Department of Biochemical Engineering and Biotechnology
Indian Institute of Technology Delhi

April 9, 2012

NIQ for CO_2 INCUBATOR

1) Microprocessor controlled 150-200 Liters direct heated CO_2 Incubator with High Temperature Decontamination facility@160degC having temperature control from 8deg. C above ambient to 50°C, with control accuracy ±0.1°C.
2) It should have six-sided direct heating with finless, gentle convection circulation to provide stable temperature control, excellent uniformity and rapid recovery with no over shoot.
3) It should have CO_2 control range from 0 to 10% with control accuracy and uniformity of ±0.1% and should have rapid recovery.
4) It should have Infra-red (IR) CO_2 sensor with programmable auto-zero function provide superior accuracy & stability.
5) It should come with minimum 3 adjustable height shelves & humidity reservoir (removable) to achieve 95 +/- 2% RH with humidity digital display.
6) It should have independent door heater eliminate condensation on inner door surface.
7) It should have digital display for set parameters such as temperature, weekdays, time, CO2, humidity and set-up values - language to be chosen in setup with audio visual alarm.
8) It should have HEPA filter on CO_2 inlet.
9) It should have USB interface.
10) It should have non-volatile memory which must guarantee data integrity regardless of length of time or frequency of power interruption.
11) 2 Pt100 sensors Class A in 4-wire-circuit, mutually monitoring and taking over the performance at the same temperature value
12) It should have following additional safety (Auto-safety function) such as back-up microprocessor, separate under/over temperature cut-out, alarms set point reset automatically, password protection etc. etc.
13) It should come with CO_2 gas cylinder with regulator.
14) It should be ISO 9001 & CE Certification. programme stored on power failure
15) It should have chip card for sterilisation of working chamber with fixed cycle (4 hrs./160 °C) without removal of sensors and mountings
16) It should have fully insulated stainless steel door with double locking and 4-point adjustment and inner glass door with opening to take gas samples.

General instructions:

1. Letter from the manufacturer specifically to quote for this tender is to be attached for authenticity of dealership/ agency and the dealer should be authorized service provider.
2. Vendor should get a fresh certificate directly from their product principal's clearly mentioning about warranty for three years of the equipment to be delivered from the date of installation.
3. The lowest quotation however, does not depend upon the warranty period.

4. Validity of the quotation should be at least three months. Vendors will do the installation and demonstration of the equipment at IIT Delhi premises without additional charges.
5. Taxes, terms and conditions should be clearly mentioned.
6. In the case the items are proprietary products of the company, a proprietary item certificate stating the same may be provided.
7. Specifications form should be similar to the given specifications sheet.
8. A compliance statement for required specifications should be attached.
9. Payment terms and conditions should be clearly mentioned. No advance payment is encouraged by IIT Delhi.
10. Firm MUST provide a compliance statement vis-à-vis specifications in a "tabular form" clearly stating the compliance and giving justification, if any supported by technical literature with clear reference of page number, paragraph or lines. This statement must be signed, with the company seal, by the tendered for its authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification of the tender. The quotation should be complete in all respects. (as per IIT-Delhi rules).

The Institute/ purchase committee has the right to accept or reject any bid or all quotations without assigning any reason whatsoever.

Sealed quotations in separate envelopes of Technical and Commercial bids kept in one sealed outer envelope (super-scribed "Quotation CO_2 incubator") should be addressed to **Dr. Ritu Kulshreshtha, Department of Biochemical Engineering and Biotechnology, IIT-Delhi, Hauz Khas, New Delhi 110016** and should **reach the Department of Biochemical Engineering and Biotechnology, IIT-Delhi by 1200 hrs on April 24 , 2012.**

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