|  |
| --- |
| **logo1COLLEGE OF ENGINEERING AND TECHNOLOGY****(A Constituent College of Biju Patnaik University of Technology)****TECHNO CAMPUS, GHATIKIA, PO: MAHALAXMIVIHAR, BHUBANESWAR-751 029** |

|  |
| --- |
| Letter No. 3407 / CET / ME Dated:28/11/2019 |

**TENDER CALL NOTICE**

Sealed, Two-bid tenders are invited from **Original Equipment Manufacturers (OEM) /Authorized Distributors** /**Dealers / Registered Farms** for Supply, installation and demonstration of “**20-channel Data Acquisition System with Data Storage and Visualization Device”** for the purpose of a sponsored project by DST, Govt. of Odisha in the Department of Mechanical Engineering of CET, Bhubaneswar in the prescribed format as per the requirements enclosed in the schedule of items given in bid documents. Bid documents with details terms & conditions are to be downloaded from CET website **“**[**www.cet.edu.in**](http://www.cet.edu.in)**”.**

The tenders along with the tender cost and EMD as given in bid documents in the sealed envelope should be super-scribed with **"Tender** Supply and Installation of and Demonstration of a **20-channel Data Acquisition System with Data Storage and Visualization Device (DST/PROJ/MED)"** and submitted through **Speed Post / Regd. Post** only at the Principal Office, CET, Bhubaneswar **on or before 19.12.2019** at 4:30 P.M**.** No hand delivery will be accepted. The authority will not be held responsible for any postal delay. More details are available at our College Website: [**www.cet.edu.in**](http://www.cet.edu.in). The authority reserves the right to accept/reject any or all tenders without assigning any reason thereof. ***No correspondence in this regard will be entertained.***

The interested bidders can inspect the site at any time during working hours on any working day at their own cost before submission of tender. No consideration shall be entertained in regard to the unawareness of the site conditions and constraints after submission of tender.

Sd/-

PRINCIPAL

**Bid Ref No. 3407/CET/ME Date: 28/11/2019**

**BIDDING DOCUMENTS AND INSTRUCTIONS**

**FOR**

**SUPPLY AND INSTALLATION OF “A 20-CHANNEL DATA ACQUISITION SYSTEM WITH DATA STORAGE AND VISUALIZATION DEVICE” FOR THE DST SPONSORED PROJECT, GOVT. OF ODISHA**

**IN THE DEPARTMENT OF MECHANICAL ENGINEERING**

****

**COLLEGE OF ENGINEERING AND TECHNOLOGY**

**(A Constituent College of Biju Patnaik University of Technology)**

**Techno Campus, Mahalaxmivihar, Bhubaneswar – 751 029**

**INVITATION FOR BIDS**

**Principal, College of Engineering & Technology**, Bhubaneswar invites sealed bids from eligible bidders for Supply, installation and demonstration of **20-channel Data Acquisition System with Data Storage and Visualization Device** for the purpose of a sponsored project by DST, Govt. of Odisha in the Department of Mechanical Engineering, College of Engineering & Technology, Techno campus, Ghatikia, Mahalaxmi Vihar, Bhubaneswar -751029.

Interested eligible Bidders may obtain detail information and list of items with technical specifications from **the College website:** [**www.**](http://www.nitdgp.ac.in)**cet.edu.in**

Particulars about submission of bidding document are as follows:

(a) Price of bidding document (non-refundable) : **Rs. 500/-**

(b) First date of availability of Bidding Document in the website :  **28/11/2019**

(c) Last date and time for submission of bids **: 19/12/2019 up to 4.30 p.m.**

(d) Time and date of opening of bids :  **26.12.2019 at 3.00 p.m**.

(e) Place of opening of bids : **Principal Office**

**College of Engineering & Technology Techno campus, Ghatikia,**

**Mahalaxmi Vihar, Bhubaneswar-751029**

(f) Address for communication : **Principal**

**College of Engineering & Technology**

**Techno campus, Ghatikia,**

**Mahalaxmi Vihar, Bhubaneswar-751029**

**Sd/- Principal**

### Eligibility of Bidder and General Instructions:

### 1.1 Eligibility:

Those who fulfill the following criteria are eligible to participate in the tender.

