Indian Institute of Science Bangalore

Prof. Mayank Shrivastava
Associate Professor
Department of Electronic Systems Engineering
Indian Institute of Science Bangalore
560012, Bangalore, Karnataka, India

Inquiry Number: DESE/LU/MSA/16/2022-23
Dated: 04/07/2022

Request for Quote for Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor for items to build <u>Transient Reliability Characterization Setup</u>

Indian Institute of Science, Bangalore
(Last Date: 25th July 2022)

Dear Sir/Madam,

Kindly send your best price quotation (in INR only) for the following item with various accessories on FOR-IISc Bangalore basis to the undersigned. Your quotation should clearly indicate the terms of delivery, delivery schedule, entry tax, payment terms, etc.

Your quote should also include mode of payment and **should reach the undersigned, duly signed on or before 1000 hours (IST) on 25th July 2022.**

The quote must include all details of technical specifications of the equipment along with the commercial terms and conditions, the bill of materials, printed technical brochure and any other supporting document. Vendors will be required to submit a technical proposal and a commercial proposal in **two separate sealed envelopes**. **Please enclose a compliance certificate, printed on your letter head, along with the quote.**

The commercial bid must include the price of the item in Indian currency, indicating the following separately:
   a. FOR price
   b. Freight and Insurance
   c. Tax
   d. Total

The quotation should address to:

The Chairman,
Department of Electronic Systems Engineering
Indian Institute of Science, Bangalore – 560012

I. Technical Specifications of Transient Reliability Characterization Setup for Semiconductor Wafer Testing

The following items are required to build Transient Reliability Characterization Setup.

Specific Description:

Sr. No.	Parameter	Specifications
Hardware Description of the System Components		
(1) 1 GHz 4 Channel Oscilloscope – Quantity 1 No.		
1	Number of Channels	4 Analog Channels Upgradable up to 32 digital channels
2	Bandwidth	1 GHz on all Channels or better (upgradable to 2 GHz)
3	Sample Rate	6.25 GSa/s on all Channels simultaneously
4	Rise time	≤ 400 ps
5	Record Length	≥ 60M Points per channels

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6	ADC Resolution	12 Bits @ 3GSa/s sample rate
7	Input Coupling & Impedance	DC, AC 50Ω, 1 MΩ
8	DC Gain Accuracy	≤ ± 0.5 % of full scale for scale > 2mV/div
9	Time base range	200 ps/div to 1000 s/div
10	Waveform Capture Rate	≥ 500,000 wfm/sec in Real Time capture mode
11	Trigger types	Auto, Normal, Single, Edge, Width, Runt, Window, visual and sequence trigger
12	Trigger Rate in Segmented Mode	200 ns or better
13	Vertical sensitivity	1 MΩ: 500 μV/div to 10 V/div 50 Ω: 500 μV /div to 1 V/div
14	Acquisition mode	Sample, Peak Detect, High Resolution, FastAcq, Envelope, Hardware Averaging, segmented mode, and History
15	Spectrum Analysis	Hardware DDC based spectrum analysis simultaneously with Time Domain Analysis on all channels Each Channels can be individually configured to turn ON & turn OFF.
16	DDC Span	100 Hz to 300 MHz
17	RBW Setting	1mHz to 60MHz
18	Spectrum Time Setting	It should be available for DDC Spectrum & Time Domain.
19	Measurements	Amplitude, maximum, RMS, Rise/Fall Time, Skew, Frequency, Data Rate, Positive Width, Positive/Negative Overshoot etc. Phase Noise and Time Interval Error At least 32 simultaneous measurements
20	Measurement Analysis	Histogram, Time trend, Spectrum Plots, phase noise and Eye diagram
21	Number of Math channels	>20 channels simultaneously
22	Search & Mark	It should be available and should be to find min & max for debug.
23	Result Table	Search Result table & Measurement Result Table
24	Report Generation	Should be available with PDF format
25	Trigger Frequency Counter	With 8 Digit resolution or better
26	Digital Voltmeter	4 Digit Resolution or better
27	Display	HD 1920 x 1080, minimum 15.6 inch with multi-touch capacitive display
28	Operating System	Embedded with 250GB removable SSD
29	Temperature Range	Operating: 0°C to 50°C
30	Standard Probes	1 GHz active/passive probes, one probe per Channel (total 4) with better than 4pF loading factor
31	Accessories	Front cover, Accessories Pouch etc.
32	AC Input	230 V, 50 Hz
33	Warranty	1 Year Warranty
(2) In built Power analysis application:		
1	Automated Advanced power analysis application	Should be available with the oscilloscope

