

राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर हमीरपुर177005-(हि .प्र.) NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P.)-177005

[An Institute of National Importance under Ministry of Education (शिक्षा मंत्रालय)]

E-TENDER NOTICE

Sealed online e-Tender in two bid system are hereby invited by the undersigned for the supply of following items on behalf of the Director, NIT, Hamirpur from the Eligible/ Experienced/ Resourceful, manufacturer's dealer/authorized distributor etc. having experience in appropriate field and who have successfully completed works of similar type, so as to reach in the office of the undersigned as per date & time mentioned below.

Sr. No.	Name of works/item	Qty/ No.	Earnest Money In Rs.	Time Limit
1	Supply and installation of workbench for the Grid connected solid state transformer-based inverter and its solutions For detailed specifications etc please refer to SBD	1	30500	60 days

1. Availability of bid document and mode of submission:-The bid document is available online and bid should be submitted in online mode on website http://www.eprocure.gov.in/ and http://www.nith.ac.in/. Bidder would be required to register in the web-site which is free of cost. For submission of bids, the bidder is required to have Digital Signature Certificate (DSC) from one of the authorized certifying authorities (CA).

2. Key dates: (1)

Date of online publication	08.11.2025 at 6.00 PM
The state of the s	08.11.2025 to 27.11.2025 10.30 AM
Bid submission start and end date	08.11.2025 to 27.11.2025 10.30 AM
	On or before 05.30 PM on 27.11.2025
documents and cost of tender document etc.	
Date of opening of technical bid	28.11.2025 at 11.30 AM
	Physical submission of EMD, technical

(II) Objections/representation if any against the bidders will be entertained only within three days after publication/uploading of technical bid opening summary on net and thereafter that the date of opening of financial bid of technically qualified bidders will be published /uploaded on net.

3. Tender Details:-The tender Documents shall be uploaded in 2 cover:-

Cover 1:-Shall contain scanned copies of all "Technical Documents/Eligibility information".

Cover 2:- Shall contain "BOQ/Financial Bid", where supplier will quote his offer for each item.

(a) Submission of Original Documents: The bidders are required to submit (a) original demand draft towards the cost of bid document if any and (b) original bid security/Earnest Money deposit (EMD) and other technical documents in the Store &

Purchase section, NIT Hamirpur-177005 (HP) as specified in the key dates of <u>Sr. no.2</u> on tender opening dates & schedule, failing which the bids will be declared non-responsive. <u>EMD in the form of DD/FDR must be attached with in favour of Director, NIT, Hamirpur (H.P) -177 005. The EMD should remain valid for a period of 90 days beyond the final bid validity period. EMD of unsuccessful bidders shall be returned after the expiry of the final bid validity or before the 30th day of the award of contract. The EMD of the successful bidder shall be released after successful execution of supply order.</u>

- 4. BID OPENING DETAIL: The bids shall be opened as per schedule specified in the key dates of Sr. no.2. in the store & Purchase section, NIT, Hamirpur by the authorized officer. In their interest the tenderer are advised to be present along with original documents at the time of opening of tenders. If the office happens to be closed on the date of opening of the bids as specified, the bids will be opened on the next working day at the same time & venue.
- 5. The bids shall remain valid for acceptance for a period of not less than 120 days after the deadline date for bid submission. Other details can be seen in the bidding documents. The officer inviting tender shall not be held liable for any delays due to system failure beyond its control. Even though the system will attempt notify the bidder of any bid updates. The Employer shall not be liable for any information not received by the bidder. It is the bidders responsibility to verify the website for the latest information related to the tender.
- 6. The copy of enlistment order & renewals, Copy of PAN issued by Income tax Department and copy of GST Certificate must accompany in the cover-1
- 7. The bidder preferably must have successfully supplied similar items in recent years. The bidders shall have to produce supporting documents giving date of award, date of commencement and completion from the concerned competent authority and should be included in cover-1
- 8. Destination: F.O.R. destination i.e. NIT, Hamirpur (HP) and the rates must include the charges for Packing, Forwarding, Freight, etc., if any.
- 9. Price/Rate: The price of items may be quoted in Indian rupees.
- 10. GST:- All the firms may invariably mention their GST/PAN numbers on tender failing which quotations may not be considered valid. Further, this Institution does not issue any Concessional form, so the GST applicable as per actual rates must be mentioned in the offer. In case GST is not mentioned, the rates shall be treated as inclusive of all taxes.
- 11. The bidders/firms have to supply the complete catalogue/brochure of the products to be supplied along with the Technical bid.
- 12. The technical bids will be evaluated on the basis of terms & conditions of the tender and details of the product to be supplied as per condition 11 of the tender notice. The committee reserves the right to reject any technical bid on the basis of technical specifications/catalogue/brochure submitted.
- 13. Conditional/ telegraphic tenders shall summarily be rejected.
- 14. For any clarifications bidders are requested to contact FI (Purchase), NIT Hamirpur at his E-mail ID i.e. fip@nith.ac.in.
- 15. The tender/bid shall be kept in a sealed envelope superscribed as "Tender for (Name of work and date of opening".

