

G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Ref. e-Tender Notice No. NITJ/DRC/PUR/ME/13/2022

Please find enclosed herewith the following:	Page No.
e-Tender Notice No. NITJ/DRC/PUR/ME/13/2022 & Schedule for	2
Opening of the e-Tender	
Annexure-I (Detail of Equipment, Tender Fee & EMD)	3
Important Note	4
Instruction to Tenderers	5-7
Tender Evaluation	8-10
Terms & Conditions	11-12
Acceptance of terms and conditions	13
Questionnaires A & B	14-15
Performa for performance statement	16
Annexure 'A' (Specifications of the Equipment)	17-19
Annexure 'B' & 'C' (Format For Performance Bond/	20-21
Guarantee & Format For Performance Bond (Bank	
Guarantee)	
Annexure – 'D' (Format for Manufacturer's Authorization	22
Form)	
Annexure- 'E' (Declaration Regarding Blacklisting/ Debarring	23
for taking part in Tender)	
Annexure –'F' (Certificate of Warranty)	24
	e-Tender Notice No. NITJ/DRC/PUR/ME/13/2022 & Schedule for Opening of the e-Tender Annexure-I (Detail of Equipment, Tender Fee & EMD) Important Note Instruction to Tenderers Tender Evaluation Terms & Conditions Acceptance of terms and conditions Questionnaires A & B Performa for performance statement Annexure 'A' (Specifications of the Equipment) Annexure 'B' & 'C' (Format For Performance Bond/Guarantee & Format For Performance Bond (Bank Guarantee) Annexure - 'D' (Format for Manufacturer's Authorization Form) Annexure- 'E' (Declaration Regarding Blacklisting/ Debarring

Assistant Registrar

Dr. B. R Ambedkar NIT Jalandhar Email: arpurchase@nitj.ac.in

G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

HIS DOCUMENT IS FOR REFERENCE ONLY. ONLY E-TENDERS WILL BE ACCEPTED

e-Tender Notice No. NITJ/DRC/PUR/ME/13/2022

National Institute of Technology, Jalandhar invites e-tender for Purchase of various equipment for the department of Mechanical Engineering as per detail available at Annexure-I along with Tender Fee & EMD of the Institute as per details given below:

I	Downloading & Submission of Online e-tender/bids	Start Date: 25/08/2022 at 04:30 PM
II	Last date of submission of online bids	End Date: 15/09/2022 upto 04:30 PM
III	Physical submission of Tender Fee and EMD	End Date: 15/09/2022 upto 04:30 PM
IV	Opening of Technical e-Bid (online)	16/09/2022 at 04:30 PM

Detailed Terms and Conditions are available in e-tender document. The bid document can be downloaded from the CPP Portal.

Complete tender document is available for reference purposes on Institute website www.nitj.ac.in and CPP Portal. Only e-tenders will be accepted.

Registrar



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Annexure-I

Ref. No. e-Tender Notice No. NITJ/DRC/PUR/ME/13/2022

Detail of Equipment, Tender Fee & EMD are as under:

Sr. no.	Item/Equipment	Qty.	Tender Fee	EMD
1.	Triple channel DC Power supply	02	Rs. 500/-	Rs. 13,200/-
2.	Digital Storage Oscilloscope 4 channels	01	-	
3.	Encoders/Optical Potentiometers	80		
4.	Microcontroller systems	06		

The bidders are required to quote for all the items, otherwise their bid will not be considered.

Note: The quantity of required equipment/item may vary as per requirement.

*Exemption of Tender fee & EMD will only be given to MSME/NSIC registered bidders.



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Important Note

- 1. All corrigenda, addenda, amendments and clarifications regarding this tender document will be uploaded on the website www.nitj.ac.in and CPP Portal and not in the newspaper; Bidders shall keep themselves updated with all such developments.
- 2. In case, the last date of receipt/opening of bids falls on holiday, the bids shall be receipt/opened on the next working day at same time.
- 3. In case, the last date of submission of EMD & Tender fee falls on holiday, the EMD & Tender fee shall be submitted on the next working day at same time.
- 4. Tenderer who have downloaded the tender document form from the institute website, shall submit a declaration along with tender document that I/We have downloaded the Tender Form from the institute website www.nitj.ac.in and I/we have not tempered /modified the tender form in any manner. In case, if the same is found to be tempered/modified in any manner, I/we understand that my/our tender will be summarily rejected and I/we are liable to be banned from doing business with institute.
- 5. Tender fee of Rs.500/- (Non- refundable) in the form of DD in favour of <u>Director, D R</u> B R Ambedkar NIT, Jalandhar.
- 6. EMD (refundable) in the form of DD in favour of Security- A/c, DR B R Ambedkar NIT, Jalandhar.
- 7. Both EMD and Tender fee are be submitted as per dates mentioned in schedule, failing which e-bids will not considered.
- All the bidders are required to submit the Tender Fee and EMD as per requirement of tender document failing which bids received straightway rejected and bid will be treated invalid.
- Note: If the bidder inadvertently or otherwise upload the quoted rates in the technical bid, the bid will be straightway rejected and treated invalid.
- If the bidder is exempted for payment of Tender Fee and EMD as NSIC/MSME registered bidders, then bidder is required to submit NSIC/MSME exemption certificate for same. The Certificate must be valid as on last date of submission of bid.

