

**Indian Institute of Information Technology,
Design and Manufacturing, Kurnool
Jagannathagattu, Diinidevarapadu, Kurnool.**



Tender Document

For

Supply and Installation of Electronic Equipments

Date: 20. Febraury2019

Item	:	Supply and Installation of Electronic Equipments (Specification and Quantity enclosed as Annexure)
Tender Enquiry No	:	IIITKL/18-19/S&P/ELECTRONIC EQUIPMENTS/07 Dt. 20 .02.2019
EMD	:	Earnest Money Deposit (EMD) for Rs. 48,000/- (Rupees Fourty eight Thousand Only) in the form of Demand Draft drawn in favor of "IIIT Kurnool" payable at Kurnool.
Submission of Offer	:	Two Bid System: Two bid system will be followed in this tender. In this system the bidder must submit his offer in two separate sealed envelopes . Both the technical bid and commercial bid envelopes should be securely sealed and stamped separately and clearly marked as "Envelope No: 1 – Technical Bid" and "Envelope No: 2 – Commercial Bid" respectively. EMD should be placed in the Technical Bid. This two separate sealed envelopes should be placed in single envelope super scribing the tender No and description of the item.
Place of Submission Bid	:	The Mentor Director Indian Institute of Information Technology, Design and Manufacturing Kurnool Jagnnathagattu, Dinnidevarapadu, Kurnool, Andhrapradesh-518007.
Due Date (For submission of bids)	:	02.00 PM 03.04.2019 (any bid received after the due date and time by any means will be summarily rejected)
Opening of Technical Bid	:	04:00 PM, 03.04.2019
Delivery Period	:	04 weeks from the date of Purchase Order

Important :

All communications are to be addressed to in the name of Mentor Director, IIITDM Kurnool only and not in the name of any officer and mails has to be sent to official purchase email id purchase@iiitk.ac.in

Terms and Conditions

1. The Bidders are requested to give detailed tender in two bid format.

Envelope-I : **Technical Bid**
Envelope-II : **Commercial Bid**

2. The bidder has to accept all terms and conditions of the Institute and conditional offers will not be accepted.

3. The tender document can be downloaded from the IIITDM Kurnool website www.iiitdmkl.ac.in at free of cost. The duly filled tenders should be submitted to The Mentor Director, Indian Institute of Information Technology, Design and Manufacturing, Kurnool, Jagannathagattu, Dinnidevarapadu ,kurnnol-518007 **on or before due date 02.00 PM,.03.04.2019**. Extension of due date will not be entertained.

4. Tenders which are submitted without following the two bid offer system will summarily be rejected.

5. **Envelope No-1 : Technical Bid**

- i) EMD for Rs. 48,000 /- (Rupees forty eight thousand only) in the form of Demand Draft drawn in favor of **"IIIT Kurnool"** payable at Kurnool. (The EMD without interest shall be returned to the unsuccessful bidders after finalization of the tender).
- ii) The firms registered and having valid NSIC Certificate are exempt from submission of EMD.
- iii) The leaflet / catalogue of the product quoted.
- iv) The copies of purchase orders received from Industry / Educational / Research Institution etc.
- v) Bids should have a validity of **60 days**.
- vi) The technical offer **should not contain any price information**.

6. **Envelope No-2 : Commercial Bid**

This should contain only the price information along with commercial terms and conditions.

7. **Opening of Technical Bids**

The technical bids will be opened on the scheduled date in the presence of the bidders or their authorized representatives who choose to attend the technical bid opening.

8. **Technical Evaluation**

- i) All the technical aspects of the bids received will be evaluated for suitability and specification. If required, the Institute may seek additional clarification from the bidders.
- ii) The technical recommendation shall be final and binding on all the parties.
- iii) The technically qualified firms will be intimated about Price Bid opening by email.

9. Opening of Commercial Bids

The Institute will open commercial bids of only the shortlisted bidders in technical evaluation in the presence of the bidders or their authorized representatives who choose to attend the commercial bid opening. The representatives of shortlisted firms only will be allowed for commercial bid opening.