16. The jurisdiction of the law of court shall be at Hamirpur (HP).

FI (Purchase)

Dated: 07-11-2025

No: NIT/HMR/DoEE/S&PS/ 2025/691-93

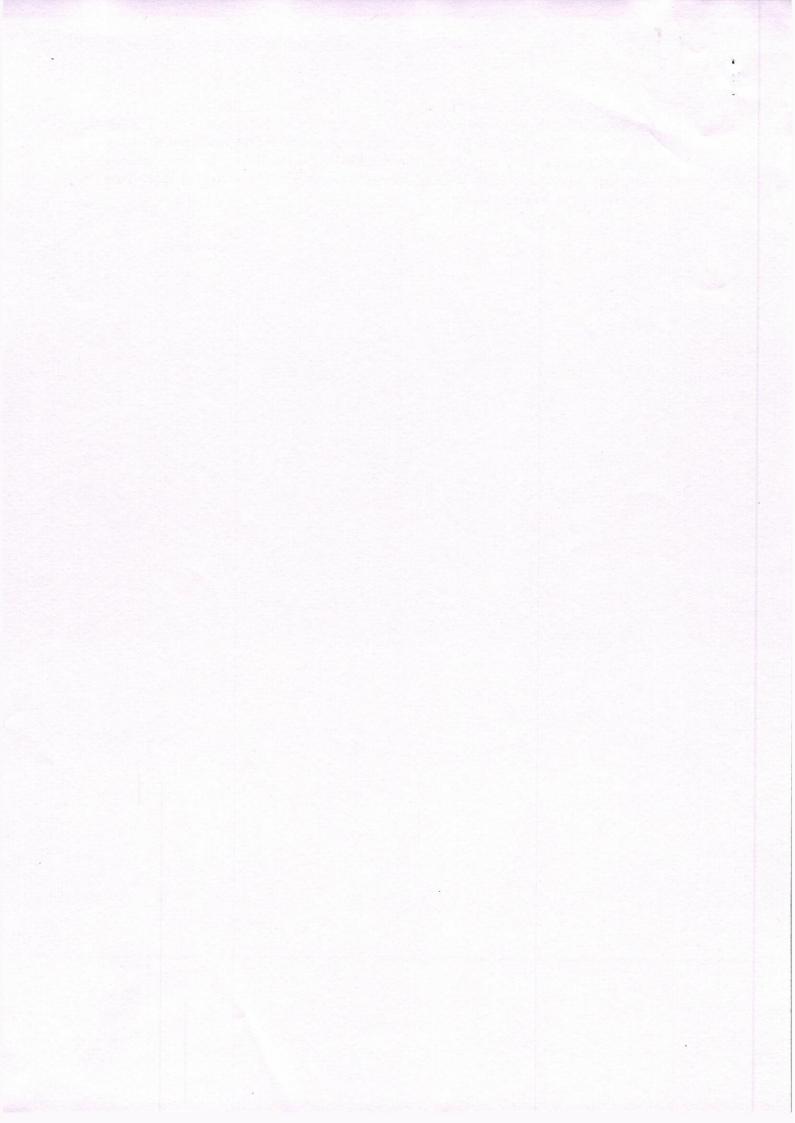
Copy forwarded to the following for information please:-

1. The HOD, DoEE, NIT, Hamirpur

2. Dr. Jiwanjot Singh, Assistant professor, DoEE, for information please.

The FI (CC), for getting the advertisement displayed in the Institute website for wider publicity under head: - Supply and installation of workbench for the Grid connected solid state transformer-based inverter and its solutions For Electrical Engineering Department of NIT Hamirpur.

