

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

शिक्षा मंत्रालय, भारत सरकार द्वारा स्थापित

सैक्टर 81,नॉलेज सिटी,प. ओ. मनोली, एस. ए. एस. नगर, मोहाली, पंजाब 140306 INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI

(Established by Ministry of Education, Govt. of India)
Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab
PAN No. - AAAAI1781K GSTIN – 03AAAAI1781K2ZS

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CPPP/Institute Website

IISERM (1482)21/22-Pur

Dated: 13th July 2021

NOTICE INVITING E-TENDER

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for the **Supply and Installation of Sampling Oscilloscope upto 25GHz and accessories** as per technical specification and details given below and BOQ list from the original manufacturer/supplier at CPPP i.e. **https://eprocure.gov.in/eprocure/app**. Tender documents may please be downloaded from the E-procurement portal website **https://eprocure.gov.in/eprocure/app** & Institute website **www.iisermohali.ac.in.**

-Sd-Assistant Registrar (P&S)

NOTE: This is a domestic Tender according to the DPHT Order dated 15/07/2017 and subsequent amendments to the order for Public Procurement Preference & PROVISION FOR LOCAL SUPPLIERS TOWARDS PREFERENCE TO MAKE IN INDIA. The bidder required to declare on the letter head the percentage of Local content for the quoted instrument and submit with the Technical Bid. Bidder should also give details of the location(s) at which the local value addition is made



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E-TENDER NOTICE

Tender Ref.- IISERM(1482)21/22-Pur Dated: 13th July 2021

Critical Date Sections

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	13 th July 2021	6:00pm
2.	Tender Document download start Date & Time	13 th July 2021	6:00pm
3.	Bid Submission start Date &Time	13 th July 2021	6:00pm
4.	Bid Submission End date and Time	3 rd August 2021	Upto 11:00am
5.	Tender opening Date and Time	4 th August 2021	At 11:30am

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for following item(s) from the original manufacturer/supplier at CPPP i.e. https://eprocure.gov.in/eprocure/app. Tender documents may please be downloaded from the E-procurement portal website https://eprocure.gov.in/eprocure/app & Institute website www.iisermohali.ac.in. Tender fee in shape of Demand Draft of Rs 590/- (Non-refundable) should be submitted by bidder in favour of the Registrar, IISER Mohali payable at Mohali or through Online mode in Institute Account (Canara Bank Saving Account Number 4790101001912 and IFSC Code CNRB0004790) However, scanned copy of the Tender fee should be uploaded on website along with technical bid. The hard copy of the same in original to be sent to the address mentioned below duly superscribing the supply/work name and reference/tender ID on the envelope and same must reach before opening of the bid and if not received before due date the bid will be summarily rejected. Micro & MSME/NSIC and Firms registered and the firms registered with concerned Ministries/ Departments, the bidders are exempted from payment of Tender Fee/EMD as per GOI notifications/GFR (2017) and Ministry of Finance OM No. F.9/4/2020-PPD dated 12 November 2020.

Bidders will also be required to execute bond/undertaking Bid Security Declaration Form attached as ANNEXURE-I for availing exemption to submit EMD.

The Original Tender Fee should be sent to:

Assistant Registrar (P&S) Indian Institute of Science Education and Research Mohali Sector-81, Knowledge City, SAS Nagar, Mohali, Punjab, India, Pin: 140306

Non-receipt of original Tender Fee will lead to rejection of tender.

ITEM WISE DETAILS

Sr.	Description	Qty.
No.		(in
		units)
1.	Supply and Installation of Sampling Oscilloscope upto 25GHz and accessories	01
	TECHNICAL SPECIFICATIONS: AS PER ANNEXURE-II	
	*The attached ANNEXURE-II must be filled by the bidder duly stamped and signed.	

