INDIAN INSTITUTE OF TECHNOLOGY KANPUR

Department of Electrical Engineering

Enquiry No.: **EE/SA/INQ/2017-18/03**
Opening Date: **5-June-2017**
Closing Date: ~~**26-June-2017**~~ **28-June-2017**

Sub: Inquiry for Programmable high voltage DC power supply

We are interested in purchase of programmable high voltage DC power supply of the following configuration. Our organization is an educational institute of repute and liable to get **educational discount** from the manufacturer / supplier. Please specify the discount separately.

There will be **two steps in the tender process**:

1. Technical specifications should be put in one sealed envelope. SPECIFY company name and model number, and attach detailed technical specification for each part/component. Must also include detailed technical brochure.
2. Financial details i.e. budget quotation should be in a separate sealed envelope. This quotation will not be opened if technical details of the product do not match with our specifications.

Please send your **Sealed Quotation** to the undersigned for the same. The envelope should be marked as "**Programmable high voltage dc power supply - EE/SA/INQ/2017-18/03**"

Items required:

Item required	Specifications	Quantity
Programmable high voltage DC power supply	Total output Power: 15 kW at 600V, 25A continuously **AC input:** 400/410/440 V (nominal) (3 phase), 50 Hz **DC output:** Continuous Rated Output voltage >=600V Continuous Rated Output Current >= 25A (actual voltage and current should be controllable between zero and their corresponding rated values) Load regulation: Voltage <=0.02% of full scale Current<=0.1 % of full scale Line regulation: Voltage <=0.01% of full scale Current<=0.05 % of full scale Output voltage noise (p-p): <=350mV Output voltage ripple (rms) : <=600mV Output current ripple (rms) : <=45mA Temperature Coefficient <=0.04% of Vmax/^{o}C < = 0.06% of Imax/^{o}C	2

	Transient response time: Recover Within 2ms to =/- 0.75% of steady state output for a 50% to 100% or 100% to 50% load change. Output should not drift by more than +-0.05% after 8 hour of operation. Should be able to operate in constant current and constant voltage mode. **Programming Accuracy (Digital/Analog):** Voltage=<0.1% of Vmax Current=<0.4% of Imax **Measurement Accuracy:** Voltage (Digital Interface) =<0.2% of Vmax Current (Digital Interface) =<0.4% of Imax **Programming & Measurement Resolution:** Voltage and current (Digital Interface) =<0.04% of full scale **Operating temperature:** 0°C - 40°C **Protection:** Overvoltage, Overcurrent, Over temperature **I/O Interface to connect to computer**: LAN (Ethernet port) and one of the (USB or RS232) **Panel Description:** Should have at least but not limited to LCD display, power switch, numeric key to set data, I/O port and interface. **Isolated Analog Control:** Should be able to operate as power/voltage amplifier by using low voltage analog signals as inputs. **Both the modules must have provision to operate in parallel, thereby supplying 30KW, 600V, 50A load continuously.** Should have at least **3 years warranty. Warranty must include/cover parts, labour and transportation cost**. **Software to interface with computer must be included in the quotation.**	

Note:

1. Your quotation shall contain Authorization Letter from manufacturer.
2. Quotation must be valid for minimum of 90 days.
3. Delivery period should not be more than 10 weeks and delivery should be at IIT Kanpur or CIF New Delhi.
4. Send complete detail of the product(s).
5. Payments terms: 90% on installation and 10% on satisfactory report (FOR IIT Kanpur) and LC (CIF New Delhi)
6. Price must include all taxes and charges (including delivery, installation etc.)
7. IITK has exemption on excise and custom duty. Suitable certificate would be provided if required by the supplier.
8. All prices are to be FOR IIT Kanpur or CIF New Delhi.
9. The Institute reserves the right of accepting and rejecting any quotations without assigning any reason.

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