1. The bidder must be a reputed Original Manufacturer and/or the Authorized Dealer/supplier/distributor of a reputed manufacturer. Manufacturers should provide all documents relating to their **Manufacturing Capabilities.**
2. If the bidder is an Authorized Dealer/supplier/distributor of a reputed manufacturer, necessary certificate to this effect from his manufacturer must be enclosed.
3. The quoted price of the bidder should be in the range of the current technical specification and should be available in the manufacturer’s website.
4. The bidder should provide at least 3 (three) numbers of recent Data Acquisition System with Data Storage and Visualization System P.O. of the quoted product in last one year supplying to reputed institutes (i.e., IITs, NITs or any other state/central universities). Also, the bidder has produce last three years supply to different Institutions.
5. All after sales support should be provided directly by the manufacturer only.
6. The bidder must have the willingness for providing comprehensive maintenance support of the Machine supplied by him.
7. The bidder must provide evidence of successful execution of supply orders with installation and successful after-sales support in reputed organizations.
8. The bidder must have GSTIN No. and Income Tax payment up to date. Attested copies of GSTIN Certificate or non-assessment certificate from the concerned Authority valid up to the date and attested copy of Income Tax Clearance Certificate or non-assessment certificate, as the case may be, from the competent authority, up to the date and PAN Number must be enclosed along with the Tender documents.

### 1.2 General Instructions:

Submission of more than one bid by a particular bidder under different names is strictly prohibited. In case, it is discovered later on that this condition is violated, all the tenders submitted by such bidders would be rejected or contract cancelled.

All offers should be in English and the price quoted for each item should be firm.

**Warranty period (at least 03 years), Delivery period and After-Sale-Service conditions, etc. are also to be clearly indicated.**

**The rates and the conditions of the offer will remain valid for three months from the date of opening of the tender and no change or alteration of the rate will be acceptable on any account.**

Submitted tender forms with overwriting or erased or illegible specifications and rates will be rejected.

Request from bidder in respect of additions, alterations, modifications, corrections, etc. of either terms & conditions or rate after opening of the bid may not be considered. **However, negotiation may be made before finalization.**

Bidders shall carefully examine the bid documents and fully inform themselves of all the conditions, which may in any way affect the work of the cost thereof.

Should a bidder find discrepancies or omissions from the specification or other documents and any doubt as to their meaning, he should at once notify the purchaser and obtain clarification in writing.

This, however, does not entitle the bidder to ask for time beyond the due date fixed for receipt of tenders.

The bidder must also specify minimum uptime and maximum time to repair/replace in the event of a failure and penalty thereof.

Verbal clarification and/or information given by the purchaser or its employees or representatives shall not be binding on the purchaser.

Submission of sealed bid will carry with the implication that the bidder agrees to abide by the conditions laid down in the detailed particulars of the bid notice.

Conditional offers and offers qualified by vague and indefinite expression, as ‘subject to immediate acceptance’ ‘subject to prior sale’, etc. will not be considered.

While tenders are under consideration, bidders and their representatives or other interested parties are advised to refrain from contacting by any means, to the purchaser's personnel or representatives on matter relating to the tenders under study.

The purchaser, if necessary, will obtain clarification on tenders by requesting such information from any or all the bidders either in writing or through personal contact as may be necessary.

The purchaser, if necessary, will visit the site of some selected bidders or all bidders to see the Lab equipment for better appreciation of any material/design on tenders either in writing or through personal contact as may be necessary.

The bidder will not be permitted to change the substance of his offer after the tenders have been opened.

In the event of non-compliance with this provision, the bidder is liable to be disqualified.

### 1.3 Procedure for Submission of Tenders:

a) The Bidders must submit their bids as required in two parts in separate sealed covers prominently super scribed as **Part-I “Technical Bid” and Part-II “Price Bid”** and also indicating on each of the covers the “Tender callNotice Number & Date” and due date and time of submission as mentioned in Tender Call Notice.