A) IMORTANT NOTES:-

- I. This is a domestic Tender according to the DPIIT Order dated 15/07/2017 and subsequent amendements to the order for Public Procurement Preference & PROVISION FOR LOCAL SUPPLIERS TOWARDS PREFERENCE TO MAKE IN INDIA. Bidders should also give details of Localtions(s); at which the local value addition is made. Bidders are requested to furnish the declaration regarding local content/locations in Annexure III.
- II. The online updated Price BOO is in INR format. Bids are invited in INR only against domestic tender.
- III. The Online bids should be submitted directly by the original manufacturer/supplier. If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company.
- IV. All MSME/NSIC/Startup Units shall be considered as per provisions/rules prescribed by Govt of India.
- V. <u>Auto-extension of last date for E-Tenders has been activated by CPP Portal which</u> has participation 2 bids or less.
- VI. Warranty: One year, if not specified above.

B) SUBMISSION OF TENDER

- I. All bid/ tender documents are to be uploaded online at Central Public Procurement portal i.e. https://eprocure.gov.in/eprocure/app only and in the designated cover/ part on the website against tender ID. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained except tender fee and EMD. Late tenders will not be accepted.
- II. The online bids shall be opened at the office of the Assistant Registrar (P&S), IISER Mohali, on above given date and time. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.
- III. The bidder shall upload the tender documents duly filled in and stamped by the authorized signatory on each and every page. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.
- IV. The bidder shall upload scanned copy of the PAN Card, GST number duly signed and stamped. Also bidders applying against 'MSME/NSIC Certificate" issued by appropriate Authority, should ensure that the certificate attached is relevant to the area of service/supply. For example, If the tender is for "supply & installation of Desktop" the certificate should be issued for activity/area of "Computer supply and services activities etc" otherwise bid will be REJECTED without notice.
- V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

C) INSTRUCTIONS

- 1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected.
- 2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID.
- 3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Supplier from outside India should mention the Ex-works/FOB/FCA/CIF/CIP price clearly. Conditional tenders will be summarily rejected.
- 4. In case of Ex-godown terms the amount of packaging forwarding freight etc. should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.
- 5. THE INSTITUTE IS EXEMPTED FROM CUSTOM DUTY under notification no- TU/V/RG/- CDE(1062)/201 CUSTOM DT.30.08.2016.
- 6. Tax: This Institute is not exempted from the payment of GST. The current rate (i.e. percentage of GST should be clearly indicated included or excluded) wherever chargeable. Please also provide/upload the copy of PAN card, GST number duly self-attested.
- 7. Concessional GST is applicable for all the items purchased for Research labs vide Ministry of Finance, notification no. 45/22017 dated 14.11.2017 and 47/2017 dated 14.11.2017.
- 8. Bidder/s quoting in currency other than **Indian Rupee** (**INR**) should explicitly mention the currency in which tender quoted wherever applicable in <u>Technical Bid</u> along the tender documents.
- 9. The delivery period should be specifically stated. Earlier delivery will be preferred.
- 10. The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets and literature of the article quoted. The name of the manufactures and country of manufacture should also invariably be stated. In the absence of these particulars, the quotation is liable for rejection.
- 11. Validity of offer: 90 days.
- 12. The warranty period after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/ Bank Performance Guarantee @ 3% of the value of supply order, in terms of *Ministry of Finance, DoE, GOI, OM. No. F.9/42020-PPD dated 12-11-2020 and* as per norms may be sought from the firms.
- 13. The right to reject all or any of the quotation and to split up the requirements for itemized L-1 or relax any or all the above conditions without assigning any reason is reserved by the IISER Mohali. For any corrigendum and addendum please be checked the website https://eprocure.gov.in/eprocure/app and <a href="https://eprocure.gov.
- 14. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

–Sd-Assistant Registrar (P&S)