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2	Input analysis measurements	Input capacitance, inrush current, RMS voltage and current, Frequency, True, apparent, and reactive power, Power factor, THD and crest factor
3	Harmonics analysis	up to 100th harmonic order with source as either voltage or current Harmonic limit testing as per standards: IEC61000-3-2, AM 14, MIL- STD-1399, DO-160G
4	Switching loss measurement	Turn on loss, Turn off loss, conduction loss, RDS(on), Safe Operating Area (SOA)
5	Magnetic analysis measurements	Inductance, Magnetic property including BH curve, Magnetic loss, I vs. ∫V
6	Output analysis	Line and switching ripple, Efficiency, turn on time and turn off time,
(3) 8 GHz 4 Channel Oscilloscope – Quantity 1 No.		
1	Input Channels	4 Analog channels upgradable up to 32 Digital channels
2	Bandwidth	8 GHz and upgradable up to 10GHz
3	ADC Resolution	12 Bits @ 12.5 GSa/s Sample Rate
4	Sample Rate	25GSa/s on 4 Chanels simultaneously 50G Sa/s on 2 channels simultaneously
5	Record Length	62.5M points per Channel
6	Waveform capture rate	>500,000 Waveforms/Sec
7	Maximum trigger rate	>5,000,000 waveforms per second
8	Input Coupling	DC, AC
9	Input Impedance	1Mohm and 50 ohm
10	DC Gain Accuracy	1% of Full scale
11	Random Noise, RMS 1mv/div at 8GHz	153 μV
12	Time base range	40ps/div to 1000s/div
13	Time base accuracy	±1.0 x10-7
14	Acquisition Modes	Sample, Peak detect, Segmented Mode, High resolution mode, Fast Hardware Avg mode, Envelope, History, FastAcq mode
15	Spectrum analysis	Time correlated DDC based spectrum analysis simultaneously with Time Domain Analysis on all channels
16	DANL	-160 dBm/Hz
17	Noise Figure	17dB
18	Phase Noise @ 1GHz, 10kHz offset	-118dBc/Hz
19	Span	100Hz to 1.25 GHz
20	Vertical units	dBm, dBμW, dBmV, dBμV, dBmA, dBμA
21	Resolution Bandwidth	100 mHz to 60 MHz
22	Measurements	36 simultaneous measurements Automated Amplitude, timing measurements Phase noise and TIE with statistics and pass/fail testing
23	Measurement plots	Histogram, Spectrum, Time trend plots, Eye diagram, phase noise
24	Math	It should have advanced Math analysis of 24 channels