10. Delivery Period / Timelines

The deliveries and installation must be completed **within 06 weeks** from the date of purchase order. The time is the essence of the contract.

11. Locations for the supply / services

The bidders may note that the items covered by this document is required to be supplied and installed at

**IIITDM Kurnool,
Jagannathagattu,
Near Pullareddy Engineering College
Dinnedavarapadu village,
Kurnool, Kurnool District
Andhra Pradesh-518007.**

12. Price

- i) **The price should be quoted in INR only. GST payable extra.**
- ii) **The price quoted shall be for supply, delivery and Installation at specified room of IIITDM KURNOOL, Kurnool District, Andhra Pradesh.**
- iii) The packing, forwarding, freight, insurance and commissioning charges, if any extra may be quoted separately in commercial bid.

13. Installation

- i) Bidder shall be responsible for installation as applicable and for after sales service during the warranty and thereafter.
- ii) Installation to be arranged by the supplier free of cost and the same is to be done within 15 days of the arrival of the item at site.

14. Warranty / Support

- i) The items supplied shall carry the warranty as per the requirement mentioned in the technical specification.
- ii) The defects, if any, during the guarantee / warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost,

insurance, freight, custom duty, octroi, local taxes if any and should be borne by the beneficiary or his agent.

- iii) The bidder should arrange for technical support during warranty period within 24 Hours of lodging of complaint

15. Indemnity

The vendor shall indemnify, protect and save IIITDM Kurnool against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc., or such other statutory infringements in respect of all the items supplied by them.

16. Freight and Insurance

The items to be supplied will be insured by the vendor at his cost against all risks of loss or damage from the date of shipment till such time it is delivered at IIITDM Kurnool, Kurnool District, Andhra Pradesh.

17. Payment

100% payment after delivery, and acceptance by IIITDM on submission of Bank Guarantee for an equivalent value of 5% of PO value valid till warranty period plus 2 months.

The bidders may note that **other modes of payment like advance payment and payment against delivery is not considered.**

18. Penalty for delayed services / LD

- i) As time is the essence of the contract, delivery period mentioned in the purchase order should be strictly adhered to. Otherwise the LD clause will be applied / enforced.
- ii) If the supplier fails to supply, and fix the item as per specifications mentioned in the order within the due date, the supplier is liable to pay liquidated damages of 1% of order value for delay of every week or or part thereof subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.
- iii) IIITDM Kurnool reserves the right to cancel the order in case the delay is more than 04 weeks and the contractor is not eligible for any damage from the Institute and contractor will forfeit his claim for EMD.

19. Purchasers right to vary quantities at the time of award

IIITDM Kurnool reserves the right at the time of award of contract to increase or decrease the quantity of items specified in the schedule of requirements without any change in price or other terms and conditions.

20. Jurisdiction

The disputes, legal matters, court matters, if any, shall be subject to Courts in the district of Kurnool Jurisdiction only.

21. Force Majeure

- a) IIITDM Kurnool may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that the delay, in performance or other failure to perform its obligations under the contract, is the result of a force majeure.
- b) If the due date of submission of tender / tender opening is declared a holiday for the Institute, the due date for submission of tender / tender will be extended to same time on next working day.

22. Arbitration

All disputes of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc., shall be referred by either party (IIITDM Kurnool or the bidder) after issuance of 30 days notice in writing to the other party clearly mentioning the nature of dispute and will be referred to the arbitrator to be nominated by The Mentor Director, IIITDM Kurnool. The Venue for arbitration shall be Chennai / Hyderabad, India.

23. Acceptance of the terms and conditions of tender document

The bidders has to accept all the terms and conditions of this tender document and it is made known that the bidders quoting for this tender had impliedly accepted the terms and conditions of this tender.

24. Interpretation of the clauses in the Tender Document

In case of any ambiguity / dispute in the interpretation of any of the clause in this tender document, interpretation of The Mentor Director, IIITDM Kurnool shall be final and binding on all parties. The IIITDM Kurnool reserves the right to accept the offer in full or in parts or reject the offer summarily or partly without assigning any reasons.

Mentor Director

Sd/-

Sl.NO	Item Name & Specification	Quantity
1.	<p><u>Equipment :</u></p> <p><u>2 CHANNELDIGITAL STORAGE OSCILLOSCOPES</u></p> <ul style="list-style-type: none"> • a. Frequency bandwidth – 100 MHz and above • Sample rate – 2GSa/s and above • More than 20 digital automatic measurement • Record Length – 2.5k • Math functions for quick display like +, -, x, FFT • Measurement cursors can be placed manually or Automatically • Auto scale function for both channel • Save more than 10 setups and waveform memories Internally & Externally(using USB) • Adjustable attenuation factor • Connector – standard BNC connector for input and output channels • Accessories – signal probes and other necessary Accessories • Warranty – 5 years <p><u>2 Channels Arbitrary Function Generator</u></p> <ul style="list-style-type: none"> • Built-in waveforms-Sine, Square, Pulse, Ramp, Noise, and frequently used arbitrary waveforms • Frequency Range – approximately 1 μHz or less to 60 MHz and above • Arbitrary waveform memory – 1 M and above • Sampling rate: 300MSa/S and above • Vertical Resolution:14 bits and above • Amplitude Range – approximately 	6NO
2		6NO

3.

1 mVp-p or below to 10 Vp-p and above

- Modulation – AM , FM, PM, FSK
- Connector – standard BNC connector for input and output channels
- Accessories – signal probes (cable with crocodile clip) and other necessary
 - Accessories
- Warranty – 5 years

1NO

Multiple Output DC Programmable Power Supply

4.

- No. of Channels : 3
- Voltage Range: 0 V to 60V (on 2 channels), 0V to 5V (1 Channel)
- Current Range: 0V to 3A (on all Channels)
- Load Regulation:
 - Voltage: +0.01%+3 mV or less
 - Current: +0.01%+3 mA or less
- Line regulation:
 - Voltage: +0.01%+3 mV or less
 - Current: +0.01%+3 mA or less
- Ripple Resolution:
 - Voltage: 4 mV peak-peak, 1mV_{RMS}
 - Current: +0.01%+3 mA or less
- Setting Resolution:
 - Voltage: 1 mV
 - Current: 1 mA or less
- Temperature Resolution:
 - Voltage: ≤0.01%+1 mV
 - Current: ≤0.02%+1 mA
- Load Transient Recovery Time
 - Voltage setting band 50 mV or less, 50% to 100%, 1 kHz, rise and fall rate 5 A per μs: ≤50 μs

1NO

- Transition Time:
 CC mode to CV mode, V-set = 5 V, I-limit = 0.5 A, resistive load change from 2.5 Ω to 25 Ω : ≤ 10 ms
 CV mode to CC mode, V-set = 5 V, I-limit = 0.5 A, resistive load change from 25 Ω to 2.5 Ω : ≤ 5 ms
- Output Timer:
- Settling Range: 0.1s or less to 99999.9s or more
- Resolution: 0.1s or less
- Warranty – 3 years

LCR Meter

- Frequency 20 Hz to 2 MHz
- Accuracy: 0.05% basic accuracy with superior measurement repeatability at low and high impedance (medium/long).
- Measurement Parameters Cp-D/Q/G/Rp, Cs-D/Q/Rs, Lp-D/Q/G/Rp, Ls-D/Q/Rs, R-X, Z- ϕ d/ ϕ r, G-B, Y- ϕ d/ ϕ rLp-Rdc, Ls-Rdc
- Manufacturer should have NABL Accredited Lab and Service/Calibration facility in India.
- Display Ranges: Cs, Cp ± 1.000000 aF to 999.9999 EF
 - Ls, Lp ± 1.000000 aH to 999.9999 EH
 - R&Z ± 1.000000 a Ω to 999.9999 E Ω
- Circuit Mode Series & Parallel with Auto & Manual
- Trigger Mode Internal, Manual, External, GPIB
- 100 μ V to 2Vrms, 1 μ A to 20 mA variable test signal.
- Trigger Delay 0-999 Second with resolution of 100 μ sec. In range of 0

5.