Tenderer must submit a scanned copy (duly signed and stamped) regarding terms & conditions as per our tender documents along-with make/model, specifications, bill of quantity as per required equipment in the technical bid for examine the bid as per our institute tender documents. It is noted that no rate should be depicted in the letter head.



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Instructions to Tenderer

- No tender will be accepted in physical form. The bidders shall have to submit their bids online in Electronic Format under Digital Signatures. For participation in the etendering process, the bidders need to register themselves on CPP Portal.
- 2. Bids are to be submitted online and opened online as per time given failing which no tender will be considered.
- 3. Bids will be opened online as per time given schedule.
- 4. Before submission of online bids, bidders must ensure that scanned copies of all the necessary/relevant documents have been uploaded with the bid which should be duly signed and stamped. The duly signed and stamped copies of Terms & Conditions of the tender, reply of the Questionnaire of Plant & Machinery and other documents of the Tender & Annexures must be uploaded, failing which their bids may be rejected.
- 5. NIT JALANDHAR, will not be responsible for any delay in online submission of bids due to any reason whatsoever.
- 6. Bidders should also upload the scanned copies of Tender fees/EMD/Exemption Certificate as specified in the tender documents along with online technical documents. EMD in the form of a Demand Draft in favour of the Security A/c, Dr B R Ambedkar NIT, payable at Jalandhar (refundable separate) and Tender Fee in the form of a Demand Draft in favour of the Director, Dr B R Ambedkar NIT, payable at Jalandhar (Non- refundable separate) should also be submitted in physical form to the following address as per scheduled time given for physical submission of EMD and Tender fee. The Envelope should be superscribed as EMD and Tender Fee for Tender for Supply of various equipment and sent to following address:-

Kind Attention- Assistant Registrar (Purchase Section)
Director,
Dr B R Ambedkar National Institute of Technology,
G T Road Amritsar By Pass, Jalandhar-144001, Punjab (India).

- 7. The details of EMD specified in the tender document should be same as submitted online (scanned copies). Otherwise tender will be rejected summarily.
- 8. The conditional bids shall not be considered and will be out rightly rejected.

Read and Accepted



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

- 9. The Financial Bid through e-tendering process shall be opened of only those bidders, who will qualify in the technical bid and approved by the Purchase Committee/Technical Experts. The date, time & place of opening of the financial bid(s) will be intimated in due course of time.
- 10. At any time prior to the deadline for submission of bid, the institute may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective tenderer(s), modify the tender document by issuance of an amendment.
- 11. The amendment will be uploaded on Institute website and CPP Portal only. In order to provide reasonable time to prospective tenderer(s), for preparing their bid as per amendment, the institute may, at its discretion extend the deadline for the submission of tender.
- 12. The supplier must upload the original manuals / catalogue and Make/Model of the Equipment /Item. Otherwise bid is liable to be rejected.
- 13. The Institute is not liable to pay any interest on EMD. Earnest money deposit shall be forfeited, if the tenderer, withdraws its bid during the period of tender validity. The Earnest money deposit of the tenderer, whose tender has been accepted, will be returned on the submission of performance security @ 3% of the total value of the offer. The performance security will be kept till the warranty period + 02 months more of the Equipment /Item. The warranty period will start from the date of satisfactory installation of the Equipment /Item duly given by the concerned department. Earnest money deposit of the successful tenderer shall be forfeited, if it refuses or neglects to execute the contract or fails to furnish the required performance security within the time frame as specified by the institute. The EMD(s) of other Bidder(s) whose offer are found according to required specifications/ lowest will be released after finalization of Technical Bids/ Lowest Bid/Purchase.
- 14. The Format of Performance Bank Guarantee bond or Performance Bank Guarantee issued by the bank as per the format given in **Annexure "B" & "C"**.
- 15. Delivery time is the essence of the contract and must be met with.
- 16. Nearest specifications/better specifications can be considered. In case of deviation, complete justification should be furnished with proper documents.
- 17. The Director may accept a tender in part or whole of the quantity offered, reject any tender without assigning any reasons and may not accept the lowest bidder. Further in case of any doubt/dispute, the decision of the Director of the Institute shall be final.
- 18. The offer shall be kept valid for minimum 120 days.