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		simultaneously.
		Support standard and custom filters
25	Trigger Frequency Counter	8 digits
26	DVM	4 digits
27	Trigger Types	Edge, Pulse Width, Timeout, Runt, Window, Logic, Setup & Hold, Rise/Fall Time, Video, Sequence, Visual trigger, parallel Bus
28	Standard Passive probes	4 numbers of 1GHz probes with < 4pF probe loading factor
29	Operating System	Embedded OS; 250GB removable SSD
30	Display	15.6-inch capacitive touch, Full HD 1920 X 1080
31	Power source	240V 50Hz
32	Operating Temperature	+0 °C to +50 °C
33	Ethernet interface	10/100/1000Mb/s
34	USB Ports	3 USB 3.0 ports & 4 USB 2.0 Ports
35	Warranty	1 Year
(4) Isolated Differential voltage probe - Quantity 3 nos.		
1	Bandwidth	1GHz
2	Differential voltage range	±2.5 kV
3	Common mode voltage range	60 kV peak
4	Input capacitance	<2pF
5	CMRR at 1GHz	Up to 90 dB
6	Connectors	MMCX and square pin tips with following attenuation settings for voltage ranges 1X - ±5 V 10X - ±50 V 50X - ±250 V 100X - ±500 V 500X - ±2.5 kV Probe tip adapter: MMCX tip to standard 0.100" spaced, 0.025" square pins
7	Accessories	Probe bipod, SMA wrench, carrying case
(5) AC/DC Current Probes- Quantity 2 nos.		
1	Current probe	2 numbers with AC &DC measurement capability
2	Maximum DC/RMS current	30A
3	Maximum peak pulse current	50A
4	Sensitivity	1 mA
5	DC Accuracy, typical	±1%
6	Bandwidth	DC to ≥120 MHz
7	Power requirements	Should be powered directly by oscilloscopes
8	Operating temperature	0 °C to 50 °C
(6) Differential Voltage Probes- Quantity 2 Nos.		
1	Bandwidth	200MHz
2	Attenuation	50X / 500X
3	Differential voltage range	±1500 V
4	Common mode voltage range	±1500 V
5	Power source	Probe should be powered by oscilloscope
(7) 200 MHz 4 Channel Oscilloscope- Quantity 2 Nos.		

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1	Analog Bandwidth	200 MHz
2	Number of analog Channels	4
3	Maximum Sampling Rate	2 GS/s
4	Record Length	5 M points per channel
5	Input sensitivity range	1mV/div to 10 V/div
6	Input impedance and coupling	1MΩ, DC or AC
7	Vertical resolution	8 bits
8	Acquisition Modes	Peak Detect, Sample, Average, High Resolution
9	Trigger Modes	Auto, Normal & Single Sequence
10	Horizontal Time base	1 ns/div to 100 sec/div
11	Measurements	32 automated amplitude and timing measurements Gating should be available
12	Display	9-inch Colour Display should be available
13	Remote connectivity	Built-in web page enables remote control of horizontal and vertical scale, trigger settings, and measurements.
14	I/O ports	Wi-Fi Dongle Support, USB, LAN
14	Operating temperature	0 °C to +50 °C
16	Probes	200MHz probes one per channel (4 probes) Capability to connect active current and voltage probes
17	Warranty	5 years
(8) Source Measure Unit – Quantity 2 Nos.		
1	Voltage Source and measure ranges	20mV to 200V
2	Voltage resolution	Measure: 10 nV Source: 500nV
3	Current Source and measure range	10nA to 1A
4	Current resolution	Measure: 10 fA Source: 500 fA.
5	Voltage Accuracy	0.100% + 150 μV @ 20 mV 0.015% + 10 mV @200V
6	Current accuracy	0.10% + 50 pA @ 10 nA 0.030% + 500 μA @ 1 A
7	Sweep types	Linear, log, Dual Linear, Dual Log, Custom, Source Memory mode. Time based measurement mode.
8	Internal buffer	250000-point reading buffer
9	Programming interfaces supported	USB, GPIB, Ethernet (LXI), TSP
10	Signal supported connectors	Front Panel Banana Jacks/ rear panel 3 lug Triax
11	Measurement speed	3000 readings / sec
12	Source and measure resolution	At least 6 ½ digit or more.
13	Measurement mode	Voltage, current, Resistance, power
14	Display and control	5-inch Built-in capacitive Touch screen display. Icon based control to setup measurement, source and graph display
15	Cables	Required cables must be provided for the desired measurements
(9) Power Supply – Quantity 2 Nos.		
1	Maximum voltage per channel	±30V
2	Maximum current channel	5 A

