

INVITATION FOR QUOTATION

TEQIP-III/2018/iiit/Shopping/57/5182

11-Jan-2019

To,

Sub: Invitation for Quotations for supply of Laboratory Equipment.

Dear Sir,

1. You are invited to submit your most competitive quotation for the following Laboratory Equipment with equipment wise detailed specifications given at Annexure I,

Sr. No	Brief Description	Quantity	Delivery Period	Place of Delivery	Installation Requirement (if any)
1	Digital Storage Oscilloscope	12 Nos	45 Days	IIIT Guwahati	Yes
2	Function Generator	12 Nos	45 Days	Bongora	Yes
3	Triple DC Power Supply	12 Nos	45 Days	Guwahati 781015	Yes
4	True RMS Hand Held Digital Multimeter	12 Nos	45 Days		Yes

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.
3. Quotation,
 - 3.1 The contract shall be for the full quantity as described above.
 - 3.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
 - 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.
 - 3.4 Applicable taxes shall be quoted separately for all equipment.
 - 3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
 - 3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **55** days after the last date of quotation submission.
6. Evaluation of Quotations,

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

 - 6.1 are properly signed ; and
 - 6.2 confirm to the terms and conditions, and specifications.
 - 6.3 You are also requested to submit the following documents:-
 - Proof of Registration under relevant law, such as Companies Act, and / or Shops & Establishment Act or Trade License from appropriate authority etc.
 - **Dealership/authorisation certificate from the OEM (Original Equipment Manufacturer).**

- **Copy of ISO or equivalent certifications of the OEM for the products to be quoted.**
 - Copy of PAN, GSTIN
 - Details of the after sales service facilities available at Guwahati, Assam responsible for maintaining the equipment during the entire period of warranty.
- 6.4 In addition to above, bidders intending to offer bids in response to advertisement published in the official website of the Institute (i.e. www.iitg.ac.in) should submit the following :-
- Details of the similar equipment ordered by Government/ Autonomous Institute(s) during last three years as per **Annexure-II**.
 - Copies of the Purchase order(s) of similar equipment from Government/ Autonomous Institute(s) during last three years.
 - Customer satisfaction certificate from one such organization for similar equipment.
7. The Quotations would be evaluated for all equipment together.
8. Award of contract:
The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
- 8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
9. Payment shall be made in Indian Rupees(₹) as follows:
Delivery and Installation - 90% of total cost
Satisfactory Acceptance - 10% of total cost
10. All supplied equipment are under onsite warranty of **36** months from the date of successful acceptance of equipment with a provision of entering into Comprehensive Maintenance Contract beyond the initial warranty period of 36 months.
11. You are requested to provide your offer latest by **16:00** hours on **25-Jan-2019** .
12. Detailed specifications of the equipment are at **Annexure I**.
13. Training Clause (if any) :**Yes**, Training to be provided after successful delivery & installation of the equipment .
14. Testing/Installation Clause (if any):**Yes**, Testing & Installation to be done by the bidder after delivery of the equipment.
15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
16. Sealed quotation to be submitted/ delivered at the address mentioned below,
The Director
Indian Institute of Information Technology Guwahati
Bongora, Guwahati, Pin-781015
17. We look forward to receiving your quotation and thank you for your interest in this project.

Sd/-
(Authorized Signatory)
Name & Designation
Gautam Barua, Director, IITG

Annexure I

Sr. No	Item Name	Specifications	
1	Digital Storage Oscilloscope	Parameters	Required Specifications
		Bandwidth	100 MHz and Upgradable
		Analog Channels	2
		Sample Rate per Channel	2 GS/s or better
		Rise Time	≤ 4ns
		Modes	Main, Zoom, Roll, XY
		Display	TFT/WVGA or Better
		Vertical Resolution	Minimum 8-bits (Measurement resolution should be 12 bits)
		Vertical Sensitivity	1mV to 5 V/div
		Waveform Update Rate	> 1 million Waveforms/sec
		DC Vertical Accuracy	±2% or better
		Time Base Range	5ns to 50 s/div
		Time Base Accuracy	25 ppm or better
		Zoom	Both vertical & horizontal
		Maximum Input Voltage	Typically 300 Vrms
		Trigger Modes (Source)	Auto, Normal, Single Sequence (CH1, CH2, Ext, AC Line)
		Trigger Type	Edge (Rising/Falling), Video, Pulse Width
		Input Coupling	AC, DC, GND
		Input Impedance	1 MΩ ±1 % (approx. 20pF), 50 Ω ±1.5%
		Storage	2.5K waveform storage without USB Flash Drive, more than 90 reference waveforms per 8 MB with USB Flash Drive
		Automatic Waveform Measurement	Period, Frequency, +Width, -Width, Rise Time, Fall Time, Max, Min, Peak-Peak, Mean, RMS, Cycle RMS, Cursor RMS, Duty Cycle, Phase, Delay.
		Waveform Math	At least Add, Subtract, Multiply, FFT
		Cursor Measurement	ΔT, 1/ΔT, ΔV
		Auto Set	Single-button, automatic setup of all channels for vertical, horizontal, and trigger systems
Interface	USB, LAN (10/100Base-T) Interface		
Line Supply Voltage	220V AC ~ 50Hz (Indian)		
Any other added feature	All additional features to be clearly mentioned.		

