

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

GT ROAD, KALYANPUR, KANPUR – 208016

UTTAR PRADESH, INDIA

TENDER REFERENCE NO.: IITK/ME/AM/2022-23/04

Bid Submission End Date: 10.12.2022

Opening Date: 11.12.2022

Tender Document

For

"Purchase of Sound Level Meter"

Tender document

Department of Mechanical Engineering Indian Institute of Technology Kanpur Kanpur (UP) 208016 India

Tender Ref. No.: IITK/ME/AM/2022-23/04

Bid Submission Start Date:1.12.2022

End Date: 10.12.2022 at 17:30 hrs

Opening Date: 11.12.2022

Sealed quotations are invited for **Sound Level Meter.** The detailed specifications and address are given below.

Parameter	Specification	
~ 1 1	Class I sound level meter, IEC61672-1 Ed. 2.0 (2013) Class 1,	
Standards	IEC60651 Ed 1.2 (2001) and IEC60804 (2000-10) Type 1, ANSI S1.4	
	2014 Class 1, ANSI S1.43-1997 Type 1, DIN 45657	
Octave Filter Standards	IEC61260 Ed. 2.0 (2014) Class 1, ANSI S1.11-2014 Class 1	
Sample Rate	51,200 Hz	
Integration Method	Linear or Exponential	
Metrics Measured	Leq, Lmax, Lmin, Lpeak, Ln (6 values), LDN, LDEN, LCeq – LAeq	
Ln Statistics	6 in xx.xx% format	
Number of Markers	10	
Measurement Control Modes	Manual Stop, Timed Stop, Stop when Stable, Continuous, Single Block Timer, Daily Block Timer	
Dynamic Range (A-weighted)	24 dB to 140 dB	
Peak Rise Time	30µs	
Frequency Weighting	A, C, or Z	
Time Weighting	Slow, Fast or Impulse	
Humidity Sensitivity	$<\pm 0.05$ dB from 0 to 90% RH, non-condensing at +50 °C	
Octave Filters	1/1 octave: 8 Hz to 16 kHz	
	1/3 octave: 6.3 Hz to 20 kHz	
Filter Selection	None, 1/1 octave, 1/3 octave, or 1/1 and 1/3 octaves	
Resolution	0.1 dB	
Octave Analysis		
1/1 Octave Filters	8 Hz to 16 kHz	
1/3 Octave Filters	6.3 Hz to 20 kHz	
Frequency Weighting	A, C, or Z (independent of broadband weighting)	
Maximum Spectrum	Maximum in each band or Spectrum at broadband Lmax	
Spectral Statistics	6 percentiles per filter	
Time History Logging		
Record Period	Selections from 2.5 ms to 24 hr	
Logging Parameters	Any combination of available broadband and spectral, Any Data plus	
	non-sound metrics	
Measurement History Logging		
Interval	1 min to 99 hr	

Sound Level Meter:

Logging Parameters	Same as Overall Measurements	
Sound Record Tagging	Ln Statistics + Spectral Ln At start of each interval	
Logging Period	20 ms to 5 s	
Logging Parameters	Leq, Lmax, Lpeak, Date and Time, Duration, Exposure in dB and Pa2s, and available spectral Leq. and maximum. Event Time History is also available with broadband and spectral levels.	
Sound Record Tagging	8 ksps or 16 ksps	
SEL	LAE	
Sound Recording		
Data Format	Mono wave file (.wav) or compressed (.ogg)	
Listening Options	Using USB headset with Utility program, or using standard wave file player	
Sample Rate	8, 16, 24, ,48, or 51.2 ksps	
Storage Requirement	1 MB/min at 8 ksps to 6 MB/min at 48 ksps for wav file	
Sound Recording Modes	Manual, coupled to marker, at measurement interval start, upon event	
Pretrigger	Variable depending upon sample rate; up to 60 s	
Duration	Max 9999 s	
Reverberation Time		
Methods	Impulse Excitation and Interrupted Noise	
Filters	1/1 (63 Hz to 8 kHz) and 1/3 (50 Hz to 10 kHz)	
Sample Time	2.5, 5, 10 or 20 ms	
Measurements	T20, T30 and ISO 3382-2 quality indicators	
FFT Analysis		
FFT Lines	400, 800, 1600, 3200, & 6400	
Bandwidth (Hz)	100, 200, 500, 1k, 2k, 5k, 10k, & 20k	
Window	Hanning, Flat-top, and Rectangular	
Overlap	Fixed 33%	
Units	dB re 20 uPa, m/s2, cm/s2, mm/s2, g, ft/s2, in/s2	
Y-axis	Linear or log	
Cursor	Max tracking with harmonic cursors	
Supported Sensors	Microphone or ICP® accelerometer with adaptor	
Integration	Frequency domain to velocity and displacement	
Data Storage	2GB, expandable with USB storage	
Display	LCD Colour Screen with backlit	
Internal Power	4 AA cells, 1.5 volts each; Alkaline, NiMH, or Lithium	
External Power	I/O connector: 10 to 25 VDC	
Battery Life	>18 hours	
Operating Temperature	-30 °C to 50 °C	
Weight	<500 grams	
Accessories	free-field microphone, wind screen, Pre-amplifier, Power cables, Carrying case	
Warranty	2 Years	

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Terms and Conditions:

- 1. All vendors are requested to submit "Technical and financial bids" together in separately sealed envelopes.
- 2. Evaluation will be done based on technical specification given in tender specifications given in tender document.
- 3. Financial bid will be open for those only who qualify all the technical specifications as per our tender notice.
- 4. Quotation must be valid for 90 days.
- 5. Payments terms: 100% after delivery.
- 6. **Warranty** should be clearly mentioned, the Warranty must start from the date of installation at IITK.
- 7. Only OEM or its authorized agents should quote, Quotation should carry proper certifications like proprietary certificate/ authorization certificate from the manufacturer, etc.
- 8. Quotation must integrate FOR prices.
- 9. The delivery period should be within **5 Weeks** after receipt of PO.
- 10. At any time prior to the deadline for submission of the bid, the institute may, for any reason, at its own initiative, modify the bid document by amendments. Such amendments shall be uploaded on the website through corrigendum and shall form an integral part of the bid document. The relevant clauses of the bid document shall be treated as amended accordingly. It shall be the sole responsibility of the prospective bidders to check the website from time to time for any amendment in the tender document. In case of failure to get the amendments, if any, the Institute shall not be responsible for it.
- 11. The Penalty @1% per week or part thereof subject to max 10% of the delivery price will be deducted from the balance payment if supply is not completed within aforesaid delivery period.
- 12. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved.
- 13. It is mandatory to provide local content (MII certificate) & country of origin for the quoted product.

Appendix -1

TENDER ACCEPTANCE LETTER (To be given on Company Letter Head)

Τo,

Date: _____

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: - _____

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

______as per your _______as per your ______as per your _______as per your _______as per your ______as per your _______as per your ______as per your __

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. ______ to _____ (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully, (Signature of the Bidder, with Official Seal)

Appendix -2

<u>Certificate for Tender</u> (To be given on Company Letter Head)

To,

Date: _____

Sub: Certificate of compliance as per Rule 144 (xi) GFR's 2017

Tender Reference No: _____

Name of Tender / Work: - _____

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Yours Faithfully, (Signature of the Bidder, with Official Seal)

Appendix - 3

Declaration for Local Content

(To be given on Company Letter Head - For tender value below Rs.10 Crores) (To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores)

	Date:
To,	
The Director,	
Indian Institute of Technology Kanpur,	
GT Road, Kalyanpur, Kanpur -208016	
Sub: Declaration of Local content	
Tender Reference No:	
Name of Tender / Work:	

Country of Origin of Goods being offered: ______

2. We hereby declare that items offered has <u>%</u> local content.

"Local Content" means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

"*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law."

> Yours Faithfully, (Signature of the Bidder, with Official Seal)