FI (Purchase)





राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर हमीरपुर177005-(हि .प्र.) NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P.)-177005 [An Institute of National Importance under Ministry of Education (शिक्षा मंत्रालय)]

NIT-SBD

Subject: - Supply and installation of workbench for the Grid connected solid state transformer-based inverter and its solutions For Electrical Engineering Department of NIT Hamirpur.

Sealed online E-Tender in two bid system are hereby invited by the undersigned for the supply of following items on behalf of the Director, NIT, Hamirpur from the Eligible/ Experienced/ Resourceful, manufacturer's dealer/authorized distributor etc. having experience in appropriate field and who have successfully completed works of similar type, so as to reach in the office of the undersigned as per date & time mentioned in the tender notice.

Sr. No.	Name of works/item	Qty/ No.	Earnest Money In Rs.	Time Limit
1	Supply and installation of workbench for the Grid connected solid state transformer-based inverter and its solutions For detailed specifications etc please see below:-	1	30500	60 days

Detailed Technical Specification for supply and installation of workbench for the Grid connected solid state

transformer-based inverter and its solutions

S. No	Name	Quantity
1	Workbench for the grid connected solid state transformer-based inverter and its solution	
	a) SiC/ GaN based modules/ stakes with gate drivers	
	DC Link Film Capacitors-3	
	SIC and GaN half bridge modules -12 quantity	
	Each unit should contant 4 half bridge legs with drivers	
	Max switches voltages up to 1200 Volts or more	
	Max switches current up to 70 Amp or more	
	Max switching frequency up to 250 kHz or more	
	On resistance should be minimum in milli ohms approx	
	On board snubber capacitor	01
	On board heat sink and cooling fan	
	Multiple stack formation should be possible	
	This devices should be suitable for any application for switching frequency up to	
	250kHz approx. Some of targeted applications for inverter, PFC converters	
	The supplier must test the converter on site with the multilevel inverter algorithm and PFC algorithms for PV applications with his own algorithms.	
	High Speed Gate Driver	
	Up to 250 kHz switching frequency	
	Standard +15/-5 volts drive (can be provided with other preferable options)	

- Direct 3.3v and 5v pulse support, no need of additional interfacing circuit
- 8A peak current drive capability
- On board isolated supplies
- Half-bridge drive with inbuilt dead band option available
- Buffered inputs for low noise
- Under voltage lock out protection
- Short-circuit protection using VCESAT and Fault feedback
- Up to 1000 volts DC link support
- Power and fault indication LED

This gate driver is suitable for any application for switching frequency up to 250kHz. Some of targeted applications for multilevel inverter, PFC converters Warranty required for 1 year or more

Vendor has to test the 10 to 20 kva grid connected SiC based multilevel inverter by his own algorithm and to show the demo and training for measurement at the time of supply or during the tender as or when required.

b) High accuracy 4 channel MSO with the current probe and voltage differential probe

High accuracy 4 channel MSO-1 quantity

4.channels or more

Bandwidth: 200 MHz or more Minimum Sample Rate 1 GS/s:

Max sampling required 8GS/s or more

Recording required

Digital channel- 16 or more

Color Display: Warranty and Certificate of Traceable Calibration

Standard.

Connectivity: USB, PC and Ethernet

FFT analysis should be inside, waveform capture rate should be high, software integration is required

Voltage probes: quantity 1

Should be compatible to MSO for the measurement of voltage 1000 V or more with the high bandwidth and to measure the 250 KHZ frequency voltage Current probes: quantity 1

Should be measure the 50 amp with the high bandwidth and to measure the 250 KHZ frequency current

Vendor has to test the MSO with probes in the 10 to 20 kva grid connected SiC based inverter and to show the demo and training for measurement at the time of supply or during the tender as or when required.

c)High power DC with hardware and software- quantity 1 Specifications and features