Sr. No	Item Name	Specifications																																																										
2	Function Generator	<table border="1"> <thead> <tr> <th data-bbox="446 222 721 264">Parameters</th> <th data-bbox="721 222 1354 264">Required Specifications</th> </tr> </thead> <tbody> <tr> <td data-bbox="446 264 721 306">Bandwidth</td> <td data-bbox="721 264 1354 306">20 MHz (Optional Upgradable)</td> </tr> <tr> <td data-bbox="446 306 721 401">Waveforms</td> <td data-bbox="721 306 1354 401">Sine, Square, Pulse, Ramp, Noise, DC, Sin(x)/x, Gaussian, Lorentz, Exponential Decay, PRBS, and Haversine or more</td> </tr> <tr> <td data-bbox="446 401 721 443">Channel</td> <td data-bbox="721 401 1354 443">2</td> </tr> <tr> <td data-bbox="446 443 721 485">Sine Wave</td> <td data-bbox="721 443 1354 485">1µHz to 20 MHz</td> </tr> <tr> <td data-bbox="446 485 721 527">Square Wave</td> <td data-bbox="721 485 1354 527">1µHz to 10 MHz or better</td> </tr> <tr> <td data-bbox="446 527 721 569">Ramp Wave</td> <td data-bbox="721 527 1354 569">1µHz to 200 kHz or better</td> </tr> <tr> <td data-bbox="446 569 721 611">Pulse Wave</td> <td data-bbox="721 569 1354 611">1mHz to 10 MHz or better</td> </tr> <tr> <td data-bbox="446 611 721 674">Other Waveforms if any</td> <td data-bbox="721 611 1354 674">1µHz to 200 kHz or better</td> </tr> <tr> <td data-bbox="446 674 721 737">Arbitrary Waveforms</td> <td data-bbox="721 674 1354 737">1mHz to 10 MHz or better</td> </tr> <tr> <td data-bbox="446 737 721 779">THD</td> <td data-bbox="721 737 1354 779"><0.2% (20Hz to 20 kHz, 1 Vp-p) or better</td> </tr> <tr> <td data-bbox="446 779 721 842">Amplitude, 50Ω Load</td> <td data-bbox="721 779 1354 842">10mVp-p to 10Vp-p (Minimum)</td> </tr> <tr> <td data-bbox="446 842 721 905">Amplitude, Open Circuit</td> <td data-bbox="721 842 1354 905">20mVp-p to 10Vp-p (Minimum)</td> </tr> <tr> <td data-bbox="446 905 721 947">Output Impedance</td> <td data-bbox="721 905 1354 947">50Ω (Standard)</td> </tr> <tr> <td data-bbox="446 947 721 989">Load Impedance</td> <td data-bbox="721 947 1354 989">May be selectable: 50Ω, High Z</td> </tr> <tr> <td data-bbox="446 989 721 1031">Protection</td> <td data-bbox="721 989 1354 1031">Overload Protection</td> </tr> <tr> <td data-bbox="446 1031 721 1094">Accuracy</td> <td data-bbox="721 1031 1354 1094">± (1% of setting +1 mV), (1 kHz sine waveform, 0 V offset, >10 mVp-p amplitude) or better</td> </tr> <tr> <td data-bbox="446 1094 721 1136">Resolution</td> <td data-bbox="721 1094 1354 1136">0.1 mV (p-p), 0.01 mV (rms), 0.1 dBm, or 4 digits</td> </tr> <tr> <td data-bbox="446 1136 721 1199">DC Offset Range, 50Ω Load</td> <td data-bbox="721 1136 1354 1199">± (5Vpeak - amplitude Vp-p/2) or better</td> </tr> <tr> <td data-bbox="446 1199 721 1262">DC Offset Range, Open Circuit</td> <td data-bbox="721 1199 1354 1262">± (10Vpeak - amplitude Vp-p/2) or better</td> </tr> <tr> <td data-bbox="446 1262 721 1304">Modulation</td> <td data-bbox="721 1262 1354 1304">AM, FM, PM, FSK, BPSK, PWM (Minimum)</td> </tr> <tr> <td data-bbox="446 1304 721 1346">Sweep</td> <td data-bbox="721 1304 1354 1346">Linear, Logarithmic</td> </tr> <tr> <td data-bbox="446 1346 721 1388">Rise/Fall Time</td> <td data-bbox="721 1346 1354 1388">≤ 20ns or better</td> </tr> <tr> <td data-bbox="446 1388 721 1451">Nonvolatile Memory</td> <td data-bbox="721 1388 