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3	Ripple	<1 mv rms
4	Readback voltage accuracy	0.02% +2.5 mV
5	Readback current accuracy	0.05%_2.5 mA
6	Meter Voltage resolution	1 mV
7	Meter current resolution	0.1 mA
8	Maximum power	150W
9	Power supply should have internal memory to set up to 30 configurations	
10	Both channels voltage and current output should be displayed simultaneously	
11	Power supply should have remote sensing feature for accurate sourcing	
(10) 18GHz Real Time Spectrum Analyzer – Quantity 1 No.		
1	Frequency Range	9KHz to 18 GHz
2	Real Time Capture Bandwidth	40 MHz or better
3	Frequency reference accuracy	1 x 10 -6 ppm GPS Locked: ±0.025 ppm
4	Resolution Bandwidth Settings	2 Hz to 8 MHz
5	Max RF Input without Damage	+33 dBm
6	DANL (With PreAmp ON)	1 MHz to 18 GHz: - 148 dBm/Hz or better
7	Trace Points	upto 64001 points
8	SFDR	-75 dBc or better
9	Phase Noise at 10 kHz offset (typical), 1 GHz	-97 dBc/Hz or better
10	Built in Attenuator	Yes, 0 to 50dB in 1dB steps
11	Preamp Gain	25dB at 15GHz
12	Max Spectrum Processing Rate	10,000 spectrum/sec
13	Interface	USB 3.0 device side
14	Connector & Input Impedance	Type – N, female – 50 Ω
15	Spectrum Analysis	It should have spectrum analyzer window.
16	Analysis Windows/Traces	Time Window, Spectrum Window, Amplitude Vs. Time, Frequency Vs. Time, Phase Vs. Time
17	Spectrum related Measurements	Channel Power, Adjacent Channel Power, Multicarrier Adjacent Channel Power/Leakage Ratio, Occupied Bandwidth, xdB Down, CCDF. Spurious and spectrum emission mask with user defined limits
18	Multi Domain Analysis	Cross Domain Analysis is possible. Co-related markers with Demodulation, Real Time Analysis & Spectrum Analysis.
19	Spectrogram with Time Markers	Should be available. It should have time markers to see the history from the spectrogram. Markers should also inter–trace correlated.
20	Sweep Real-Time	Required
21	Real-Time Spectrogram	Required
22	PC Software for analysis	To be provided
23	Windows API	Required
24	Linux API	Required
25	Operation	Battery operation of 4 hours
26	Warranty	3 Years

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27	Cables	Required cables must be provided for the desired measurements
Software		
1. Any relevant software licenses for communication and control of these hardware components must be provided.		

II. Mandatory Requirement: The vendor must have more than 5 years of history of manufacturing above stated equipment and selling it to industries and universities all around the world. The vendor must provide detailed evidence of this (example: list of groups using this equipment, equipment picture, company history, etc.). The vendor must also have a distributor in India who should be well trained to operate and maintain this equipment.

III. Additional Items (Must be added to compliance certificate as well):
1. Support: Please provide details of support provided within the warranty period
2. Shipping: The quote must be in FOR – IISc Bangalore.
3. Installation: Please list a set of acceptance tests for on-site (vendor) inspection and after installation at IISc Bangalore.
4. Other Options: Necessary spare parts should be quoted as an option.
5. Please include any other options currently available that can be added on in the future.
6. Training: Please highlight the extent of training provided as part of this purchase and for how many days.

IV. Optional Items:

1. Please provide separate letter indicating annual maintenance charges (AMC) post warrantee / guarantee period.

All the above-mentioned technical specifications are highly desired. However, lower technical specifications may be considered if the above-mentioned specifications are found to be unsuitable in financial terms. The Institute reserves the right to go for lower specifications taking into consideration its technical preferences and financial constraints. Vendor is encouraged to highlight the advantages of their tools over comparable tools from the competitors.

PI Terms and conditions specific to this purchase (should be included in compliance certificate):

1. In principle onsite installation should be free of cost.
2. Software upgrade, if any, must be free of cost for next 5 years.
3. The vendor must assure that there are no bugs and glitches with the integration and characterization software. In case of glitches or bugs, vendor must fix the issues in less than 7 days.
4. In case of software issues or support, vendor should be able to provide required solution within two days.
5. All equipment must be well calibrated. Calibration capability must be available in India.
6. Additional quote for an annual maintenance contract should be included for the next 5 years.
7. The vendor should have a good track record of delivering such equipment at universities/research institutions (please furnish the details).
8. Please provide list of customers who have procured your equipment in last 5 years.
9. The vendor should be able to repair, maintain and upgrade the equipment, once it is installed in India. No travel claims must be made by vendor for servicing during the warrantee/guarantee time.
10. The lead time for the delivery of the equipment should not be more than 8 week from the date of receipt of our purchase order. The smallest lead time will be appreciated. Our expectation is shipment immediately after PO and payment post installation.
11. On all systems the payment terms will be specified in the commercial proposal and is subject to negotiation.
12. The validity period of the quotation should be 90 days atleast.