**Part-I (Technical Bid)**

Excepting the price schedule, all other documents i.e. details of technical specifications, leaflet, Copy of Firm Registration Certificate from the competent authority, GSTIN certificate, Income Tax Clearance, PAN Card copy, ISO Certificate, NABL accreditation Certificate, list of clients, authorization certificate from Manufacturer in case of Dealer, etc. along with tender document duly signed by the authorized person in each page shall be covered in *Part-I (Technical Bid).*

**Part-II (Price Bid)**

All indications of price shall be given in Part-II (Price Bid)

#### b) Both sealed covers Part-I **“Technical Bid”** and Part-II “**Price Bid**” should be placed in a third cover along with requisite EMD & cost of Tender documents (separately in the form of DD drawn in favour of **Principal, College of Engineering & Technology, Bhubaneswar** at any Nationalized Bank payable at Bhubaneswar) , others requisite supporting documents etc. and sealed. The sealed cover containing tender documents as per procedure indicated above should be submitted at the office of the Principal, CET, Techno campus, Bhubaneswar through **Registered Post/Speed Post** only addressing to the **Principal, College of Engineering & Technology, Techno-Campus, Mahalaxmivihar, Bhubaneswar-751029** within the due date and time as stipulated in Tender Call Notice**. The sealed envelope must show the name of the bidder and his address and should be super scribed as “20-channel Data Acquisition System with Data Storage and Visualization Device (DST/PROJ/MED) for the Department of Mechanical Engineering”****on the top of the envelope**.

**c)** All the documents submitted must be in the papers showing signature of the bidder and printed office name of the bidder on official seal.

**d)** All the documents must be submitted in a sequential manner with separator/flags to help in quick scanning of the topics. Wherever possible, data in tabular form should be given.

### Requirements by Bidder before Supply:

### 2.1 Rating Plate, Name Plate and Labels:

Each of the equipment are to have permanently attached to it, a rating plate of non-corrosive material in a conspicuous position, upon which the total specifications along with the manufacturer’s name, address, etc. are to be engraved.

### 2.2 Packaging:

All the goods are to be suitably protected, covered in water -proof packing and crated to prevent damage or deterioration during transit and storage till the time of installation. The supplier shall be responsible for any loss or damage caused during transportation, handling or storage till their successful installation.

### 2.3. Inspection:

All materials shall be inspected and tested for completeness, proper assembly, operation, cleanliness and state of physical condition and performance as per quoted specification.

The cost inspection, assembly shall be borne by the Bidder.

CET reserves the right to reject any mentioned equipment, if it does not comply with the technical specifications during site testing, installation, commissioning and demonstration stage.

Inspection & testing would be conducted, jointly, at various stages as applicable during unpacking, installation and commissioning of respective training systems/equipment at the manufacturing site/assembly site.

### Requirements by Tender after Supply:

### 3.1 Supply:

The material would be delivered by the supplier at **Department of Mechanical Engineering, College of Engineering and Technology, Techno Campus, Mahalaxmivihar, Bhubaneswar – 751029, Odisha.**

The items should be supplied directly from the manufacturing terminal having passed all tests successfully with Certifications as required.

The materials should conform to the latest relevant National/International standards and shall be completed in all respect.

Any component, fitting etc. which may not have been specifically mentioned in the specifications but which are usual and necessary for the equipment shall be supplied by the bidder at no extra cost.

In case, articles are found damaged in transit or found short at the time of delivery the full cost of the same will be deducted from the bill of the supplier in case the supplier does not replace the stock within a week from the date of the complaint.

The articles ordered must be supplied in one lot within 6(six) weeks of placing of the order.

In case of delay in delivery or successful installation, a penalty of 1% (one per cent) per week shall be levied.

CET reserves the right to procure the materials from alternative sources at the risk and cost of the successful bidder giving 15 days notice period.

Any increase in tax and duties after expiry of delivery period will be to the seller’s account.

In case the items supplied by the supplier are found not up to the specification shall be rejected.

The supplier will be intimated to take back the stocks at his own cost within three days from the date of rejection and to replace the same within 7 days, failing which the EMD will be invoked in addition to taking legal actions.

