DEPARTMENT OF MECHANICAL ENGINEERING

INDIAN INSTITUTE OF TECHNOLOGY DELHI

Dated: October 5, 2013

Notice Inviting Quotations

Quotations are invited for the purchase of a High Voltage Dual Channel DC Power Supply. More details on the desired specifications are provided below.

- 1. Type: IGBT based switched-mode power supply (SMPS)
- 2. Input Voltage: 230V ±10% AC, 50Hz, Single Phase
- 3. Output Voltage: 0 to 5 kV DC or higher voltage
- 4. Output Current: 0 to 50 mA or higher current
- 5. Mode of Operation: Constant Voltage and Constant Current
- 6. Number of Outputs: two (2) or more
- 7. Polarity: Positive for both outputs
- 8. Line Regulation should not be more than 0.05% for ±10% variation in input voltage
- 9. Load Regulation should not be more than 0.05% for 0 to 100% load variation
- 10. Output ripple should not be more than 0.1% RMS
- 11. Voltage Control by potentiometer on the front panel with ten (10) or more turns
- 12. Current Control by potentiometer on the front panel with ten (10) or more turns
- 13. The device should provide protections against overload, short-circuit and arc
- 14. Front panel of the power supply should have at least the following features:
 - AC Power ON/OFF switch with indication
 - High Voltage ON/OFF switch with indication (2 sets)
 - Three and a half $(3^{1}/_{2})$ digit voltage meter and current meter (2 sets) or better
 - Potentiometer (with 10 turns or more) for voltage control and current control (2 sets each) or better
 - Constant Current and Constant Voltage Indicator (2 sets each)
- 15. Topology: Switch Mode Type
- 16. Regulating Device: IGBT
- 17. Two (2) sets of Detachable High Voltage Cable (each 10 feet or longer) should be provided with the power supply cable.
- 18. A minimum warranty of one year from the date of installation is required.

Terms & Conditions

- 1. Technical and Commercial bids are required to be submitted in separate sealed envelopes. Both these envelopes can be enclosed in a single envelope which should be clearly labeled as "Quotation for High Voltage Dual Channel DC Power Supply".
- 2. Compliance chart conforming to the specifications as per the NIQ should be attached along with technical bid. A bid without the compliance chart shall be rejected (Note: The Compliance chart should match the specifications of the NIQ)
- 3. The bidder must be a reputed OEM or an authorized local agent.

- 4. List and addresses of organizations in India where similar equipment has been supplied should be provided.
- 5. If there is any Indian agent associated with the foreign supplier, then an appropriate "Letter of Authorization" certificate has to be provided with the quotation.
- 6. Validity of the quotation should be at least 120 days from the date of submission.
- 7. Quotation must indicate a delivery schedule, which in no case should exceed 8 weeks from the date of placement of order.
- 8. Please indicate the cost as FOB, IIT Delhi.
- 9. Payment will be made after satisfactory installation as per IIT norms.
- 10. Installation, commissioning and staff training expenses are to be borne by the supplier.
- 11. The Institute reserves the right to accept/reject any or all quotation without assigning any reason.
- 12. Taxes as applicable should be indicated clearly.
- 13. No advance payment will be possible.
- 14. Country of origin should be mentioned.

Sealed quotations should reach the undersigned on or before October 21, 2013 by 3:00 p.m.

Please quote best prices with appropriate discounts for academic institutions. The quotations can be sent to the undersigned:

Dr. Supreet Singh Bahga
Department of Mechanical Engineering
Indian Institute of Technology
Hauz Khas, New Delhi-110016