

September 10, 2013

NIQ for Gradient PCR machines

Sealed quotations are invited for the supply of Dual Block Gradient PCR machine (**1 unit**) and single gradient block PCR machine (**1 unit**) in the Department of Biochemical Engineering and Biotechnology. The technical specifications for the gradient PCR machines are given below.

Specifications:-

- It should have capability to accommodate 2x 96 x 0.2ml PCR Tube, 2x 71 x 0.5 ml PCR tube and 2x 96 well PCR plate (Skirted, Semi-skirted or Un-skirted plate) for ultimate throughput
- It should have precise control of temperature based on Peltier patented Triple Circuit Technology. The Block Temperature Accuracy should be $\pm 0.2^{\circ}\text{C}$ and Block Homogeneity: $\leq \pm 0.3^{\circ}\text{C}$ (20°C to 72°C); $\leq \pm 0.4^{\circ}\text{C}$ (90°C)
- The ramp rate should be 3°C/s (Heating) and 2°C/s (Cooling)
- The Gradient technology should ensure identical ramp rates in both gradient and normal operation and it should be able to test 12 different temperatures in gradient function
- Gradient temperature range from $30 - 99^{\circ}\text{C}$ with 0.1°C minimum gradient spread
- Block temperature control range must be 4°C to 99°C
- It should have 'Fast, Standard and Safe' temperature control modes providing ultimate flexibility for different applications.
- It should have capability for thermal sample Protection (TSP) to accommodate PCR tubes with flat or domed caps. The Lid Temperature range should be $37 - 110^{\circ}\text{C}$
- It should have large display with Intuitive Graphic programming
- It should have a login option with or without PIN for enhanced security
- It should allow customized programming with a maximum of 20 steps and 99 cycles
- Auto Restart facility with user defined time interval when power fails and resumes
- Instrument should display remaining runtime in larger font and the status of the run
- Should have Two USB ports: for Protocol transfer, Self-test, USB, printer / mouse
- It should have Power save Standby function
- It should have cooling vents at bottom and rear
- Optional Self-test dongle to check functionality of all 6 peltier elements
- Interface: USB, Ethernet, CAN in, CAN out
- Maximum power consumption should be 700 W
- Calibration should be according to NIST (USA), DKD/PTB (Germany) UKAS/NPL (UK), UL/cUL listed. It should comply to RoHS (2011/65/EU)

Terms and conditions:

1. A minimum comprehensive warranty with spares for 3 years from the date of installation of the instrument.
2. Comprehensive on-site training to the users after installation.
3. Catalogue in original with all technical specifications printed on the catalogue. Principal needs to declare the year of launch of the quoted model.

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 systems to be delivered.
3. Special discount/ rebate wherever admissible keeping in view that the supplies made for educational purposes in respect of the public institution of national importance may please be indicated.
4. Vendors should attach the relevant product brochures for the model quoted.
5. Validity of the quotation should be at least three months.
6. Vendors will do the installation and demonstration of the equipment at IIT Delhi premises without additional charges.
7. Taxes, terms and conditions should be clearly mentioned.
8. In the case the items are proprietary products of the company, a proprietary item certificate stating the same may be provided.
9. Specifications form should be similar to the given specifications sheet.
10. A compliance statement for required specifications should be attached.
11. Payment terms and conditions should be clearly mentioned. No advance payment is encouraged by IIT Delhi.
12. 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 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 for Gradient PCR machine”) should be addressed to **Prof. T.R. Sreekrishnan, 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 1500 hrs by **September 26th, 2013**.