- ♦ SiC technology, integrates source and sink function in one unit
- \blacklozenge Stand-alone max. output power 6 to 10kW, expandable option up to 50 MW by paralleling
- ♦ Voltage output range: 0 to 1500V
- ♦ Current output range: 0 to 40A (single cabinet)
- ♦ High power density up to approx. 10 kW in compact 3U rack space
- ♦ Seamless current switch between souring and sinking
- ♦ High regenerative efficiency up to 95% or more
- ♦ Standard Built-in USB/CAN/LAN/digital IO interface, optional GPIB/analog & RS232
- ♦ Full protections: support OVP, ±OCP, ±OPP, OTP, power down protection, antiislanding protection
- ♦ Support CC/CV priority setting, different loop speed can be set

- ♦ Partial pre-compliant with LV123, LV148, DIN40839, ISO-16750-2, SAEJ1113-11,LV124 and ISO21848 testing standards could be used as battery cycler and support various battery charging and discharging modes, such as CC/CV/CP
- ♦ Built-in function generator, support arbitrary-waveform generating
- ♦ Could be used as PV simulator, simulating the PV curves
- ♦ Could be used as battery simulator
- ♦ Support multiple working modes, rising and falling time can be adjustable.
- ♦ Support Datalog via USB disk and the shortest sample interval is 10us
- ♦ Strong dynamic driving profile simulation function, up to 10,000,000 points Vendor has to test the bidirectional power supply with the integration to the 10 to 20 kva grid connected SiC based inverter by using his own setup and to show the demo at the time of supply or during the tender as or when required.

Total

Other Terms & Conditions

- Vendor participating must be responsible for integration of all hardware items with software items.
- Vendor participating can be called for onsite demonstration with sample product for quality and feature analysis during the technical evaluation.
- Technical committee / PI can accept or reject any bid based upon the product quality & unsatisfactory operation of the equipment.
- Bids will be rejected in case of any technical deviation in compliance.
- Bidders must have similar experience in providing the similar products in other IITs / NITs or any central / state universities.
- Vendor must give 2-year warranty or more of all the supplied items
- Vendor has to give demonstration and training for the supplied equipment at NIT Hamirpur in Electrical engg. Department.
- No extra cost will be provided for delivery and installation of the equipment.

TERMS AND CONDITIONS:-

- 1. Validity: Minimum validity of the quotation will be 03 months from the date of opening of the quotation/tenders.
- 2. **Time Limit:** The firm/supplier has to the supply and install the equipments within 60 days from the date of the award letter.
- 3. **Guarantee/warranty**: The supplier has to provide equipment guarantee/warranty supplied for 02 years from the date of successful installation of the equipment supplied. (Certificate of the same to be given by the supplier)
- 4. **Demonstration & Training:** The supplier will have to demonstrate and impart training to concerned users at NIT, Hamirpur after successful supply & installation. (Certificate of the same to be given by the concerned user/indenter).
- 5. EMD: EMD in the form of DD/FDR /Bank Guarantee must be attached in favour of Director, NIT, Hamirpur (H.P) -177 005. The EMD should be remained valid for a period of 120 days beyond the final bid validity period. EMD of unsuccessful bidders shall be returned after the expiry of the final bid validity or before the 30th day of the award of contract. The EMD of the successful bidder shall be released only after submission of 3 %