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

19. a) Either the agent/ dealer on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.

- b) If an agent/ dealer submits bid on behalf of the Principal/OEM, the same agent /dealer shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
- c) Only one agent/dealer of single Principle/OEM can submit the bid. If more than one agent/dealer of same OEM/Principal quote in the tender, then bids of all the bidders of single OEM/Principle are liable to be rejected.
- d) All offers other than those from the Principal/OEM should be supported by an authority letter from the manufacturer authorizing the dealer /supplier to tender on their behalf as per **Annexure-D**. In case of manufacturer, a certificate or a copy thereof to the effect that the bidder is a manufacturer of the Equipment /Item must be accompanied with the technical bid.
- 20. The supplier will be responsible till the entire stores contracted for, arrive in good condition at destination.
- 21. The tenderer should not have been debarred and/ or blacklisted by any Central Government/ or any State Government Department(s). This must be supported by an affidavit as per format given in **Annexure-"E"**.
- 22. If any information furnished by the bidder is, at any stage found to be incorrect/false/fabricated, the Institute shall have the absolute right to forfeit the EMD, warranty/performance guarantees or/and security deposits, in addition to cancellation of contract, and in accordance with law, such other actions may be taken like black-listing of the bidder etc.

Read and Accepted.



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

TENDER EVALUATION

Institute will evaluate all the proposals to determine whether these are complete in all respects as specified in the tender document. Evaluation of the proposals shall be done in two stages as:

(a) Stage – I (Technical Evaluation):

(i) Institute shall evaluate the technical bid(s) to determine the following like the bid qualifies the essential eligibility criteria or not, the tenderer has submitted the EMD & Tender fee or not, any computational errors have been made or not, all the documents have been properly filled or otherwise, all the documents have been submitted/ uploaded with technical bid or not, the specifications, Make/Model, Catalogue of quoted Equipment /Item are as per requirement tender specifications or not, Authorization of Dealer / Distributor/ Exclusive Agent certificate from manufacturer is in order or not, Sales & service policy of equipment / item during warranty period and after warranty period will also be seen, location of their authorized service center will also be seen for evaluation etc.

After evaluation of technical bid(s), a list of the qualifying tenderer (s)/ bidder s) shall be made. Short-listed tenderer(s) will be informed of the date, time and place of opening of financial bid(s) and they may attend or depute their authorized representative/s to attend the schedule of opening of financial bid(s) on the scheduled date and time, if they wish to do so. The representative(s) should have a letter of authority to attend the price bid(s) opening event.

Read and Accepted



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

PART – II (e-FINANCIAL BID):

- a) Bidders should offer the rates as per the format of BOQ as available on CPP Portal. Detailed bill of material/quantity is also to be provided along with the price breakup of each item as per requirement of the tendered specification of the equipment in the online price bid at CPP Portal.
- Note: The quoted amount as filled in the Annexure(s) of online financial bid and detailed bill of material/quantity provided with price break up of each item in the online financial bid should be tallied and both must be same, otherwise bid will be treated invalid.

Read and Accepted.

G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

ARBITRATION:

In case of any dispute or difference arising out in connection with the tender conditions/job order/Contract, the Institute and the Seller/Service Provider will address the dispute/difference for a mutual resolution and failing which, the matter shall be referred for arbitration to a sole Arbitrator to be appointed by the Institute.

The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Jalandhar only. The decision of the Arbitrator shall be final and binding on both the parties.

JURISDICTION:

The courts at Jalandhar alone will have the jurisdiction to trial any matter, dispute or reference between parties arising out of this tender / contract. It is specifically agreed that no court outside and other than Jalandhar Court shall have jurisdiction in the matter.

Read and Accepted.



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

(TERMS AND CONDITIONS (FOR THE SUPPLY OF GOODS, EQUIPMENT /ITEM)

- 1. Rate should be quoted F.O.R NIT Jalandhar and In INR only.
- 2. Where the Equipment / Machinery/ Instrument are composed of several sub units/components, the rate should be quoted for each subunit/component separately. NIT Jalandhar reserves the right to increase or decrease the number of sub units/components and number of Equipment / Machinery/ Instrument according to its requirements.
- 3. The institute being government educational institute is having Excise and Custom duty exemption in terms of government notification No. 51/96-customs Dt. 23-7-1996 and No. 10/97-central excise Dt. 1-3- 1997 as amended from time to time, therefore taxes be quoted accordingly and this must be depicted in Price Bid clearly.
- 4. GST or any other chargeable duty where applicable must be specifically mentioned, failing which no tax or duty will be allowed at subsequent stage.
- 5. All items shall be indicated both in words as well as in figures. If there is difference between amount quoted in words and figures, amount quoted in words shall prevail.

