indian rupees shall be quoted on FOR Basis.
- Quotation should clearly mention installation & delivery charges. Clearly indicate whether the prices are inclusive of all taxes. Otherwise indicate all taxes separately.
- Special discounts/rebate wherever admissible keeping in the view that supplies are being made for an Educational institute may be indicated in the offer.
- Supplier shall fully warrant that all the materials supplied under the order shall be new and first quality.
- Quotation should be valid for three months from Due Date.
- A minimum of 1 year’s comprehensive warranty of the equipment is required.
- The technical and financial bids should be sealed in separate envelops with proper labeling before putting them together in the sealed cover.
- Payment in Foreign currency will be made by Letter of credit as per Institute’s rules.
- Payment in Indian currency will be released after installation as per Institute’s rules.
- Delivery period should be clearly indicated in the quotation.
- Order must be delivered and installed within 6 weeks of receipt of order.
- Prices for Annual Maintenance Contracts including any applicable discounts for educational use of the equipment for a period of 3 year from the date of installation of the equipment of IIT Delhi should be quoted in a separate sheet within the financial bid.
- Incomplete and conditional submitted tenders would be summarily rejected.
- Institute Reserves the right to accept/Reject any or all quotation without assigning any reason.

Name and Address for quotations:

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