- Performance bank Guarantee which should be valid till expiry of warranty period. EMD/PBG exemption is permissible as per Govt. rules.
- 6. Make in India preference:- NIT Hamirpur shall compare all substantially responsive bids to determine the lowest evaluated bid. The Institute is following and abide with the revised Public Procurement (Preference to Make in India), Order No. P- 45021/2/2017 PP (BE-II) dated 16.09.20 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India & subsequent instructions of Ministry. Accordingly, preference will be given the make in India products while evaluating the bids. However, it is sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India along with respective documentary evidence in the technical bid itself.
- 7. Technical Evaluation:- Technical evaluation of the participating firms will be done strictly on the basis of catalogues/brochures/literature/technical details of the product to be supplied along with relevant experience & fully complying all the terms & conditions of the SBD & tender notice. It is mandatorily to physically submit the technical literature/catalogue of the product to be supplied along with make & model no. failing which the technical bid of the participating bidder will be straightforward rejected. NIT Hamirpur also reserves the right to seek clarification from any of the participating firm during technical evaluation. The participating bidder has to submit undertaking that they fully complies to our abovementioned technical specifications.
- 8. **Destination**: F.O.R. destination i.e. NIT, Hamirpur (HP) and the rates must be quoted inclusive of all taxes and charges.
- 9. **Penalty**: In case the firm/vendor fails to supply the equipments within the stipulated period penalty without assigning any reasons @ 1/2% (half percent) of the total value of the item covered in order as penalty per day subject to a maximum of 5% (five percent) will be imposed unless extension is obtained in writing from the office on valid ground before expiry of delivery period
- 10. Price/Rate: The price of equipment/items may be quoted as per BOQ clearly mentioning the Basic rate & GST in the specified columns of BOQ in Indian rupees. Tender will be awarded to the participating bidder who will be lowest in terms of total of all items
- 11. **GST:** All the firms may invariably mention their GST/PAN numbers on quotation/tender failing which quotations may not be considered valid. Further, this Institution does not issue any C/D Concessional form, so the GST applicable as per actual rates must be mentioned in the offer. In case GST is not mentioned, the rates shall be treated as inclusive of all taxes.
- 12. **NIT/NIQ Opening**: Representative of the firm may be present at the time of opening of the Quotations, if it wishes.
- 13. Payment: 100% payment shall be made immediately after receipt of material in good condition and successful installation of the same.(Certificate of the same to be given by the indenter/inspection committee NIT, Hamirpur)
- 14. Right of Acceptance/Rejection: Right of acceptance and rejection of any tender/quotation in part or full without assigning any reason are reserved with the institution authorities. The number of items to be purchased could be increased or decreased depending on the requirement of end user.
- 15. In case of any dispute the jurisdiction of Hamirpur (HP) Courts shall apply. For any clarifications please contact: Dr. Jiwanjot Singh (Mobile 9872581018)

Annexure I - Bidder's Information

(Bidder should duly fill and send with technical documents via post/courier)

1	Name of the Bidder	
2	Address of the Bidder	
3	PAN No.	
4	GSTIN No.	
5	E-mail ID	
6	Contact Person's Name & Designation	
7	Mobile No.	
8	Email ID	

Annexure II -Questionnaire
(Bidder should duly fill and send with technical documents via post/courier)

Sr.No.	Questions	Pagnanga
1	Whether all the terms and conditions of the NIT document have been complied. Compliance (Yes/No)	Response
2	Whether all the items specified in the technical specification has been compiled and have been quoted in the bidding engine. Compliance (Yes/No)	
3	Confirm that you have read all the instructions carefully and have complied with the instructions accordingly. Compliance (Yes/No)	
4	In case bidder does not manufacture goods offers to supply have submitted Manufacturer's Authorisation letter. Compliance(Yes/No)	·
5	Mention Delivery period	
6	Mention Warranty of the material	
7	Mention HSN/SAC code of the material	
8	In case of import supplies whether you have mentioned nearest international port of shipment in the technical bid (if not applicable please mention 'NIL').	

Signature and Seal of the	ne Manufacturer / Bidder
Place:	
Date:	

ANNEXURE III - DECLARATION OF LOCAL CONTENT

(To be given on company letter head - For tender value below Rs.10 crores)
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 crores)
(Bidder should duly fill and send with technical documents via post/courier)

Date:	
Го,	
The Faculty Incharge Purchase, National Institute of Technology, Hamirpur-177005 (HP)	
Sub: Declaration of Local content	
Tender Reference No:	
Name of Tender: -	
1. Country of Origin of Goods being offered:	
2. We hereby declare that items offered has% local content.	
3. Details of Location at which local value addition is made "Local Content" means the amount of value added in India which shall, be the total value of the item be offered minus the value of the imported content in the item (including all customs duties) as a proportion thetotal value, in percent.	eing n of
The bidders cannot claim services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc as local value addition.	ng
"*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 15 (iii) of the General Financial Rules along with such other actions as may be permissible under law."	51
Yours faithfully, (Signature of the Bidder, with Official Seal)	