6. Payment:

- (a) 100% payment will be made against physical delivery, inspection, installation, training of the Equipment/Machinery/Instrument etc. in the institute, receipt of satisfactory working report of the Equipment / Machinery/Instrument etc. and receipt of Performance Bank Guarantee @ 3%.
- 7. Warranty: Rates should be quoted with comprehensive warranty. Besides this, policy regarding after sale service on the expiry of warranty period of Equipment / Machinery/Instrument etc. may be explained. The bidders should attach duly signed and stamped certificate of warranty as per <u>Annexure-F</u> with the technical bid.
- 8. Training: In house training (where applicable) after the installation and commissioning of Equipment / Machinery/Instrument etc. shall be provided by the supplier.
- **9. Delivery:** Delivery date will be mentioned in the supply order. The time and date of delivery or dispatch stipulated in a supply order shall be deemed to be the essence of the supply order and if the supplier fails to deliver or dispatch any consignment within the period prescribed for such delivery, the delayed consignment will be accepted subject to penalty as laid down in the supply order, which will be recovered from the pending payments.

Read and Accepted.



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

1. No recovery of penalty will be made, if the delayed supplies are acceptable by extending the delivery period by the Director with our any LD charges.

- 2. Director will allow extension on the request of the supplier by recording in writing that in exceptional circumstances the supply was beyond the control of the supplier and there was no loss to the institute.
- 3. Penalty on account of delay, Director NIT, Jalandhar reserves the right to impose 0.5% (Half) per cent penalty per week on account of delay in supply, if delivery received after expiry of the original delivery period. The total penalty will not exceed 10% of the value of the delayed goods.
- **10. Installation**: Supplier has to install the Equipment / Machinery/ Instrument within two to three weeks from the receipt of the Equipment / Machinery/Instrument etc. in NIT Jalandhar.
- 11. Spares and Accessories, wherever required should be quoted separately and clearly, even if these are not asked for.
- 12. Site Preparation: The supplier shall inform NIT Jalandhar about the site preparation, if any, needed for the installation, immediately after receipt of the supply order. Supplier must provide complete details regarding space and all infrastructural requirements needed for the Equipment / Machinery/Instrument etc which NIT Jalandhar should arrange before the arrival of Equipment / Machinery/Instrument etc to ensure its early installation and smooth operation thereafter. The supplier may offer his advice and render assistance to NIT Jalandhar in the preparation of the site and other pre installation requirements.
- **13.** The total scope of work includes the supply, installation, satisfactory commissioning and testing of the Equipment / Machinery/Instrument etc by the supplier, training at NIT Jalandhar, method development and validation for parameters as mentioned in specifications at **Annexure-A**. The supplier will complete installation & Commissioning of Machine within two to three weeks from the date of receipt of Equipment / Machinery/Instrument etc. of NITJ.
- **14.** Details about the service center for the quoted Equipment / Machinery/Instrument etc. in India may be mentioned.

Read and Accepted.



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Acceptance

We	read and accept the instructions to the
tenderer, terms & conditions and all othe shall comply with them strictly.	er documents as mentioned in the tender and
Name of Bidder	 Signature
Address	Seal of firm:
	 Date:



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Questionnaires A & B

QUESTIONNAIRE FOR PLANT & MACHINARY

Note: Please submit the reply in detail and also enclose the necessary documents with proof where required as per Questionnaire. These documents must be submitted in the technical bid document.

Please state that you have submitted your quotations as per procedure mentioned below:-



Bids consisting of technical details bringing out clearly in a separate sheet ,the deviation in the specifications if any from that of tender enquiry specifications along with commercial terms and tender form.

- 1. Please attach list dully signed by you, for such spare parts and tools which are absolutely essential for proper maintenance and operation of machine for a period of two years giving full particulars of spare and tool with a price of each spare parts and tools separately.
- 2. Please confirm that you have adequate servicing and spare parts facilities in India in respect of Equipment /Item tendered by you or that you should arrange to provide such facilities simultaneously.
- 3. Please indicate that you guaranteed that before going out of production of spare parts, you will give adequate advance notice to the purchaser so that the institute may order his requirements of spares in one lot, if he so desire.
- 4. Please indicate that you guaranteed that if you go out of production of spare parts, then you will make available prints, drawings of the spare parts and specifications of the material at no cost if and when required in connection with Equipment /Item to enable the purchaser to fabricate or procure spare parts from other sources.
- 5. Please confirm that you undertake to enter into a rate contact with the purchaser to supply spare parts on an agreed basis for an agreed period.
- 6. Status:
 - a) Indicate whether you are ISU or SSI
 - b) Are you registered with Government e-Marketing (GeM) for the item quoted? If so indicate whether there is any monetary limit or registration.
 - c) If you are a small scale unit registered with NSIC under single point registration scheme whether there is monetary limit.
- 7. a) If you are registered either with NSIC or with Government e-Marketing (GeM), please State whether you are registered with Directorate of industries of the state government concerned.
 - b) If so, confirm whether you have attached a copy of the certificate, issued by Director of industries.
- 8. Please indicate:Name & Full Address of your Banker
- 9. Please indicate whether you agree to submit advance samples if called upon to do so within the specified period of 21 days.



