



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : drps@ismdhanbad.ac.in || Website : www.iitism.ac.in

No. Mech-INS-367-18-19

Date: February 27. 2018

Request For Quotation

To,

Subject: **Supply & Installation of 2 – Channel High Voltage Amplifier.**

Sirs,

The Indian Institute of Technology (Indian School of Mines), Dhanbad is interested for the purchase of the materials/ equipment listed below:

S No	Description of item(s)	Quantity	Remarks
1	Supply & Installation of 2 – Channel High Voltage Amplifier. (Detail specification in Annexure I)	01 No.	At the earliest/ Ex-stock

INSTRUCTIONS:

- 1) Please attach relevant technical literature of the item, Authorization and Proprietary certificate from OEM.
- 2) Please mention warranty/ guarantee period in your offer.
- 3) Please mention after sales service information in your offer.
- 4) Price should be in F.O.R. IIT(ISM), Dhanbad basis only.
- 5) ***Please attach a certificate that the quoted price is not more than that of any other Govt. organization/ institution in India along with minimum three Purchase Order for the same equipment. This has to be mentioned in the offer letter clearly.***
- 6) The rates should be quoted for each item separately.
- 7) Rates quoted will be taken as inclusive of all taxes unless given separately. IIT (ISM) does not issue any Form 'C' or 'D' towards sales tax concessional rate. Hence, full rate of sales tax/ VAT, GST applicable should be quoted.
- 8) The items/ materials shall be required to be delivered at **Mechanical Engineering** of IIT (ISM) Dhanbad at the risk and cost of the tenderer.
- 9) Your tender must be **valid for minimum 90 days** from the date of opening of tender.
- 10) The stores are required to be delivered within **30 days**, late delivery may not be accepted.
- 11) Full details of stores offered should be given in the tender along with supporting & relevant literatures/ Technical Literature.
- 12) Sales Tax/ VAT Registration Number, GSTIN should be clearly mentioned in your offer, failing which your offer may not be considered.
- 13) The items offered should be of good quality confirming to BIS standards, wherever applicable.
- 14) ***Performance Security/Performance Bank Guarantee:*** Performance Security has to be submitted from the successful bidder. Performance Security should be 10% of the ordered value. Performance Security may be furnished in the form of Bank Guarantee/Demance Draft from any Nationalized Bank and. Performance security should remain valid for a period of two months beyond the date of completion of all contractual obligations of the successful bidder(s).
- 15) ***Advance payment is not admissible.*** Payment shall normally be made within 30-45 days subject to receipt and acceptance & installation (as per Purchase Order Terms) of the ordered materials/items.
- 16) In the event of the supplier failed to supply the materials or install the same as contractual condition, IIT (ISM) shall have the right to deploy suitable agency/ third party to get the job completed at the risk and cost of the supplier.



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : drps@ismdhanbad.ac.in || Website : www.iitism.ac.in

No. Mech-INS-367-18-19

Date: February 27. 2018

- 17) Tender may please be submitted *in sealed cover only superscribed with Enquiry No. Mech-INS-367-18-19 and due date* as is **IMMEDIATELY**.
- 18) Your bid should reach our office preferably latest by **25.03.2019**.
- 19) Any other information that you may like to obtain, you are free to contact IIT(ISM) before submission of tender.
- 20) IIT (ISM) reserves the right to accept and/or to reject any/all tenders without assigning any reason.

Assistant Registrar



No. Mech-INS-367-18-19

Date: February 27. 2018

Annexure -I

SPECIFICATIONS OF 2-CHANNEL HIGH VOLTAGE AMPLIFIER

Function

Application Control of piezoactuators

Output

Output Voltage Range -500 V to +1500 V

Output Current Range 0 to +/- 50 mA DC, 0 to 60mA peak AC

Connector SHV connector

Wave Generator Input

Input Voltage Range -2.5 V to +7.5 V corresponds to -500 V to +1500 V output

Input Resistance 100 k Ω

Signal Frequency Range 0 Hz to 10 kHz

Connector BNC coaxial connector

Audio Signal Input

Input Voltage Range 0.2 V to 3 V AC

Input Resistance 100 k Ω

Gain Control Range -12 db to +12db, by using a 10-turn potentiometer

Offset Control Range -500 V to +1500 V, by using a 10-turn potentiometer

Signal Frequency Range 10 Hz to 10 kHz

Connector BNC coaxial connector

Performance

DC Voltage Gain 200 V/V for wave generator input, noninverting

DC Voltage Gain Accuracy Better than 0.1% of full scale

Offset Voltage Less than 1 V

Slew Rate Greater than 50 V/ μ s

Large Signal bandwidth DC to 10 kHz

Drift with Time Less than 100ppm/hr

Drift with Temperature Less than 50ppm/ $^{\circ}$ C

Output Voltage Monitoring

Conversion Factor 1/200th of the output voltage

Output Impedance 1 k Ω

Connector BNC coaxial connector

Audio Signal Input

Input Voltage Range 0.2 V to 3 V AC

Input Resistance 100 k Ω

Gain Control Range -12 db to +12db, by using a 10-turn potentiometer

Offset Control Range -500 V to +1500 V, by using a 10-turn potentiometer

Signal Frequency Range 10 Hz to 10 kHz

Connector BNC coaxial connector



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : drps@ismdhanbad.ac.in || Website : www.iitism.ac.in

No. Mech-INS-367-18-19

Date: February 27. 2018

Output Current Monitoring

Conversion Factor 0.2 V/mA

Output Impedance 1 k Ω

Connector BNC coaxial connector

Indicators

HVON A LED illuminates indicating that the high voltage is on

Limit A LED illuminates if the output voltage or current exceeds the limits

Interlock

Function The output voltage is turned on only if the interlock signal is closed , i.e. pin 1 and pin 2 of the interlock connector are connected together

Interlock Connector A 3-pole socket on the rear panel.

Signals Pin 1: output signal, +5 V

Pin 2: input signal, i.e. interlock signal

Power

Line Voltage 115/230VAC, 50/60 Hz, 150VA

Fuse Two fuses 1A-2A slow blow for 230V/115V

Connector Standard three-prong power connector with fuse holder

Operating Conditions

Temperature 0°C to 40°C

Relative Humidity to 85%, noncondensing