ANNEXURE-I

Bid Securing Declaration Form

Date:	E-Tender No	E-Tender ID
*	nplete name and address of the purdersigned, declare that:	chaser)
I/We understande	and that, according to your condit	ions, bids must be supported by a Bid Securing
	n the date of notification if I am /V	bidding for any contract with you for a period of We are in a breach of any obligation under the bid
period of bid b) having bee validity (i) fa Performance Securing Dect of (i) the rece	validity specified in the form of Bio en notified of the acceptance of or ill or reuse to execute the contract Security, in accordance with the I laration shall cease to be valid if I ar	r derogates from the tender, my/our Bid during the l; or ar Bid by the purchaser during the period of bid t, if required, or (ii) fail or refuse to furnish the instructions to Bidders. I/We understand this Bid in/we are not the successful Bidder, upon the earlier the of the successful Bidder; or (ii) thirty days after
_	rt signature of person whose name a y of (insert legal capacity of person	and capacity are shown) signing the Bid Securing Declaration)
	complete name of person signing led to sign the bid for an on behalf	ne Bid Securing Declaration) of (insert complete name of Bidder)
	day of al (where appropriate)	(insert date of signing)
*	e of a Joint Venture, the Bid Securi enture that submits the bid)	ng Declaration must be in the name of all partners
PS: Furnish the	above in original stationary/letter head w	th signed and sealed.

ANNEXURE-II

Sampling Oscilloscope upto 25GHz

The unit must be low cost USB unit capable to measuring upto 25 GHz with following specifications.

	Feature	Specifications	Compliance (Show Dasta sheet and brochures)
	VERTICAL		
V1	Number of channels	2 Channel	
V2	Acquisition timing	Selectable simultaneous or alternate acquisition	
v3	Bandwidth, full	25 GHz	
v4	Bandwidth, narrow	12 GHz	
V5	Pulse response rise time, full bandwidth	14.0 ps (10% to 90%, calculated)	
V6	Pulse response rise time, narrow bandwidth	29.2 ps (10% to 90%, calculated)	
V7	Noise, full bandwidth	< 1.9 mV RMS typical, < 2.5 mV RMS maximum	
V8	Noise, narrow bandwidth	< 1.0 mV RMS typical, < 1.3 mV RMS maximum	
V9	Noise with averaging	100 μV RMS system limit, typical	
V10	Operating input voltage with digital feedback	1 V p-p with ±1 V range (single-valued)	
V11	Operating input voltage without digital feedback	±400 mV relative to channel offset (multi-valued)	
V12	Sensitivity	1 mV/div to 500 mV/div in 1-2-5 sequence with 0.5% fine increments	
V13	Resolution	16 bits, 40 μV/LSB	
V14	Accuracy	±2% of full scale ±2 mV over temperature range for stated accuracy (assuming temperature- related calibrations are performed)	
V15	Nominal input impedance	$(50 \pm 1) \Omega$	
V16	Input connectors	2.92 mm (K) female, compatible with SMA and PC3.5	
	TIMEBASE (SEQUENTIAL TIME SAMPLING MODE)		
T1	Ranges	5 ps/div to 3.2 ms/div (main, intensified, delayed, or dual delayed)	
T2	Delta time interval accuracy	For > 200 ps/div: $\pm 0.2\%$ of delta time interval ± 12 ps	
Т3		For < 200 ps/div: ±5% of delta time interval ± 5 ps	
T4	Time interval resolution	64 fs	
T5	Channel deskew	1 ps resolution, 100 ns max.	
T6	TRIGGERS	•	