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

- 10. Business name and constitution of firm:
 - i)The Indian company Act. 1956
 - ii)Indian partnership Act.1932
 - iii)Any act, if not, who are the owner/partners (please give full name and address)
- 11. Whether the tendering firm is / are:
 - i) Manufacturers authorized agents
 - ii) Holders stock of the stores tendered for
 - iii) NBI manufacturer's agents please enclose with tender the copy of manufacturer's authorization.
- 12. Please state whether the inspection clause is acceptable to you
- 13. Here state specifically:-

(Signature of Tenderer)

- i) Whether the price quoted by you is to the best of your knowledge and belief is not more than the price usually charged by you on stores of the same natures, class of description to any private purchase either foreign or as well as government purchaser. If not state the reason thereof if any also indicates the margin of Difference.
- ii) In respect of indigenous items for which there is a controlled price fixed by law, the price quoted shall not be higher than that the controlled price and rates available on DGS&D/ Government e-Marketing (GeM) contract. The reason thereof should be stated.
- 14. State whether business dealing with you has been banned by Ministry /Department of supply or any other Govt. Department.
- 15. Please confirm that you have read all the instruction carefully and have complied with accordingly.

(
1	Full Name & Address of the person signing

()
2.	Whether signing as proprietor /partners	_,



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

PERFORMA FOR PERFORMANCE STATEMENT

(For the Period of last 3 years)

e-Tende	e-Tender Notice No. NITJ/DRC/PUR/ME/13/2022					
Sr. No.	Order (full placed address of purchaser)	Order No. & dated	Description And Qty. of Stores Ordered	Value of Order	Date of Completion of delivery	Has the Equipment/Item been satisfactory commissioned



G T Road By Pass, Jalandhar-144027, Punjab (India)

EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Annexure "A"

Detailed technical specifications

Triple channel DC Power supply: 60V/3A (2x) & 5V/3A; 375W - (02 Qty.)

- CH1/2 Voltage: 0-60VCh1/2 Current: 0-3ACH3 Fixed Output: 5V/3A
- load and line regulation (CV: < 0.01% + 2 mV; CC: <0.02% + 2 mA)
- Transient response < 50 μsec
- Low output noise $\leq 1 \text{ mV}_{rms}$ and $\leq 1 \text{ mA}_{rms}$ from 20 Hz to 20 MHz
- Safety features Fully integrated OVP and OCP
- Keypad lock feature
- Dual display shows both voltage and current reading
- Auto-tracking between output 1 and output 2 with a single control
- Multiple channels that can be individually/simultaneously controlled
- Two variable: CV and CC operation
- One fixed: CV operation only
- Programming accuracy: CV: ≤ 0.25% + 15 mV, CC: ≤ 0.30% + 15 mA
- Meter readback accuracy: CV: ≤ 0.25% + 10 mV, CC: ≤ 0.25% + 10 mA
- Stability (output drift):- Voltage: < 0.02% and Current: < 0.1%
- Overvoltage protection accuracy ± (% of output + offset):- < 0.5% +0.5 V
- Overvoltage protection response time < 10 ms
- Programming/meter resolution: Voltage: 10 mV (4 digits), Current: 10 mA (3 digits)
- Display:- LCD with amber backlight
- Software: Should be supplied with compatible software to connect and control the instrument and to build automated test sequences without any programming.
- Warranty--3Years



