

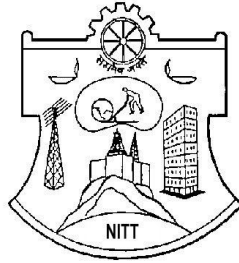
NATIONAL INSTITUTE OF TECHNOLOGY

TIRUCHIRAPPALLI – 15

Department of Electrical & Electronics Engineering

Web : www.nitt.edu

Phone : 0431 - 2503250



TENDER DOCUMENT

Tender Notification No.: NITT/EEE/NaMPET/DCdrive/CN

Name of the item : **DC DRIVE**

Quantity required : One number

EMD Amount : Rs. 1,500/-

Delivery : within four weeks from the date of purchase order

Last Date of submission of Tender : 08.05.2009 upto 3.00 p.m

Address for submission of Tender : Dr.C.Nagamani
Professor/EEE
National Institute of Technology
Tiruchirappalli – 620 015
E-mail: cnmani@nitt.edu
Phone No : 0431-2503254

Date of opening of technical bid : 08.05.2009 at 3.30 p.m



**NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI – 15**

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Tender Notification No.: NITT/EEE/NaMPET/DCdrive/CN

Date: 09.04.2009

NOTICE INVITING QUOTATION

The National Institute of Technology, Tiruchirappalli (NITT) is an autonomous body under MHRD, GOI, imparting Technical Education and engaged in Research Activities. It is proposed to procure the following item for the departmental academic/research activities.

Sealed quotations are invited for the following item subject to the following terms and conditions, from the reputed manufacturers or their authorized dealers so as to reach this office on or before scheduled date and time. The quotations will be opened on the same day in the presence of bidders or their authorized agents who may choose to be present.

Name of the item	: DC DRIVE
Quantity required	: One number
EMD (in Rupees)	: Rs. 1,500/-
Time for completion of supply after placing purchase order:	One month
Last Date of submission of quotation	: 8.05.2009 upto 3.00 p.m
Quotation to be submitted at the following address	: Dr.C.Nagamani Professor/EEE National Institute of Technology Tiruchirappalli – 620 015 E-mail: cnmani@nitt.edu Phone No : 0431-2503254

Place, Date and time of opening of bid :

Date: 08.05.2009

Time: 3.30 pm

Venue: College main office [Central stores]

Note: The Institute shall not be responsible for any postal delay about non-receipt / non delivery of the bids or due to wrong addressee.

SECTION: 1 INSTRUCTION TO BIDDER

1. The bidders should give details of their technical soundness and provide list of customers of previous supply of similar items to Universities, Institutes or Government Departments/Undertakings/public sectors with contact details. The details of the bidder/profile should be furnished along with the copy of all related documents.

1.1 **Documents to be submitted in the Bid:**

- (i) The agency should furnish copy of licence certificate for manufacture/supply of the item.
 - (ii) The agency should furnish Income Tax PAN number
 - (iii) Catalogue of the product with detailed product specifications
 - (iv) Shelf-life of the chemicals offered for supply is to be specified.
 - (v) EMD, if applicable, in original form valid for minimum six months, through Bank guarantee drawn on any scheduled bank in favour of "**The Director, NIT, Trichy**" payable at Trichy should be submitted. EMD shall bear no interest. Any bid not accompanying with EMD is liable to be treated as non-responsive and rejected.
2. The agencies should submit their rate as per the format given in Section 4 of the Notice Quotation in this cover. The rate should be quoted both in words and figures. All the pages of the bid should be signed affixing the seal. All corrections and overwriting should be initialed.

The bid cover should be duly superscribed with the following details.

(1) Quotation Notification Number (2) Quotation for the supply of (3) Date of opening

Mention "Kind Attention: Contact's person's name and phone number", and submit at the address given in the quotation Notice.

