

Indian Institute of Technology Kanpur
Department of Physics

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Enquiry No: IITK/PHY/2016-17/NC-303

Enquiry date: 17/01/2017

Last date: 01/02/2017

Tender Notice

Sealed quotation should reach the undersigned latest by 5.00pm on 1st Feb, 2017 for the following item:

S.No.	Description of item	Quantity
1	Bipolar, four quadrant, high speed, programmable DC power supply (10A/20V, 200W) for inductive loads	03

The above –mentioned item should conform to the following specifications:

S. No.	Specification
1	Output voltage range: 0 to $\pm 20V$
2	Output Current Range: 0 to $\pm 10A$
3	Must be able to source 200W and sink at least 80W power
4	Automatic crossover between current and voltage; Separate control circuits for voltage and current with automatic crossover between main channel and limit channel must be there.
5	Voltage control: Variable input, fixed gain
6	Current control: Differential comparison
7	Output voltage limit and current limit must be adjustable.
8	Output programming (both for current and voltage source): a) by front panel 10 turn, zero center pot b) by remote using analog voltage in -10 to +10V range
9	Static voltage mode O/P ripple & noise < 1 mVrms and < 10mVp-p
10	Static current mode O/P ripple & noise: V (rms) < 3mV , V (p-p) < 30mV , I (rms) < 1mA, I (p-p) < 10mA
11	Drift with time (over 8hrs): in voltage < 2 mV, in current < 2 mA
12	Drift with temperature (per °C): in voltage < 2 mV, in current < 2 mA
13	Supply voltage: 220V/50Hz
14	Parallel (current sharing) and series connection of identical models must be possible
15	Zeroable preamplifier must be available for scaling and summing external signals
16	Bandwidth (with nominal resistive load) ≥ 10 kHz
17	Bandwidth (with 2mH inductive load) ≥ 4 kHz
18	rise/fall (10%-90%) time (with nominal res load) $\leq 50\mu s$
19	Load Effect (Nominal Resistive Load) ≤ 12 ppm/Hz
20	Recovery time constant at step load (short-circuit to nominal resistive load) $\leq 250\mu s$
21	Bandwidth correction with external capacitor for inductive loads must be possible
22	Controls and flag signals must be accessible through connections at the rear

Terms & Conditions:

- 1) Quotations must reach undersigned by **01.02.2017, 5.00 pm**
- 2) Quotations should have a validity of minimum of 90 days.
- 3) Technical specification sheets, authorization certificate or proprietary certificate (if applicable) and Any other relevant documentation should be included with the quotation.
- 4) Quotations are required in duplicate: (1) TECHNICAL BID (2) FINANCIAL BID, in separate Sealed envelopes, both to be finally put in one single envelope with Tender Enquiry Number Mentioned clearly in all sealed envelopes.
- 5) Please specify the maximum permissible educational discount, if any.
- 6) The delivery period should be specifically stated.
- 7) The rate offered should show both F.O.B (specify city) in the country of origin and CIF (New Delhi)
- 8) Please clearly mention the tax rate (like VAT etc.) and transportation charges up to IIT Kanpur, India.
- 9) Institute is exempted for payment of Excise Duty under notification No.10/97 & partially @ 5.15% Customs Duty exemption certificate under notification 51/96 and road permit will be provided if applicable.
- 10) After sales Service in India and warranty period should be clearly mentioned.
- 11) The Institute reserves the right of accepting and rejecting any quotation without assigning any reason.
- 12) Quotations by E-mail will not be accepted.

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