T7	Trigger sources	All models: external direct,	
1 '	Trigger sources	external prescaled, internal direct	
		and internal clock triggers.	
T8		PicoScope 9302 and 9321 only:	
10		external clock recovery trigger	
T9	External direct trigger	DC to 100 MHz : 100 mV p-p; to	
	bandwidth and sensitivity	2.5 GHz: 200 mV p-p	
T10	External direct trigger jitter	1.8 ps RMS (typ.) or 2.0 ps RMS	
110	External direct trigger fitter	(max.) + 20 ppm of delay setting	
T11	Internal direct trigger	DC to 10 MHz: 100 mV p-p; to	
111	bandwidth and sensitivity	100 MHz: 400 mV p-p (channels 1	
	Saira Wiairi aira Saisiri Viry	and 2 only)	
T12	Internal direct trigger jitter	25 ps RMS (typ.) or 30 ps RMS	
	and the state of t	(max.) + 20 ppm of delay setting	
		(channels 1 and 2 only)	
T13	External prescaled trigger	1 to 14 GHz, 200 mV p-p to 2 V	
	bandwidth and sensitivity	p-p	
T14		14 to 15 GHz, 500 mV p-p to 2 V	
		p-p	
T15	External prescaled trigger	1.8 ps RMS (typ.) or 2.0 ps RMS	
	jitter	(max.) + 20 ppm of delay setting	
T16	Pattern sync trigger clock	10 MHz to 15 GHz	
	frequency		
T17	Pattern sync trigger pattern	7 to 8 388 607 $(2^{23} - 1)$	
	length	, ,	
T18	CLOCK RECOVERY		
T19	Clock recovery trigger data	6.5 Mb/s to 100 Mb/s: 100 mV p-p	
	rate and sensitivity		
T20		> 100 Mb/s to 11.3 Gb/s: 20 mV	
		р-р	
T21	Recovered clock trigger	1 ps RMS (typ.) or 1.5 ps RMS	
	jitter	(max.) + 1.0% of unit interval	
T22	Maximum safe trigger input	±2 V (DC + peak AC)	
	voltage		
T23	Input characteristics	50 Ω, AC coupled	
T24	Input connector	SMA (f)	
T25	ACQUISITION		
T26	ADC resolution	16 bits	
T27	Digitizing rate with digital	DC to 1 MHz	
	feedback (single-valued)		
T28	Digitizing rate without	DC to 40 kHz	
	digital feedback (multi-		
	valued)		
T29	Acquisition modes	Sample (normal), average,	
		envelope	
T30	Data record length	32 to 32 768 points (single	
		channel) in x2 sequence	
T31	DISPLAY		
T32	Styles	Dots, vectors, persistence, gray-	
TTO C		scaling, color-grading	
T33	Persistence time	Variable or infinite	

T34	Screen formats	Auto, single YT, dual YT, quad	
	MEASUREMENTS AND ANALYSIS	YT, XY, XY + YT, XY + 2 YT	
M1	Markers	Vertical bars, horizontal bars (measure volts) or waveform markers	
M2	Automatic measurements	Up to 10 at once	
M3	Measurements, X parameters	Period, frequency, pos/neg width, rise/fall time, pos/neg duty cycle, pos/neg crossing, burst width, cycles, time at max/min, pos/neg jitter ppm/ RMS	
M4			
M5	Measurements, Y parameters	Max, min, top, base, peak-peak, amplitude, middle, mean, cycle mean, AC/DC RMS, cycle AC/DC RMS, pos/neg overshoot, area, cycle area	
M6	Measurements, trace-to-trace	Delay 1R-1R, delay 1F-1R, delay 1R-nR, delay 1F-nR, delay 1R-1F, delay 1R-nF, delay 1F-nF, phase deg/rad/%, gain, gain dB	
M7	Eye measurements, X NRZ	Area, bit rate, bit time, crossing time, cycle area, duty cycle distortion abs/%, eye width abs/%, rise/fall time, frequency, period, jitter p-p/RMS	
M8	Eye measurements,	Y NRZ AC RMS, average power lin/dB, crossing %/level, extinction ratio dB/%/lin, eye amplitude, eye height lin/dB, max/min, mean, middle, pos/neg overshoot, noise p-p/RMS one/zero level, p-p, RMS, S/N ratio lin/dB	
M9	Eye measurements, X RZ	Area, bit rate/time, cycle area, eye width abs/%, rise/fall time, jitter p-p/RMS fall/rise, neg/pos crossing, pos duty cycle, pulse symmetry, pulse width	
M10	Eye measurements, Y RZ	AC RMS, average power lin/dB, contrast ratio lin/dB/%, extinction ratio lin/dB/%, eye amplitude, eye high lin/dB, eye opening, max, min, mean, middle, noise p-p/RMS one/zero, one/zero level, peak-peak, RMS, S/N	
M11	Histogram	Vertical or horizontal	