Imported consignment, if any, should be destined to the **Principal, College of Engineering and Technology, Techno Campus, Mahalaxmivihar, Bhubaneswar – 751029, Odisha India** through nearest custom clearing Air Port. (Kolkata/Bhubaneswar)

The suppliers shall be responsible for releasing the consignments from the carriers/transporters.

The Lab equipment shall be delivered on site at the cost of the bidder

All taxes, levies, surcharges including the customs clearance and handling freight and insurance should be paid and handled by the bidder.

### 3.2 Documentation:

Detailed technical manuals, handbooks, drawings, Warranty card and Factory Quality Assurance checklist, test results and any other certifications mentioned in the Technical specifications shall be supplied along with the consignment.

Supplied manuals/handbooks must cover detailed technical specifications and installation, operation, maintenance and System Safety procedures.

### 3.3 On-Site Warranty:

1. The entire materials may be used continuously. The reliability and safety of the total installed system and trouble-free operation are, therefore, of prime importance. The supplied Lab equipment and components shall be covered under **THREE YEARS comprehensive on-site warranty** from the date of issue of successful completion of Performance Guarantee Report.
2. During the period of warranty, it shall be the responsibility of the bidder to provide all essential components at the bidder’s cost.

### 3.4 After Sales Service:

During the warranty period and subsequently, bidder shall attend to the problems reported by the users of CET on a priority basis.

For any problem reported the bidder shall attend and rectify the problem within 7 (seven) days or provide a standby system of the similar configuration.

The report on any problem will be informed through phone or fax number of which shall be given by the bidder.

The branch office of the concerned manufacturing firm will be fully responsible to provide maintenance service, in case of any negligence, in providing the service by the bidder.

On failure to comply with those instructions, the Bank Guarantee provided for the warranty period shall be invoked.

### 4. Financial Terms:

**4.1 EMD**

The Bidder has to submit a Demand Draft / Pay order of Rs**. 5,000/ - in favour of Principal, College of Engineering and Technology, Bhubaneswar** payable at Bhubaneswar in any Nationalized Bank towards EMD.

There will be no interest paid to the bidder towards EMD money.

In no case, the EMD Money in cash or other forms will be accepted at the time of opening of the bid.

No request for adjustment of claims, if any, will be accepted.

The EMD of unsuccessful bidders will be refunded as soon as possible after the tenders are finalized.

**4.2 PRICES:**

Price quoted should be **FOR College of Engineering & Technology, Bhubaneswar only. Tax components as applicable should be mentioned clearly in the financial bid.**

Price should be quoted for unit item; however, the actual system requirements may be much more.

Purchase order will be placed as a single lot for each type of item or for all the items together, as the case may be.

In case of items of import, the bidder should take full responsibility for customs clearance, handling, tax payment, etc. and specify the charge for the same in the price bid.

**4.3 GST Concession:**

GST Concession if any is to be availed on production of the required certificates applicable to Educational Institution.

**4.4 Discount:**

Our Institute is a pioneer academic Institution in the field of Teaching and Research in Engineering and allied disciplines and do not run with profit motive.

The rate of discount or any other Institutional benefit arising out of Govt. Policy etc., on each item considering bulk purchase may be indicated in the bid specifically.

**4.5 Payments:**

Payment of 100 percent of the ordered value will be made after successful delivery of the goods subject to submission of satisfactory performance report by the concerned users/HODs.

**4.6 Penalty:**

If the delivery, installation and commissioning is not carried out in time as specified in other part of the tender document, the bidder/manufacturer will be charged @ 1 % (one per cent) per week of the total value of the concerned machine / equipment.

**4.7 Rate Contract with DGS&D or any other Government Organisation:**

In case the bidder has entered into a Rate Contract with DGS&D or any other Government Organization such as EPM rate contract preference, number & copy of rate contract have to be submitted along with tender.

### 5. Instruction to the Bidder:

Some of the minimum specifications specified may be redundant, obsolete or incompatible and in these cases, quote the particulars of correct specification of latest trend and technology.

**If there are any queries on specifications of the items, the bidder may visit the College/Department for clarifications thereon before submitting tenders after 3 P.M. in all working days.**

Specifications instead of specified specifications are allowed if specified specification is not available, obsolete or incompatible.

Specify brand name and full model name and number for each offer.