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Sr. no.	Detailed Specification and Requirements for Digital Storage Oscilloscope 4 Channels- (01 no.)		
1	Bandwidth	DC to 100 MHz or more	
2	Number of Channels	4 or more	
3	Memory Depth/ Record Length	2Mpts half channel Interleaved,1Mpts per channel or better	
4	Sampling Rate	5GSa/Sec half Channel Interleaved, 2.5GSa/Sec per channel or better	
5	Vertical Input Sensitivity	2mV/div to 5V/div or better	
6	Time base Range	2ns/div to 50sec/div or better	
7	Waveform Update Rate	1,000,000 waveform/s or better	
8	Time Base Accuracy	25 ppm or better	
9	Automatic Measurement	Atleast 20+ including like as voltage, time, and frequency as Well as four waveform math functions including FFT	
10	Trigger Types	Edge, Edge then Edge, Pulse Width, Runt, Setup & Hold, Rise/Fall Time, Nth Edge burst, Or, Video, USB, I2C, SPI, RS232/UART, I2S, CAN, LIN, CXPI, Flex Ray, SENT, NRZ etc.	
11	Math Function	Add, subtract, multiply, divide, differentiate, integrate, FFT, Ax + B, squared, square root, absolute value, common logarithm, natural logarithm, exponential, base 10 exponential, low pass filter, high pass filter, averaged value, smoothing, envelope, magnify, max hold, min hold, measurement trend, chart logic bus (Timing or State)	
12	Inbuilt WaveGen	Inbuilt Arb Wave Gen 20 MHz should be available for future upgrade	
13	Zone Touch Triggering	Should be Available	
14	Segmented Memory	Should be Available	
15	Power Measurement	Real power, apparent power, reactive power, power factor, crest factor (V & I), phase angle should be available for future upgrade	
17	Connectivity	USB Interface Standard, LAN & VGA (Optional)	
18	Vertical Resolution	8 bit	
19	Display Size	8.5" (or Better) Capacitive Touch Screen with zone touch triggering facility.	
20	Operating Voltage	100-240 VAC, 50/60 Hz	
21	Operating Temperature	0 to +55 °C	
22	Warranty	At Least 3 Years	
23	Software	Software should be provided to capture and annotate screen images, record trace data and data log measurements, to build automated test sequences without programming & to export measurement data to Excel, Word, and MATLAB easily.	
24	Accessories	1) 2 BNC Cables for 2 channels, User Manual, Power Cord 2) Computer Interface: Preferable.	
25	Future Upgradable	Should be future upgradable for digital channels & frequency.	
26	The Manufacturer should have Nation (NABL) accredited calibration facility ir	al Accreditation Board for Testing and Calibration Laboratories India.	
27	The bidders should submit copies of suitable documents in support of their reputation, credentials and past performance.		



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Technical Specifications

Item Name	Item Description	
Encoders/Optical	Operating Voltage - 5 Volts	
Potentiometers	Output Shaft Diameter - 22mm	
	Range – 320° - (08 nos.)	

Technical Specifications

Item Name	Item Description
Microcontroller systems	Microcontroller Board with USB Cable- (06 nos.)



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Annexure: "B"

FORMAT FOR PERFORMANCE BOND/GUARANTEE

(Undertaking from the	supplier on a Non Judio	ial Stamp Paper of	requisite	duly	attested	by Notary	I)
	he Registrar, National In d to release the payment	of net value as per t	erms and	l condi	itions of a	conclude	d
Order No	dated	(hereinafter	called	'the	order') 1	for suppl	y
of <i>(he</i>	ere in after called 'the Eq	uipment /Item)to us	Messrs _				
(hereinafter called 'the supplier') on submission of a Performance Bond to the satisfaction of NIT Jalandhar for the due performance of the said order.					T		
We, Messer's	· · · · · · · · · · · · · · · · · · ·	hereby submit	the FDR	/TDR	No		_
ssued by	(Na	ame of Bank) for			pledge	ed in favou	ır
of Registrar, NIT Jaland absolutely undertake ag failure of the supplier to	nar as performance guara ainst any loss or damage p perform or omission or dhar in terms of the order	ntee amount and her e caused or suffered negligence to perfor	eby irrevo	ocably alandh	, uncondit ar by rea	tionally and son of an	d y
• •	ereby authorize Registral						

We, the supplier, do hereby authorize Registrar, NIT Jalandhar to forfeit this Performance Guarantee amount / undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the NIT Jalandhar stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the NIT Jalandhar by reason of any breach by us of any of the terms and conditions contained in the said order or by reason of our failure or omission or negligence to perform the said order or any part thereof. We, the Supplier, undertake to pay to NIT Jalandhar any amount so demanded by NIT Jalandhar, notwithstanding:

- a) Any dispute or difference between NIT Jalandhar and supplier or any other person or between the supplier or any person or any suit or proceeding pending before any court or tribunal or arbitrator relating thereto; or
- b) The invalidity, irregularity or unenforceability of the order; or
- c) Any other circumstances which might otherwise constitute discharge of this guarantee, including any act of omission or commission on the part of NIT Jalandhar to enforce the obligations by the supplier or any other person for any reason whatsoever.

We, the Supplier, further agree that the performance Bond/ Guarantee herein contained shall be continued one and remain in full force and effect during the period that would be taken for the performance of the said order and that it shall continue to be enforceable till all the dues of the NIT Jalandhar under or by virtue of the said order have been fully paid and its claims satisfied or discharged or till the office of the Registrar, NIT Jalandhar certifies that terms and conditions of the said order have been fully and promptly carried out by us and accordingly discharges this Performance Bond/ Guarantee.