M13	Mathematics	Up to four math waveforms can be defined and displayed	
M14	Moth functions withmatic		
W114	Math functions, arithmetic	$+, -, \times, \div$, ceiling, floor, fix,	
		round, absolute, invert, (x+y)/2, ax+b	
M15	Moth functions algebraic		
WITS	Math functions, algebraic	e^{x} , ln, 10^{x} , log10, a^{x} , loga, d/dx, \int , x^{2} , sqrt, x^{3} , x^{a} , x^{-1} , sqrt($x^{2}+y^{2}$)	
M16	Math functions,	$\sin, \sin^{-1}, \cos, \cos^{-1}, \tan, \tan^{-1}, \cot,$	
IVIIO	trigonometric	cot ⁻¹ , sinh, cosh, tanh, coth	
M17	Math functions, FFT	Complex FFT, complex inverse	
14117	Watti functions, 11 1	FFT, magnitude, phase, real,	
		imaginary	
M18	Math functions,	AND, NAND, OR, NOR, XOR,	
14110	combinatorial logic	XNOR, NOT	
M19	Math functions,	Linear, $\sin(x)/x$, trend, smoothing	
1,117	interpolation		
M20	Math functions, other	Custom formula	
M21	FFT	Up to two FFTs simultaneously	
M22	FFT window functions	Rectangular, Hamming, Hann,	
1,122	TTT WINGS W TURNOTIONS	Flat-top, Blackman–Harris,	
		Kaiser–Bessel	
M23	Eye diagram	Automatically characterizes NRZ	
	J • • • • • • • • • • • • • • • • • • •	and RZ eye diagrams based on	
		statistical analysis of waveform	
M24			
M25	MASK TESTS		
M26	Mask geometry	Acquired signals are tested for fit	
		outside areas defined by up to	
		eight polygons. Standard or user-	
		defined masks can be selected.	
M27	Built-in masks,	OC1/STMO (51.84 Mb/s) to FEC	
	SONET/SDH	1071 (10.709 Gb/s)	
M28	Built-in masks, Ethernet	1.25 Gb/s 1000Base-CX Absolute	
		TP2 to 10xGB Ethernet (12.5	
		Gb/s)	
M29	Built-in masks, Fibre	FC133 (132.8 Mb/s) to 10x Fibre	
	Channel	Channel (10.5188 Gb/s)	
M30	Built-in masks, PCI Express	R1.0a 2.5G (2.5 Gb/s) to R2.1	
		5.0G (5 Gb/s)	
M31	Built-in masks, InfiniBand	2.5G (2.5 Gb/s) to 5.0G (5 Gb/s)	
M32	Built-in masks, XAUI	3.125 Gb/s	
M33	Built-in masks, RapidIO	Level 1, 1.25 Gb/s to 3.125 Gb/s	
M34	Built-in masks, SATA	1.5G (1.5 Gb/s) to 3.0G (3 Gb/s)	
M35	Built-in masks, ITU G.703	DS1 (1.544 Mb/s) to 155 Mb (155.520 Mb/s)	
M36	Built-in masks, ANSI	DS1 (1.544 Mb/s) to STS3	
	T1.102	(155.520 Mb/s)	
M37	Built-in masks, G.984.2	XAUI-E Far (3.125 Gb/s)	
M38	Built-in masks, USB USB	2.0, USB 3.0 and USB 3.1	
M39	SIGNAL GENERATOR		
	OUTPUT		