Include the original catalogue and pricelist if any for each of the items quoted.

**6 Solving Disputes:**

CET, the renderer and the manufacturer shall make all efforts to resolve amicably by direct informal negotiation on any disagreement or dispute arising between them under or in connection with this contract.

All disputes arising out of the contract shall be referred to courts under the jurisdiction of the Bhubaneswar court only.

***The above terms and conditions except those otherwise agreed upon, shall form a part of the Purchase Order***.

***Sign on each page of this tender document and Return it along with the offer enclosing this part together with the Technical Offer.***

***\*\* The CET authority has all rights to accept / reject any tender without assigning any reasons thereof.***

### 7. Technical Specifications:

The specified specifications are indicative and not exhaustive.

The quoted materials should comply the below mentioned technical specification

# DATA ACCQUISITION SYSTEM WITH DATA STORAGE AND VISULAIZATION SYSTEM

|  |
| --- |
| **Technical Specification for Data Acquisition System with Data Storage and Visualization Device** |
| Universal Inputs i.e. Input channels should be software configurable and should be capable of accepting Volts, Current, Temperature inputs from T/C, RTD etc. |
| Measurement: 22 bit (6.5 Digits) resolution |
| Programmable, Modular and expandable in nature. |
| It should be able to work as a Standalone unit (if required) without the PC. |
| Both LXI and USB (source and Device) should be available. Graphical web interface for monitoring should be available. |
| Wide selection of different types of Multiplexer Units |
| Window based Software for Data transfer to PC, Documentation etc. |
| Measurement of different Parameters like Temperature with all types of thermocouples, RTDs, Thermistors, Voltages, Current, Frequency, Period, Capacitance. |
| Direct Measurement of Parameters without any separate front end unit. Software functions like Mx+B Scaling, Alarm settings, X-T and X-Y recording of data, Basic math functions. Software capable of Transferring data to other user packages like EXCEL. |
| No. of Input Channels: 20, optionally expandable. |
| Scan rates : up to 80 channels per second (Expandable up to 450 ch/sec) |
| l) Measurement range  a) DC Volt: 100 mvolt to 300 Volt.  b) Resistance: 100 ohm to 1000 Mohm.  c) Current: 1µA to 1 Amp.  d) Thermocouple : E,J,K,N,R,T  e) Capacitance: 1nF to 100µF  f) Frequency: 3Hz to 300KHz |
| Memory: 100K readings in Nonvolatile memory with time stamp.  Availability of Storage option through in USB Drive |
| Measurement accuracy: 0.0030+0.0004 in DCV. |
| Single Channel Measurement rates |
|  |
| **Characteristics - Measured: Noise performance for DC voltage, current, and resistance**  **Integration time Digits RMS Noise adder (% of range + fixed base)**  **DC volts Ohms DC current**  100 PLC/1.67 s (2 s) 6.5 0 0 0  10 PLC/167 ms (200 ms 6.5 0 0 0  1 PLC/16.7 ms (20 ms) 6.5 0.0001+0.5µV 0.0001 + 0.5 mΩ 0.0006 + 0 .02 nA  0.2 PLC/3 ms (3 ms) 6.5 0.0005 + 3 µV 0.0010 +10 mΩ 0.0050 + 5 nA  0.06 PLC/1 ms (1 ms) 6 0.0020 + 3 µV 0.0020 + 10 mΩ 0.0070 + 10 nA  0.02 PLC/400 µs (300 µs) 6 0.0020 + 3 µV 0.0020 + 10 mΩ 0.0070 + 10 nA |
| Interface : Standard USB and LXI |
| Scan conditions : Programmable scan interval and conditions |
| Two, Three & Four Wire configurable for measuring strain. |
| The equipment must be supplied with a compatible laptop( i5 with 8GB RAM and 1TB Hard disk for analyzing the result |
| User Manual & Calibration/Test Certificate : Required |
| DAQ compatible Data Storage and Visualization Device/i5 laptop with 8GB RAM and 1TB Storage device for storing and visualizing the data. |