3. The quotation will be acceptable only from the manufacturers or its authorized supplier.
4. The bid shall be in the format of price schedule given in Section 4. The contract form as per format given in section 5 shall be submitted. Incomplete or conditional quotation will be rejected.
5. Details of quantity and the specifications are mentioned in Section 3 appended to this quotation Notice.
6. The item to be used is strictly according to the specification and subject to test by the Institute/concerned authorities. It must be delivered and installed in good working condition.
7. The Institute reserves the right to cancel or reduce the quantity included in the schedule of requirements at any time after acceptance of the quotation with a notice. The Contractor/Supplier shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work/supply in full but he did not derive in consequence of the foreclosure of the whole or part of the works.

8. 5% of the supply value will be retained by the Institute towards Performance Security and will be returned to the supplier after the period of warranty.
9. **Release of EMD:** The EMD shall be released after receipt of performance security from successful bidder.
10. **Validity of bids:** The rate quote should be valid for a minimum of 60 days. No claim for escalation of rate will be considered after opening the Quotation.
11. **Imports:** In case, goods are to be imported, the Indian agent should furnish authorization certificate by the principles abroad for submission of the bid in response to this Quotation Notice.
12. **Clarification of Quotation Document:** A prospective bidder requiring any clarification of the Quotation document may communicate to the contact person given in this notice inviting quotation.
13. **Amendment of quotation document:** At any time prior to the last date of receipt of bids, Institute may for any reason, whether at its own initiative or in response to a clarification requested by prospective bidder, modify the Quotation document by an amendment.
14. ***The Institute may at its own discretion extend the last date for the receipt of bids.***
15. The bids shall be written in English language and any information printed in other language shall be accompanied by an English translation, in which case for the purpose of interpretation of the bid, the English translation shall govern.
16. The Institute reserves the right of accepting any bid other than the lowest or even rejecting all the bids. The decision of the Institute Purchase Committee is final in all matters of quotation and purchase.
17. The bidder should give the following declaration while submitting the Quotation.

DECLARATION

I/we have not tampered/modified the quotation forms in any manner. In case, if the same is found to be tampered/modified, I/we understand that my/our quotation will be summarily rejected and full Earnest Money Deposit (EMD) will be forfeited and I/we am/are liable to be banned from doing business with NIT, Trichy and /or prosecuted.

Signature of the Bidder :

Name and Designation :

Business Address :
.....
.....

Place :

Date :

Seal of the Bidder's Firm

18. Any other details required may be obtained from the contact person given in the notice inviting quotation during the office hours.

SECTION : 2 CONDITIONS OF CONTRACT

1. The rates should be quoted for FOR NIT, Trichy for supply within India.
2. In case of import both CIF and / or FOB rate should be quoted. All components of expenditure to arrive at Chennai need to be explicitly specified.
3. The bidder shall indicate the excise duty exemption for the goods if applicable
4. The Institute is eligible for customs duty and excise duty exemption.
5. The rate quoted should be on unit basis. Taxes and other charges should be quoted separately, considering exemptions if any.
6. Rate quoted should be inclusive of Testing, commissioning and installation of equipment and training.
7. **Payment**: No advance payment will be made. Payment will be made only after the supply of the item in good and satisfactory condition and receipt of performance security by supplier. In case of imports, the payment will be made through LC after installation and performance security need to be submitted at the time of LC commitment.
8. Guarantee and Warrantee period should be specified for the complete period conforming to the section 3 of this quotation document.
9. Period required for the supply and installation of item should be specified conforming to the section 3 of this quotation document.
10. In case of dispute, the matter will be subject to Tiruchirappalli, Tamil Nadu Jurisdiction only.

SECTION: 3 SCHEDULES OF REQUIREMENTS, SPECIFICATIONS AND ALLIED DETAILS

Name of the Item to be procured : DC DRIVE

Specifications:

The drive system should consist of the following main parts:

1. **DC Shunt motor**
2. **Three phase intelligent power module suitable for operating the above dc shunt motor in four quadrants with built in driver circuits, isolator circuits & protection.**
3. **TMS320F2407A DSP based controller, suitable for the item 2 above**

Detailed specifications

1. DC Shunt motor

Loading arrangement: spring balance load set up with position sensor and digital load indicator. Should have double side extension for shaft
Ratings: 1hp, 220V, 5A, 1500 rpm.

2. Three phase intelligent power module with output suitable for 3 hp DC Motor or a 5HP three phase AC motor

1200V, 25A Intelligent Power Module with suitable heat sinks, Hall effect sensors (for dc current, ac currents and dc link voltage) and protection circuits.

Should have front panel access to the test signals (currents, PWM signals and feedback signals)

Should contain independent power supplies for all isolated circuits.

FRC Connectors to interface with a controller based on **TMS320F2407A processor.**

3. TMS320F2407A DSP based controller

DSP Processor: TMS320F2407A, 16 bit, 40 MIPS

Should be similar to the EVM kit of TMS320F2407A.

In addition it should have

- i). On board External memory
- ii). 16x2 LCD with back light

Additional features :

- * 16 LEDs to be provided for user program development & debug
- * One RS232 compatible serial port and terminated at 9 pin 'd' male connector
- * 3 Switches to be provided for user application program use like, Up/Down frequency, speed Setting etc.,
- * Bead Inductances to be provided for RF EMI rejection
- * ADC inputs to be protected and terminated at 26 Pin FRC connector.
- * 8 I/O lines to be protected and terminated with 50 Pin FRC connector
- * PWM outputs and capture inputs to be terminated at 34 pin FRC connector
- * On Board 12 bit DAC
- # 2 Channels of 12 bit Analog output using (AD 8585)
- # Parallel Interface with the controller.
- # $\pm 5v$ bipolar output terminated at connector.

Display: 16x2 LCD alphanumeric display

Software : Provisions needed

- * Serial interface with the controller at 38.4k baud rate
- * Windows based powerful program development software to develop & compile the program
- * Programs down-loadable to the internal (or) external memory

Quantity : One number

Any other details/requirement : --

Warranty period required : 1 Year

Delivery schedule expected after
release of purchase order (in weeks) : One month

EMD (in Rupees) : Rs. 1,500/-

Performance Security to be given by
Successful bidder after release of purchase order (in Rupees): **5%** of the equipment cost

SECTION: 4 PRICE SCHEDULE

[To be used by the bidder for submission of the bid]

- 1. Item Name :

- 2. Specifications (confirming to Section 3 of Quotation document-enclose additional sheets if necessary) :

- 3. Currency and Unit Price :

- 4. Quantity :

- 5. Item cost (Sl.No.3 & Sl.No.4) :

- 6. Taxes and other charges :
 - (i) Specify the type of taxes and duties in percentages and also in figures
 - (ii) Specify other charges in figures

- 7. Warranty period (confirming to the Section 3 of Quotation document. This should be mentioned in Technical bid also in order to get qualified for Financial bid) :

- 8. Delivery Schedule (confirming to the Section 3 of Quotation document) :

- 9. Name and address of the firm for placing purchase order :

- 10. Name and address of Indian authorized agent (in case of imports only) :

Signature of the Bidder :

Name and Designation :

Business Address :
.....
.....

Place :

Date :

Seal of the Bidder's Firm

SECTION : 5 CONTRACT FORM

[To be provided by the bidder in the business letter head]

1. {Name of the Supplier's Firm) hereby abide to deliver theby the delivery schedule mentioned in the Section 3 quotation document for supply of the items if the purchase order is awarded.
2. The item will be supplied conforming to the specifications stated in the quotation document without any defect and deviations.
3. Warranty will be given for the period mentioned in the quotation document and service will be rendered to the satisfaction of NIT, Trichy during this period.

Signature of the Bidder :

Name and Designation :

Business Address :
.....
.....

Place :

Date :

Seal of the Bidder's Firm