MHz clock, trigger out	M40	Modes	Pulse, PRBS (NRZ and RZ), 500	
M42 Bit time range, NRZ/RZ mode 4 ns to 260 μs M43 NRZ/RZ pattern length 2°-1 to 2¹⁵-1 GENERAL Temperature range, operating +5 °C to +35 °C G2 Temperature range for stated accuracy Within 2 °C of last autocalibration G3 Temperature range, storage -20 °C to +50 °C G4 Calibration validity period 1 year G5 Power supply voltage +12 V DC ± 5% G6 Power supply current 1.7 A max. G7 Mains adaptor Universal adaptor supplied G8 PC connection USB 2.0 (compatible with USB 3.0) G9 LAN connection 10/100 Mbit/s G10 Software and PC requirments Microsoft Windows XP (SP2 or SP3), Vista, 7, 8 or 10. 32-bit or 64-bit versions. G11 Dimensions 170 mm x 285 mm x 40 mm (W x D x H) G12 Weight 1.3 kg max. G13 Compliance FCC (EMC), CE (EMC and LVD) G14 Warranty 5 years G15 Installation Installation and training must be provided (either online or directly) G16 References Must give 3 references from national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q1 Sampling Oscilloscope and accessor			MHz clock, trigger out	
mode M43 NRZ/RZ pattern length GENERAL G1 Temperature range, operating G2 Temperature range for stated accuracy G3 Temperature range, storage G4 Calibration validity period G6 Power supply voltage G7 Mains adaptor G8 PC connection G9 LAN connection G10 Software and PC requirments G11 Dimensions G12 Weight G13 Compliance G14 Weight G15 Installation G16 References G16 Power supply voltage G17 Mains adaptor G18 PC connection G19 LAN connection G10 Software and PC requirments G11 Dimensions G11 Dimensions G12 Weight G13 Compliance G14 Wight G15 Installation G16 References G17 Must give a references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally G16 Very C16 CP G17 Very C17 Very	M41	Period range, pulse mode	8 ns to 524 μs	
GENERAL G1 Temperature range, operating G2 Temperature range for stated accuracy G3 Temperature range, storage G4 Calibration validity period G5 Power supply voltage G6 Power supply current G7 Mains adaptor G8 PC connection G9 LAN connection G10 Software and PC requirments G11 Dimensions G12 Weight G13 Compliance G14 Warranty G15 PSC (EMC), CE (EMC and LVD) G16 References G16 References G17 Musits to Quote Q1 Units to Quote Q2 Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Q2 Power Divider KIT upto 14 GHz or better for clock reference.	M42	<u> </u>	4 ns to 260 μs	
G1 Temperature range, operating G2 Temperature range for stated accuracy G3 Temperature range, storage G4 Calibration validity period G5 Power supply voltage G6 Power supply current G7 Mains adaptor G8 PC connection G9 LAN connection G10 Software and PC requirments G110 Dimensions G110	M43	NRZ/RZ pattern length	$2^{7}-1$ to $2^{15}-1$	
Operating Temperature range for stated accuracy Temperature range, storage -20 °C to +50 °C		GENERAL		
accuracy Temperature range, storage -20 °C to +50 °C	G1	-	+5 °C to +35 °C	
G3 Temperature range, storage G4 Calibration validity period G5 Power supply voltage G6 Power supply current G7 Mains adaptor G8 PC connection G8 PC connection G9 LAN connection G10 Software and PC requirements G11 Dimensions G12 Weight G13 Compliance G14 Warranty G15 Installation G16 References G17 References G18 References G19 LONG Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G2	1	Within 2 °C of last autocalibration	
G5	G3		-20 °C to +50 °C	
G6 Power supply current G7 Mains adaptor G8 PC connection G9 LAN connection G10 Software and PC requirments G4-bit versions. G11 Dimensions G12 Weight G13 Compliance G14 Warranty G15 Installation G16 References G17 Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G4	Calibration validity period	1 year	
G7 Mains adaptor Universal adaptor supplied	G5	Power supply voltage		
G7 Mains adaptor Universal adaptor supplied	G6	Power supply current	1.7 A max.	
G8	G7		Universal adaptor supplied	
G10 Software and PC requirments SP3), Vista, 7, 8 or 10. 32-bit or 64-bit versions. G11 Dimensions 170 mm x 285 mm x 40 mm (W x D x H) G12 Weight 1.3 kg max. G13 Compliance FCC (EMC), CE (EMC and LVD) G14 Warranty 5 years G15 Installation Installation and training must be provided (either online or directly) Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G8	PC connection		
requirments SP3), Vista, 7, 8 or 10. 32-bit or 64-bit versions. G11 Dimensions 170 mm x 285 mm x 40 mm (W x D x H) G12 Weight G13 Compliance FCC (EMC), CE (EMC and LVD) G14 Warranty 5 years G15 Installation Installation and training must be provided (either online or directly) G16 References Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G9	LAN connection	10/100 Mbit/s	
G11 Dimensions 170 mm x 285 mm x 40 mm (W x D x H) G12 Weight 1.3 kg max. G13 Compliance FCC (EMC), CE (EMC and LVD) G14 Warranty 5 years G15 Installation Installation and training must be provided (either online or directly) G16 References Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G10	Software and PC	Microsoft Windows XP (SP2 or	
G12 Weight 1.3 kg max. G13 Compliance FCC (EMC), CE (EMC and LVD) G14 Warranty 5 years G15 Installation Installation and training must be provided (either online or directly) G16 References Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.		requirments		
G13 Compliance FCC (EMC), CE (EMC and LVD) G14 Warranty 5 years G15 Installation Installation and training must be provided (either online or directly) G16 References Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G11	Dimensions	`	
G14 Warranty 5 years G15 Installation Installation and training must be provided (either online or directly) G16 References Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G12	Weight	1.3 kg max.	
G15 Installation Installation and training must be provided (either online or directly) G16 References Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G13	Compliance		
G16 References Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G14	Warranty	5 years	
Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years globally Q Units to Quote Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G15	Installation		
Q1 Sampling Oscilloscope and accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	G16	References	Must give 3 references from national Institutes like IITs, IISERS etc. or national labs for models of BW 10GHz and above. OEM must give confirmation to have sold 10 units in last 3 years	
accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats for torquing on DUT end. Q2 Power Divider KIT upto 14 GHz or better for clock reference.	Q	Units to Quote		
GHz or better for clock reference.	Q1	accessories like protective sleeve connectors, torque wrench 2 sets 6" hand formable 0.085" OD 50 ohms cables with 2.92 Female connector with flats		
	Q2	GHz or better for clock		
	Q3			