#### **COLLEGE OF ENGINEERING & TECHNOLOGY, BHUBANESWAR**

#### **DEPARTMENT OF PLANNING AND DEPARTMENT OF PHYSICS**

#### **(A Constituent College of BPUT, Odisha)**

#### **Techno Campus, P.O.: Mahalaxmivihar**

#### **Bhuabaneswar, Pin-751029**

#### **www.cet.edu.in**

#### **Email:principalcet@cet.edu.in**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**TECHNICAL BID**

(To be enclosed in separate sealed cover)

**Name and address of the bidder:**

Note: A DD for EMD and Tender document fee should be enclosed with this bid separately as mentioned in Para 4.1 of tender paper

1. Name of the bidder
   1. Full postal address
   2. Full address of the premises
   3. Telegraphic address
   4. Telex number
   5. Telephone number
   6. Fax number
2. Monthly supply capacity of goods quoted for
   1. Normal
   2. Maximum
3. Total annual turn-over(value in Rupees)(Previous year)

(Copy of Balance Sheet / Audit Statement / IT returns/ P.O. order for supplying same equipment to reputed Govt. institutes etc. to be attached as proof)

1. Past supply details for 3 years (Attach proof)
2. Whether similar job work undertaken in the past, if so details. (at least supply of three units of similar kind)

(Demo of the Lab Equipment to be arranged if required)

**Customer** **Quantity supplied** **Year**

6. GSTIN No.

**Signature and seal of the bidder**

**COLLEGE OF ENGINEERING & TECHNOLOGY, BHUBANESWAR**

**DEPARTMENT OF PLANNING AND DEPARTMENT OF PHYSICS**

**(A Constituent College of BPUT, Odisha.)**

**Techno Campus, P.O. : Mahalaxmivihar, Bhubaneswar, Pin-751029** [www.cet.edu.in](http://www.cet.edu.in)

**Email:principalcet@cet.edu.in**

\*\*\*\*\*\*\*\*\*\*\*\*\***\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**FINANCIAL BID**

(To be enclosed in separate sealed cover)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No** | **Item Description** | **Make / Model** | **Quantity**  **Required** | **Unit Cost** | **Total**  **Cost** | **GST %** | **Total Amount** |
| **Without GST** | **Without GST** | **GST cost** | **with GST** |
| 1 | 20 channel Data Acquisition System with Data Storage and Visualization Device |  | 1 |  |  |  |  |
| **Total amount in words:** | | | | | | | |

**Signature and seal of the bidder**

# PROFORMA FOR SUBMITTING ELIGIBILITY REQUIREMENT AND UNDERTAKING

**To**

**The Principal,**

**CET, Bhubaneswar**

**Sub: Submission of Tender documents for Supply and installation of a “20 Channel Data Acquisition System with Data Storage and Visualization System”** **for the DST Sponsored Project in the Department of Mechanical Engineering.**

Sir / Madam,

Having examined the conditions of contract and specifications including agenda, I/we, the undersigned, offer to undertake Supply, Installation, Commissioning of above mentioned items at Department of Mechanical Engineering, CET, Bhubaneswar, in conformity with the specifications, terms & conditions of Tender.

1. I/We agree to abide by the terms and provisions of the said conditions of the contract and provisions contained in the notice inviting tender. I/We hereby unconditionally accept(s) the tender conditions.

It is certified that I/we have not stipulated any condition(s) in our tender offer. In case, any condition(s) are found in our tender offer violated after opening tender, I/We agree that the tender shall be rejected without prejudice to any other right or remedy be at liberty to forfeit the EMD absolutely.

1. I/We hereby submit the earnest money of [INR…………..……….……] for the Tender for the above mentioned work in the form of demand draft.
2. That, I/We declare that I/We have not paid and shall not pay any bribe to any officer of CET for awarding this contract at any stage during its execution or at the time of payment of bills, and further if any officer of CET asks for bribe/gratification/undue favour, I/We shall immediately report it to the CET authorities.
3. That, I/We undertake that CET’s tender document shall form part of contract agreement.

I/We understand that you are not bound to accept the lowest or any bid, you shall receive.

Thanking you

Yours faithfully

Dated:

Signature of Bidder

Name: ………………

Telephone:…………..

Witness…................... Signature.................... Address......................

Enclosures: