

**Indian Institute of Information Technology,
Design and Manufacturing, Kurnool
(IIITDM Kancheepuram Campus)
Chennai – 600 127**

Tender Document

For

**Supply and Installation of
4 Channel Digital Storage Oscilloscope and Mixed Signal
Oscilloscope**

Date: 09.04.2018

Item	:	Supply and Installation of 4 Channel Digital Storage Oscilloscope and Mixed Signal Oscilloscope (Specification and Quantity enclosed as Annexure)
Tender Enquiry No	:	IIITKL/18-19/S&P/Oscilloscope/005 Dt.09.04.2018
EMD	:	Earnest Money Deposit (EMD) for Rs.14,000/- (Rupees Fourteen Thousand Only) in the form of Demand Draft drawn in favour of “IIIT Kurnool” payable at Chennai.
Submission of Offer	:	<u>Two Bid System:</u> 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 superscribing the tender No and description of the item.
Place of Submission Bid	:	The Mentor Director Indian Institute of Information Technology, Design and Manufacturing Kurnool IIITDM Kancheepuram campus Off Vandalur – Kelambakkam Road, Melakkottaiyur, Chennai – 600 127.
Due Date (For submission of bids)	:	02.00 PM 07.05.2018 (any bid received after the due date and time by any means will be summarily rejected)
Opening of Technical Bid	:	03:30 PM, 07.05.2018
Delivery Period	:	06 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, IIITDM Kancheepuram Campus, Off Vandalur – Kelambakkam Road, Melakkottaiyur, Chennai – 600 127 **on or before due date 02.00 PM, 07.05.2018.** 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.14,000/- (Rupees Fourteen Thousand only) in the form of Demand Draft drawn in favour of **“IIIT Kurnool” payable at Chennai.** (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. It is mandatory for the bidders who respond to this bid to meet this expectation, as this is linked to student's admission.

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.**

The Institute will not provide any accommodation / transportation for the engineers / representatives for attending installation, commissioning and demonstration work. It is the absolute responsibility of the principal supplier / agent to make their own arrangements.

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, installation 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.

Sd/-
Mentor Director

Sl. No.	Description	Quantity
1.	<p>4 CHANNELS DIGITAL STORAGE OSCILLOSCOPE: (MAKE: KEYSIGHT, TEKTRONIX, LECROY, YOKOGAWA, Rohde-Schwarz)</p> <ul style="list-style-type: none"> • Frequency Bandwidth : 200MHZ & Above • Channel output : 4 (Analog) • Sample Rate : Normal mode 1.25Gsample/s or above Interleave mode 2.5Gsample/s or above • Max Memory Depth: 20M Sample • ADC Resolution - 10-bits and above • Sensitivity – 1 mV/div to 5 V/div • Timebase range – Between 1 ns/div and 500 s/div • Waveform Update Rate – upto 50,000 waveforms • Built in Function Generator : sine, square, ramp, pulse, DC, noise • Connectivity : USB,LAN • Capture more data with up to 4 Mpts memory • High voltage probe,floatable to 600 Vrms • Math functions : +, --, & × operations • Display Size - 10.1" Capacitive Touchscreen • Math Fast Fourier Transform (FFT) • 30 plus Automatic measurements • 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 • Future Upgradability Bandwidth upgrade(300MHz), MSO, Arbitrary Waveform, Generator, Protocol analysis(I2C/SPI,UART/RS-232/RS-422/RS-485,CAN/LIN) • Warranty –3 years or more 	1 No.
2.	<p>4 CHANNELS DIGITAL STORAGE OSCILLOSCOPE: (MAKE: KEYSIGHT, TEKTRONIX, LECROY, YOKOGAWA, Rohde-Schwarz)</p> <ul style="list-style-type: none"> • Frequency Bandwidth : 350 MHZ & Above • Channel output : 4 (Analog) • Sample Rate : 2.25 GSa/S or above on all 4 channels, 5 GSa/S on 2 Channels Max Memory Depth: 40 Mpts or above on all 4 channels, 80 Mpts or above on 2 channels • Waveform Update rate 64000 waveforms • ADC Resolution - 10-bits and above • Sensitivity – 0.5 mV/div to 10 V/div • Timebase range – Between 1 ns/div and 500 s/div • Built in Function Generator : sine, square, ramp, pulse, DC, noise • Connectivity : USB,LAN 	1 No.

	<ul style="list-style-type: none"> • Capture more data with up to 4 Mpts memory • High voltage probe, floatable to 600 Vrms • Math functions : +, --, & × operations • Math Fast Fourier Transform (FFT) • 30 plus Automatic measurements • 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 – 3 years or more 	
3.	<p><u>MIXED SIGNAL OSCILLOSCOPE:</u> (MAKE: KEYSIGHT, TEKTRONIX, LECROY, YOKOGAWA, Rohde-Schwarz)</p> <p>Bandwidth – 200MHz and above Input Channels – Analog (4 channel), Digital (16 channel) Sample Rate - 4 GS/s and above ADC Resolution - 10-bits and above Sensitivity – 1 mV/div to 5 V/div Timebase range – Between 1 ns/div and 500 s/div Record Length - 10 Mpts/ch (all channels) Input Impedance - 50 Ω ±2.0%, 1 MΩ ±2.0% 16 pF Maximum Input Voltage analog - Vrms, ±10 V Peak; 1 MΩ: 400 V max Maximum Input Voltage digital - ±30V Peak Measurement Parameters - waveform: Amplitude, Area, Base, Delay, Duty Cycle, Fall Time (90%–10%), Fall Time (80%–20%), Frequency, Maximum, Mean, Minimum, Overshoot+, Overshoot-, Peak-Peak, Period, Phase, Rise Time (10%–90%), Rise Time (20%–80%), RMS, Skew, Standard Deviation, Top, Width+, Width. Display Size - 10.1” Capacitive Touchscreen Display Resolution - 1024 x 600 and above Ethernet Port 10/100Base-T Ethernet interface (RJ-45 connector) Waveform Update Rate – upto 50,000 waveforms External Monitor Port - Standard DB-15 connector (support resolution of 1024x600) Remote Control - Via Windows Automation Interfaces – USB/LAN Software – suitable software platform for the MSO Accessories – Standard input and output probes, interfaces, connectors and etc. Warranty – 3 years or more</p>	1 No.