



सीएसआईआर - राष्ट्रीय धातुकर्म प्रयोगशाला
CSIR - NATIONAL METALLURGICAL LABORATORY
(Council of Scientific & Industrial Research)

Burmamines, Jamshedpur - 831 007
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23.10.2025

CORRIGENDUM

Tender Reference No. :- PUR/282/VB/DB/EQM/2025-26

Tender ID :- 2025_CSIR_252723_1

Item Name :- IMPEDANCE ANALYZER

NOTE: The Bids must be submitted in the Central Public Procurement Portal (URL:<https://etenders.gov.in/eprocure/app>) only. Manual/Offline bids shall not be accepted under any circumstances. Bidders should quote in INR only.

Consequent to the Pre-Bid Meeting held on 21.10.2025, the revised technical specifications are attached at Annexure-I.

Accordingly, all the interested bidders are requested to kindly submit your Quotations based on the Technical Specifications as mentioned at Annexure-I.

All other terms and conditions shall remain same.

Stores & Purchase Officer,
CSIR-NML, Jamshedpur



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ANNEXURE-I

Technical specification of Impedance Analyzer

Sl. No	Parameters	Required Specification
1	Frequency range	20 Hz or less to 120 MHz or greater
2	Frequency accuracy	Minimum 0.005% of reading
3	Frequency resolution	1 mHz or better
4	Measured impedance range	30 m Ω to 40 M Ω or better
5	DC bias range	0 V to $\pm$ 40 V or better
6	Input Impedance	50 Ω or better
7	Equivalent circuit analysis model	Equivalent circuit parameters calculation with 3 & 4 components
8	Sweep parameters	Frequency, signal voltage or current, DC bias voltage or current
9	Sweep type and segment	Linear & logarithmic frequency and Linear & logarithmic DC bias voltage
10	Measurement Parameters	Impedance (Z), Phase Angle (θ), Capacitance (C), Dissipation Factor (D), Inductance (L), Quality Factor (Q), Resistance (R), Reactance (X), Conductance (G), Susceptance (B), Admittance (Y), Complex Z, Complex Y
11	Display	Display size of minimum 8 inch or better, colour and touch screen
12	Interface	GPIB/USB/LAN
13	High temperature measurement option	a) Temperature range 800 °C & above b) Holding time: 1 minute to 8 hrs or higher c) Temperature ramp rate: 5 °C/min or higher d) Provision for chamber atmosphere control e) Accuracy: 0.1°C or better f) Resolution: 0.1°C or better g) Sample holder and suitable high-temperature PID controller
14	Power requirement	220 V AC, 50 Hz
15	Computer and software	a) System-compatible computer having 16 GB RAM or higher, 500 GB SSD or higher, 23-inch FHD display or better, with the latest Windows version, with the latest processor b) Mouse keyboard and printer c) Software for fully automatic measurement with varying temperature of the sample and analysis of the data



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		d) Licensed software compatible with the latest version of Windows that controls impedance analyser and temperature chamber (furnace)
16	Accessories	Power cable, user manual, calibration conformity certificate, impedance probe/ component test fixture covering entire frequency range has to be supplied along with the system. The following fixtures are required: a) Dielectric measurement fixture (permittivity) operating up to 800 °C and above, b) Impedance measurement fixture up to to 800 °C and above, c) Standard calibration test samples for (i) dielectric and (ii) impedance measurements d) Datasheet catalogue of the offered system/model to be submitted and available in OEM/distributor website.
17.	Operational training	Minimum 3 person, 3 days training to be provided at CSIR-NML.
18	Warranty	a) 03 years comprehensive warranty b) 02 years of non-comprehensive AMC after the warranty period
19	Vendor qualification criteria	a) The bidder shall be an OEM or OEM-authorised distributor. A valid certificate by the OEM to be submitted b) The OEM authorised bidder/OEM should have supplied two impedance analyser systems or a similar model configuration in the last 05 Years in India. A copy of the purchase order should be enclosed with the technical bid.