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13. Please provide details of the number of trained personnel in India, number in the southern region or in Bangalore who can service the machine.
14. In case of proprietary system, please give a certificate.
15. See other Terms & Conditions, guidelines, eligibility criteria etc. in enclosed document in the next pages.

Sincerely,

Prof. Mayank Shrivastava
Associate Professor
Department of Electronic Systems Engineering
Indian Institute of Science
Bangalore, Karnataka 560012, India
Secretary (Ms. Rekha's) Contact: 9972525771
(On Behalf of Purchase Committee)
Email: msdlab.ese@iisc.ac.in (for tender related queries)

E-mail   : mayank@iisc.ac.in (write to msdlab.ese@iisc.ac.in for tender related queries)
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Enclosures / Annexures

Section 1 – Eligibility Criteria for Domestic Tender

Prequalification criteria:

1. The Bidder's firm should have existence for a minimum of 3 years. (Enclose Company Registration Certificate)

2. The Bidder should belong to either class 1 or class 2 supplier distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter.

    a) Class 1 supplier: Goods and services should have local content of equal to or more than 50%.

    b) Class 2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.

3. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase reference") will be given to Class-1 supplier.

4. MSME can seek exemption to some qualification criteria. IISc follows GFR2017 for such details

5. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.

6. The Bidder must not be blacklisted/banned/suspended or have a record of any service related dispute with any organization in India or elsewhere. A declaration to this effect has to be given as per Annexure 3.

Section 2 – Terms and Conditions

A) Submission of Tender:

    1. All documentations in the tender should be in English.

    2. Tender should be submitted in two envelops (two bid system).

        a. Technical Bid (Part-A) – Technical bid consisting of all technical details and check list for conformance to technical specifications.

        The technical proposal should contain a technical compliance table with 5 columns.

            i. The first column must list the technical requirements, in the order that they are given in the technical requirement below.

            ii. The second column should provide specifications of the instrument/product against the requirement. Please provide quantitative responses wherever possible.

            iii. The third column should describe your compliance with a "Yes" or "No" only. Ensure that the entries in column 2 and column 3 are consistent.

            iv. The fourth column should state the reasons/explanations/context for deviations, if any.

            v. The fifth column can contain additional remarks from the OEM. You can use this opportunity to highlight technical features, qualify response of previous columns, or provide additional details, compare your solution with that of your competitors or provide details as requested in the technical requirements table below.

        b. Commercial Bid (Part-B) – Indicating item-wise price for the items mentioned in the technical bid, as per the format of quotation provided in tender, and other commercial terms and conditions.

    3. The technical bid and price bid should each be placed in separate sealed covers, superscripting on both the envelopes the tender no. and the due date. Both these sealed covers are to be placed in a bigger cover which should also be sealed and duly superscripted with the Tender No, Tender Description& Due Date.

    4. The SEALED COVER superscripting tender number / due date & should reach **Chairman Office, Department of Electronic Systems Engineering, Indian Institute of Science, Bangalore – 560012, India** on or before due date mentioned in the tender notice. In case due date happens to be holiday the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.

    5. All queries are to be addressed to the person identified in "Section 1 – Bid Schedule" of the tender notice.

6. The items are required for research purposes, and IISc is a DSIR registered institution, hence eligible for GST exemption (i.e. GST @ 5%). While submitting the price quote, this point must be taken care. For getting GST exemption certificate, successful bidders must submit, a formal request together with Invoice copy and Purchase order copy.

7. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document (Indian Bidders only).

8. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.

9. The Institute reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to the award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.