-100 sec. & 1 milli sec. in range of 100- 999 sec.

- Auto level control (ALC) Should be Available
- Internal DC bias 2 V
- Built-in 40V DC Bias test signal (option)
- 201 points list sweep, DCR measurement function.
- Remote control/Interface GPIB, LAN, USB, LXI C
- Web browser control Should be Available
- External DC Bias Feature DC Bias: -40V to + 40V with 4 terminal-pair
- Measurement time 220 milli second LONG measurement mode, 88 milli second in MEDIUM measurement mode & 5.6 milli second in SHORT measurement mode
- Open/short/load compensation & cable length correction (1/2/4 m).
- Test Fixture Suitable test fixture for axial & radial leaded components.
- Display Color LCD Display with 320x240 Pixels resolution
- Accessories Fixtures for Axial & Radial Components & Alligator Clip Fixture
- Warranty – 3 years

1NO

Note:All the Accessories must be fully compatible with each other in their range of operation and there should not be any loss of accuracy due to the devices which are making them compatible.

Precision Measurement, Low Noise,

Programmable DC Power Supplies

Voltage: 0 to 60 V

Current: 0 to 3 A

Max. Power Output: 180 W

Voltage setting:

$\pm (0.02\% + 6 \text{ mV})$,

Resolution: 1 mV

Measurement:

$\pm (0.02\% + 5 \text{ mV})$,

Resolution: 0.1 mV

Regulation:

Load: $\pm(0.01\% + 2 \text{ mV})$

Line: $\pm(0.01\% + 1 \text{ mV})$

Output Ripple and Noise:

Accuracy: $<2 \text{ mV}_{\text{rms}}, <7$

$\text{mV}_{\text{p-p}}$

Current limiting:

$\pm(0.05\% + 5 \text{ mA})$,

Resolution: 0.1 mA

Current Measurement (range-
resolution)

10 mA- 10 nA

100 mA- 100 nA

1 A- 1 μA

10 A- 10 μA

Communication: USB, GPIB, LAN

Warranty: 3 years

Annexure-2**Quantity: 1NO****Name of Equipment: 6.5 Digit Precision Digital Sampling Multimeter**

Parameter	Range
Measurement functions	Voltage (AC and DC), Current (Ac, DC), Resistance, Frequency, Temperature and Capacitance
Digitizer	1 Msa/s sampling rate
Resolution	16 bits
Voltage ranges	100 mV to 1000V
Voltage resolution	100 nV
Voltage accuracy for 1V @ 90 days	+/-0.0030 (% of reading) + 0.0035 (% of range)
Resistance	1 ohm to 100 M ohms
Resistance resolution	1 microOhm
Current ranges DC	10 microA to 10 A; 10pA resolution
Current ranges AC	100 microA to 10 A; 100 pA resolution.
Capacitance ranges	1 nF- 100 µF
Frequency /period	3Hz to 300KHz (Reciprocal counting technique)
Capacitance accuracy at 1 nF range	1%
Temperature measurement	Direct Thermocouple, RTD, and NTC thermistor temperature measurements
communication interface	Standard - LAN/LXI.
Memory	>6 million readings
Display	5" Touch Screen LED Display. Resolution 800x480
System should have triggering option	Level, edge and window triggering
Extra feature	Direct Display of data in tabular format and graph.
Probes	1. 4 Terminal Test Lead Set – 1 no 2. Low Cost Single Pin Kelvin Probe Set – 1no
Software should be able to capture the data and in table format for post analysis	
System should be have expansion interface to increase number of channels	
Warranty	3 years

MentorDirector**SD/-**