We, the Supplier, further agree with NIT Jalandhar, that NIT Jalandhar shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said order or to extend time of performance by the said supplier from time to time or to postpone for any time or from time to time and of the powers exercisable by the NIT Jalandhar against the said supplier and forbear or enforce any of the terms and conditions relating to the order and we shall not be relieved from our liability by reason of any such variation or extension being granted to us or for any forbearance, act or omission on the part of NIT Jalandhar or any indulgence by NIT Jalandhar to us or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This Performance Bond/Guarantee will not be discharged due to the change in the constitution of the supplier. We, the Supplier, undertake not to revoke this Performance Bond / Guarantee except with the prior consent of NIT Jalandhar in writing.

The disputes relating to this Bank Performance Bond / Guarantee shall be resolved as per the terms and conditions of the order.

G T Road By Pass, Jalandhar-144027, Punjab (India)

EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Annexure "C"

FORMAT FOR PERFORMANCE BOND (BANK GUARANTEE)

In consideration for the Registrar, National Institute of Technology Jalandhar, (hereinafter called NIT Jalandhar)

having agreed to release the payment of net value as per te	'the order') for supply of
(hereinafter called 'the Equipment /Item) to Messrs_ on submission of a Bank Guarantee to the satisfaction of NIT Jak	(hereinafter called 'the supplier') andhar for the due performance of the said order.
We, of the supplier do, as a primary obliger and not merely as a absolutely undertake against any loss or damage caused or suffer of the supplier to perform or omission or negligence to perform a Jalandhar in terms of the order.	ffered by NIT Jalandhar by reason of any failure
We, the Bank do hereby undertake to pay the amount due and perely on a demand from NIT Jalandhar stating that the amount to or would be caused to or suffered by NIT Jalandhar by reasor terms and conditions contained in a said order or any part thereconclusive as regards the amount due and payable by the considered as satisfied by any intermediate payment or satis However, our liability under this guarantee shall be restricted to	claimed is due by way of loss or damage caused of any breach by the said supplier of any of the of. Any such demand made on the Bank shall be bank under this guarantee, which shall not be faction of any part of or obligation hereunder.

We, the Bank, undertake to pay to NIT Jalandhar any amount so demanded by NIT Jalandhar, notwithstanding a). Any dispute and difference between NIT Jalandhar and supplier or any other person or between the supplier or any person or any suit or proceeding pending before any court or tribunal or arbitrator relating thereto or

- a). The invalidity, irregularity or unenforceability of the order or
- b). Any other circumstances which might otherwise constitute discharge of this guarantee, including any act of omission or commission on the part of NIT Jalandhar to enforce the obligations by the supplier or any other person for any reason whatsoever.

We, the Bank, further agree that the guarantee herein contained shall continue and remain in full force and effect during the period that would be taken for the performance of the said order and that it shall continue to be enforceable till all the dues of NIT Jalandhar under or by virtue of the said order have been fully paid and its claims satisfied or discharged or till the office of the Registrar, NIT Jalandhar confirms that the terms and conditions of the said order have been fully and promptly carried out by the said supplier and accordingly discharge this guarantee.

We, the Bank, hereby agree and undertake that any claim which the bank may have against the supplier shall be subject to and subordinate to the prior payment and performance in full of all the obligations of the bank hereunder and the bank will not, without prior written consent of NIT Jalandhar, exercise any legal rights or remedies of any kind in respect of any such payment or performance so long as the obligations of the bank hereunder remain owning and outstanding, regardless of the insolvency, liquidation or bankruptcy of the supplier or otherwise. We, the Bank, will not counter claim or set off against its liabilities to NIT Jalandhar hereunder any sum outstanding to the credit of NIT Jalandhar with it.

We, the Bank, further agree with NIT Jalandhar, that NIT Jalandhar shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said order or to extend time of performance by the said supplier from time to time or to postpone for any time or from time to time and of the powers exercisable by the NIT Jalandhar against the said supplier and forbear or enforce any of the terms and conditions relating to the order and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier or for any forbearance, act or omission on the part of NIT Jalandhar or any indulgence by NIT Jalandhar to the said supplier or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This guarantee will not be discharged due to the change in constitution of the Bank or the supplier.

We, the Bank, lastly undertake not to revoke this Guarantee during its currency except with the prior consent of NIT Jalandhar in writing.

The disputes relating to this Bank Guarantee shall be resolved as per the terms and conditions of the order.