	Service life	Spares/service must be made	
		available for 10 years.	
M1	Class I and Class II	Only Class I and Class II	
	suppliers	suppliers with appropriate make in	
		India content can supply, Must	
		also have authorization letter from	
		OEM if OEM is not quoting.	
M2	Repairs	For repairs offsite local agent	
		should give Bank Guarantee or	
		other documents approved by	
		purchase or standby unit.	
M3	Country of Origin	Countries having land border with	
		India should provide appropriate	
		Govt of India approvals to quote.	

ANNEXURE-III

SELF DECLARATION [For Local Content of Products, Services or Works]

To, The Director Indian Institute of Science Education and Research (Established by Ministry of Education, Govt. of India) Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab 1. With reference to Order no P.-45021/2/2017 PP (BE-II) dated 04.06.2020 and No. P-45021/2/2017-PP(BE-II) dated 16-09-2020 of DPIIT, Ministry of Commerce and Industry, Govt. of India, we fall under the following category of supplier (please tick the correct category) for the items for which this tender has been floated and being bided. □ Class I local supplier – has local content equal to more than 50%. Local contents added at _ (name of location). ☐ Class II local supplier – has local content more than 20% but less than 50%. Local contents (name of location). added at □ Non-local supplier – has local content less than or equal to 20%. Local contents added at (name of location). 2. We are solely responsible for the abovementioned declaration in respect of category of supplier. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we may can be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law. Signature & seal of the company Name and address of the organization

Note: In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier' / 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.