1354 1451">Min 4 Waveforms</td> </tr> <tr> <td data-bbox="446 1451 721 1545">2 Channel Characteristics</td> <td data-bbox="721 1451 1354 1545">Independent Operation, Combined, Equal or differential; Crosstalk <-90; Relative Phase 0° to 360°</td> </tr> <tr> <td data-bbox="446 1545 721 1587">Line Supply Voltage</td> <td data-bbox="721 1545 1354 1587">220V AC ~ 50Hz (Indian)</td> </tr> <tr> <td data-bbox="446 1587 721 1650">Trigger/Gate/Mod. Input</td> <td data-bbox="721 1587 1354 1650">External</td> </tr> <tr> <td data-bbox="446 1650 721 1692">Interface</td> <td data-bbox="721 1650 1354 1692">USB, LAN (10/100Base-T) Interface</td> </tr> <tr> <td data-bbox="446 1692 721 1755">Any other added feature</td> <td data-bbox="721 1692 1354 1755">All additional features to be clearly mentioned.</td> </tr> </tbody> </table>	Parameters	Required Specifications	Bandwidth	20 MHz (Optional Upgradable)	Waveforms	Sine, Square, Pulse, Ramp, Noise, DC, Sin(x)/x, Gaussian, Lorentz, Exponential Decay, PRBS, and Haversine or more	Channel	2	Sine Wave	1µHz to 20 MHz	Square Wave	1µHz to 10 MHz or better	Ramp Wave	1µHz to 200 kHz or better	Pulse Wave	1mHz to 10 MHz or better	Other Waveforms if any	1µHz to 200 kHz or better	Arbitrary Waveforms	1mHz to 10 MHz or better	THD	<0.2% (20Hz to 20 kHz, 1 Vp-p) or better	Amplitude, 50Ω Load	10mVp-p to 10Vp-p (Minimum)	Amplitude, Open Circuit	20mVp-p to 10Vp-p (Minimum)	Output Impedance	50Ω (Standard)	Load Impedance	May be selectable: 50Ω, High Z	Protection	Overload Protection	Accuracy	± (1% of setting +1 mV), (1 kHz sine waveform, 0 V offset, >10 mVp-p amplitude) or better	Resolution	0.1 mV (p-p), 0.01 mV (rms), 0.1 dBm, or 4 digits	DC Offset Range, 50Ω Load	± (5Vpeak - amplitude Vp-p/2) or better	DC Offset Range, Open Circuit	± (10Vpeak - amplitude Vp-p/2) or better	Modulation	AM, FM, PM, FSK, BPSK, PWM (Minimum)	Sweep	Linear, Logarithmic	Rise/Fall Time	≤ 20ns or better	Nonvolatile Memory	Min 4 Waveforms	2 Channel Characteristics	Independent Operation, Combined, Equal or differential; Crosstalk <-90; Relative Phase 0° to 360°	Line Supply Voltage	220V AC ~ 50Hz (Indian)	Trigger/Gate/Mod. 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- Equipment/Modules to be supplied are to be manufactured by an ISO 9001 or equivalent certified organization.
- Modules/Accessories should have same warranty of three years, as per the main equipment.

Annexure-II

Details of the similar equipment ordered by Government/ Autonomous Institute(s) during last three years

Sl No	Date of Order	Institute's Name	Name of Equipment ordered	Quantity	Order value in ₹	Whether successfully completed the Order (Yes/No)

Signature of Supplier

Name: _____

Address: _____

Contact No: _____

FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To:

Sl. No.	Description of Equipment (with full Specifications)	Qty.	Unit	Quoted Unit rate in ₹ (Including Ex Factory price, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	GST and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): ₹ _____

We agree to supply the above equipment in accordance with the technical specifications for a total contract price of ₹ _____ (Amount in figures) (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of _____ months shall apply to the offered equipment and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No: _____