10. Incomplete bids will be summarily rejected.

B) Cancellation of Tender:

Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

a. To accept OR reject lowest tender or any other tender or all the tenders.

b. To accept any tender in full or in part.

c. To reject the tender, offer not confirming to the tender terms.

C) Validity of the Offer:

The offer shall be valid 90 Days from the date of opening of the commercial bid.

D) Evaluation of Offer:

1. The technical bid (Part A) will be opened first and evaluated.

2. Bidders meeting the required eligibility criteria as stated in Section 2 of this Document shall only be considered for Commercial Bid (Part B) opening. Further, Agencies not furnishing the documentary evidence as required will not be considered.

3. Pre- qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision in regard to acceptance and/or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and the decision in this regard shall be binding on the bidders.

4. The award of contract will be subject to acceptance of the terms and conditions stated in this tender.

5. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:

      a. Non-submission of complete offers.

      b. Receipt of bids after due date and time and or by email / fax (unless specified otherwise).

      c. Receipt of bids in open conditions.

6. In case any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bangalore shall construe that the BIDDER had accepted the clauses as of the tender and no further claim will be entertained.

7. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.

8. Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, pre-processing and post-processing, optional items, recommended spares, warranty, annual maintenance contract.

E) Pre-requisites:

The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.

F) Warranty:

The complete system is to be under warranty period of minimum 1-3 years (year wise breakup value should be shown in the commercial bid) including free supply of consumables, spare parts and data analysis software from the date of functional installation. If the instrument is found to be defective, it has to be replaced or rectified at the cost of the bidder within 30 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

G) Annual Maintenance Contract:

An annual maintenance contract for a period of at least 2 years post-warranty if the warranty is for 1 year, should be provided on completion of warranty period. The AMC costs will not be considered towards classifying the domestic nature (class 1 or class 2)

of the vendor (see eligibility criteria in section 2). AMC for 1 year is sought for warranty of 2 years, and AMC will be optional for 3 year warranty.

H) Purchase Order:

1. The order will be placed on the bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.

2. The quantity of the items in tender is only indicative. IISc, Bangalore reserves the right to increase /decrease the quantity of the items depending on the requirement.

3. If the quality of the product and service provided is not found satisfactory, IISc, Bangalore reserves the right to cancel or amend the contract.

I) Delivery, Installation and Training:

The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore from the date of receipt of purchase order. The system should be delivered, installed and made functional within 90 days from the date of receipt of purchase order. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore. After successful installation and inspection, the date of taking over of entire system by the IISc, Bangalore shall be taken as the start of the warranty period. No partial shipment is allowed. The bidder should also arrange for technical training to the local facility technologists and users.

J) Payment Terms:

100% payments (except AMC) will be released after completion delivery and satisfactory installation subject to TDS as per rules. AMC cost (if ordered), after completion of warranty period) will be released on half-yearly basis at the end of each six months subject to satisfactory services. The AMC will be comprehensive. Price basis must be on FOR-IISc Bangalore basis only. As per GFR no advance payment can be made to domestic vendors, unless an equal amount of bank guarantee is provided.

K) Statutory Variation:

Any statutory increase in the taxes and duties subsequent to bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed onto IISc, Bangalore.

L) Disputes and Jurisdiction:

Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

M) General:

1. All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension in the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.

2. The bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is, however, advised not to furnish superfluous information.

3. The bidder may visit the installation site before submission of tender, with prior intimation.

4. Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.

Section 3 - Technical Bid

The technical bid should furnish all requirements of the tender along with all annexures in this section and submitted to

The Chairman,

Attn: Prof. Mayank Shrivastava

Department of Electronic Systems Engineering,

Indian Institute of Science

Bangalore – 560012, India

Annexure-1:

Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

Sl. No	Items	Details
1	Name of the Bidder	
2	Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)	
3	Registration No/ Trade License, (attach attested copy)	
4	Registered Office Address	
5	Address for communication	
6	Contact person- Name and Designation	
7	Telephone No	
8	Email ID	
9	Website	
10	PAN No. (attach copy)	
11	GST No. (attach copy)	

Signature of the Bidder

Name

Designation, Seal   Date:

Annexure-2:

Declaration regarding experience

To,

The Chairman,

Department of Electronic Systems Engineering,

Indian Institute of Science,

Bangalore – 560012, India

Ref: Tender No: XXXXXXXXX

Dated: XXXXX

Supply and/or installation of <Item Name> at Prof. Mayank Shrivastava's Lab, Department of ESE, IISc Bangalore

Sir,

I've carefully gone through the Terms & Conditions contained in the above-referred tender. I hereby declare that my company/firm has ---- years of experience in supplying and/or installing <Item Name>.