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Annexure "D"

FORMAT FOR MANUFACTURER'S AUTHORIZATION FORM

The Registrar Dr B. R Ambedka Jalandhar	ar National Institute	of Technology			
Sub. : e-Tender f	or "	".			
Dear Sir,					
	, having f	actory/office at Idress of agents/			reputed manufacturers o, hereby authorize M/s id, negotiate and conclude the orde
M/s	, j	ointly and severe	ely. No d	company	tender/Agreement negotiated by or firm or individual other than M/s and conclude the order in regard to
offered for supply	against this invitation	n for bid by the a	•		d conditions of tender for the goods
*specify in deta	ail manufacturer's r	responsibilities	the serv	vices to	be rendered by
i) ii)			_		
changed or agent and obligations to	/ distributor is chang	ed it shall be ob gent failing whic	ligatory ch we w	on us to	e duties of the agent/distributor are automatically transfer all the duties facto become liable for all acts of
Yours faithfully, [Name & Signatur	e] For and on behalf	of M/s.		ı	[Name of manufacturer]



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Annexure "E"

DECLARATION REGARDING BLACKLISTING / DEBARRING FOR TAKING PART IN TENDER

Self Attested

I / We	(Tenderer) hereby declare that the firm / agency namely
M/s	has not been blacklisted or
debarred in the past by Union / Sta	ate Government or organization from taking part in Government
tenders in India.	
	Or
I / We	(Tenderer) hereby declare that the Firm / agency namely
M/s	was blacklisted or
debarred by Union / State Gover	rnment or any Organization from taking part in Government
tenders for a period of	
years w	e.f to The period is over on
and now the f	irm/company is entitled to take part in Government tenders.
	nd false I / we are fully aware that the tender/ contract will be
rejected / cancelled by Director, NI	T Jalandhar, and EMD / SD shall be forfeited.
DEDONIENT	
DEPONENT	
Attested:	
(Stamp of Company with author	ized sign)
Name	
Address	



G T Road By Pass, Jalandhar-144027, Punjab (India) EPABX-0181-2690301 & 453 website: www.nitj.ac.in email: registrar@nitj.ac.in

Annexure: "F"

CERTIFICATE OF WARRANTY

warranty shall be for a period of years for and te of satisfactory installation, commissioning and handing over of the Equipment rks conducted therewith covered under the supply order in working order. During od, I/we shall provide free "after sale service" and the replacement of any pment /Item or rectification of defects of work of the Equipment /Item will be free ement of the parts shall be arranged by us, at our own cost and responsibility. the above warranty shall begin only from the date of satisfactory and faultless Equipment /Item for 60 days at NIT Jalandhar premises. The benefit of change ranty period shall be in the interest of the use/your organization.	ŕ
Ouring the warranty period, we will be responsible to maintain the Equipment conditions for a period 350 days (i.e. 95% uptime) in a block of 365 days. be attended by us within 2 working days of receipt of the complaint in our office. elay of more than 2 days in attending to a complaint from our side then you can of days in excess of the permissible response time in the downtime. The above of 2 days for attending to a complaint by us will not be counted in the downtime.	
pay a penalty equivalent to 0.5 % of the FOB/CIF value of the Equipment /Item eart thereof delay in rectifying the defect.	
pt the reason (s) for delay and consider reduction or wave off the penalty t the sole discretion of Director, NIT Jalandhar	
Equipment /Item being/ quoted is the latest model and that spares for the available for a period of at least years and we also guarantee that ation informed of any update of the Equipment /Item over a period of	Εď
right to get the maintenance work carried out at our risk, cost and responsibility the expenses including excess payment for repairs/maintenance shall be Performance Bank Guarantee. In case the expenses exceed the amount of uarantee, the same shall be recoverable from us with/without interest in cumstances.	J a a F
the Equipment /Item at NIT Jalandhar premises itself. However, the Equipment or site on our own expenses in case it is not possible to repair the same at NIT ake the entire responsibility for the safe custody and transportation of the out for repairs till the Equipment /Item is rehabilitated to the NIT Jalandhar after pment /Item or its accessories under its charge on account of theft, fire or any at our sole risk and responsibility which will be compensated to NIT Jalandhar	/i J E r

vii. We undertake to perform calibration after every major repair/breakdown/taking the Equipment /Item for repair out of NIT Jalandhar premises.

for such losses at the FOB/CIF value for the damaged/lost Equipment /Item part, including accessories.

- viii. In case of extended warrantee, we undertake to carry out annual calibration of the Equipment /Item.
- ix. We guarantee that we will supply spare parts if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price.
- x. We guarantee to the effect that before going out of production of spare parts, we will give adequate advance notice to you so that you may undertake to procure the balance of the life time requirements of spare parts.
- xi. We guarantee the entire unit against defects of manufacture, workmanship and poor quality of components.

Signature & Seal of the Manufacturer/Tenderer