(Signature of the Bidder)

Printed Name

Designation, Seal   Date:

Annexure-3:

Declaration regarding track record

To,

The Chairman,

Department of Electronic Systems Engineering

Indian Institute of Science,

Bangalore – 560012, India

Ref: Tender No: XXXXXXX

Dated: XXXXX

Supply and/or installation of <Item Name> at Prof. Mayank Shrivastava's Lab, Department of ESE, IISc Bangalore

Sir,

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company/ firm is not currently debarred /blacklisted by any Government / Semi Government organizations/institutions in India or abroad. I further certify that I'm competent officer in my company / firm to make this declaration.

Or

I declare the following

Sl.No	Country in which the company is Debarred /blacklisted / case is Pending	Blacklisted / debarred by Government / Semi Government/Organizations /Institutions	Reason	Since when and for how long

(NOTE: In case the company/firm was blacklisted previously, please provide the details regarding period for which the company/firm was blacklisted and the reason/s for the same).

Yours faithfully

(Signature of the Bidder)

Name

Designation, Seal   Date:

Annexure – 4:

Declaration for acceptance of terms and conditions

To,

The Chairman,

Department of Electronic Systems Engineering

Indian Institute of Science,

Bangalore – 560012, India

Ref: Tender No: XXXXXX

Dated: XXXX

Supply and/or installation of <Item Name> at Prof. Mayank Shrivastava's Lab, Department of ESE, IISc Bangalore

Sir,

I've carefully gone through the Terms & Conditions as mentioned in the above referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I'm an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)

Name

Designation, Seal   Date:

Annexure – 5:

Details of items quoted:

 a. Company Name

 b. Product Name

 c. Part / Catalogue number

 d. Product description / main features

 e. Detailed technical specifications

 f. Remarks

Instructions to bidders:

 1. Bidder should provide technical specifications of the quoted product/s in detail.

 2. Bidder should attach product brochures along with the technical bid.

 3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

Section 4 – Commercial Bid

The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned under:

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total
1	Essential items noted in the technical specification				
1.a	…(details of essential items)				
1.b	…				
2	Optional items noted in the technical specification				
2.a	…(details of essential items)				
2.b	…				
3	Accessories for operation and installation				
4	All Consumables, spares and software to be supplied locally				
5	Warranty (3 years)				
6	AMC 2 years beyond warranty				
7	Cost of Insurance and Airfreight				
8	CIP/CIF IISc, Bengaluru				

Any additional items

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total

Addressed to

The Chairperson,

Attn: Prof. Mayank Shrivastava

Department of Electronic Systems Engineering

Indian Institute of Science, Bangalore – 560012, India

Section 5 – Checklist

(This should be enclosed with technical bid- Part A)

The following items must be checked before the Bid is submitted:

1. Sealed Envelope "A": Technical Bid

      1. Section 3- Technical Bid (each page signed by the authorized signatory and sealed) with the below annexures:

            a. Annexure 1: Bidders details

            b. Annexure 2: Declaration regarding experience

            c. Annexure 3: Declaration regarding clean track record

            d. Annexure 4: Declaration for acceptance of terms and conditions

            e. Annexure 5: Details of items quoted

      2. Copy of this tender document duly signed by the authorized signatory on every page and sealed.

2. Sealed Envelope "B": Commercial Bid

Section 4: Commercial Bid

Your quotation must be submitted in two envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) superscribing on both the envelopes with Tender No. and due date and both of these in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No., Tender description & Due Date