

भारत सरकार/GOVERNMENT OF INDIA
अंतरिक्ष विभाग/DEPARTMENT OF SPACE
क्रय यूनिट-III/PURCHASE UNIT-III

विक्रम साराभाई अंतरिक्ष केंद्र/VIKRAM SARABHAI SPACE CENTRE
तिरुवनंतपुरम/THIRUVANANTHAPURAM – 695 022

विज्ञा. सं. वीएसएससी/एसपीआरई-क्रय/04 दि. 10/05/2023
ADVT. NO. VSSC/SPRE-PUR/04 DT. 10/05/2023

भारतके राष्ट्रपतिकेलिए तथाउनकीओरसेवरिष्ठ प्रधान, क्रयएवंभंडार, विक्रमसाराभाईअंतरिक्षकेंद्र (वीएसएससी), तिरुवनंतपुरम, निम्नलिखितकेलिएई-प्रापणके माध्यम से (क्रम सं. 1के लिए) निविदाएंआमंत्रित करता है:-

For & on behalf of the President of India, the Sr. Head Purchase & Stores, Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram invites Tenders through e-procurement for Sl. No. 1 for the following :-

क्रम सं. Sl. No	निविदा सं. Tender No.	वर्णन / Description	मात्रा Qty.	निविदा शुल्क Tender Fee
1	VSSC/PURCHASE UNIT III (SPRE)/VS202300019701 [लोक निविदा – दो भाग/ PUBLIC TENDER-TWO PART]	विद्युत-रासायनिक वर्कस्टेशन Electrochemical Work station (Qty:1 set)	सामग्रियां/ items	लागून हीं / NA

क्रम सं. Sl. No.	बोली प्रस्तुत करने की समय-सीमा Time limit for submission of Bid	बोली खोलने की तिथि Bid Opening date
1.	दिनांक 27/06/2023[14:00 बजे तक]	दिनांक 27/06/2023[14.01 बजे]

क्रम सं. 01के लिए, ब्यौरे इसरो ई-प्रापण पोर्टल <https://eproc.vssc.gov.in> पर उपलब्ध हैं।

For Sl. No. 01, details are available on ISRO e-procurement portal <https://eproc.vssc.gov.in>.

शुद्धिपत्र, यदि कोई हो तो, हमारे वेबसाइट www.vssc.gov.in / www.isro.gov.in में मात्र प्रकाशित किया जाएगा।

Corrigendum, if any will be published in our websites : www.vssc.gov.in / www.isro.gov.in only.

हस्ताक्षरित/Sd/-

वरि. प्रधान, क्रय एवं भंडार /Sr. Head, Purchase & Stores

Tenders are invited for procurement of Electrochemical Workstation(Qty:1 set). The Bids are to be prepared and submitted in specified Templates online, by logging into the portal <https://eproc.vssc.gov.in>. The Vendors are advised to submit the Bids much before the Closing Time to avoid last minute problems. **Bid Opening date :27/06/2023 [14.01 Hrs.]**.

Only online tenders will be accepted. No manual / Postal / e-mail / fax offers will be entertained. No manual tender document will be issued. Parties interested to participate in this e-Tender are required to register themselves as vendors, if not already registered, in our e-procurement portal <https://eproc.vssc.gov.in> by downloading plugins and help demos listed on the home page of the e-procurement link mentioned above to complete the vendor registration process. They can seek help from help desk 0471 2565454 also as provided in the home page of e-procurement portal in case of any problem for registration and subsequent process. Vendors may please note that without registering in our e-procurement portal, they will not be able to quote for this e-tender.

This is a two part tender, Technical & Commercial part (Part I) and Price Part (Part II) shall be submitted separately. The tenderers should not attach any documents containing Price information along with Technical & Commercial Bid (Part I). We do not open PART II (Price Bid), if PART-I (Technical & Commercial offer) does not meet with our technical specification requirements. Cost split up, other price details etc. shall be uploaded as a separate document under COMMERCIAL DOCUMENTS FROM VENDOR tab.

THE TECHNICAL DOCUMENTS NEED TO BE ATTACHED ONLINE AS A SINGLE PDF FILE WITHOUT ANY PRICE INFORMATION, TECHNICAL BID CONTAINING PRICE DETAILS WILL BE TREATED AS REJECTED.

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
VIKRAM SARABHAI SPACE CENTRE (VSSC)
THIRUVANANTHAPURAM**

Tender for Electrochemical Workstation

Bids to be submitted online

Tender No.: VSSC/PURCHASE UNIT III (SPRE)/VS202300019701 dated 04-05-2023

A. Tender Details

Tender No :	VSSC/PURCHASE UNIT III (SPRE)/VS202300019701
Tender Date :	04-05-2023
Tender Classification:	GOODS
Purchase Entity :	PURCHASE UNIT III (SPRE)
Centre :	VIKRAM SARABHAI SPACE CENTRE (VSSC)

Electrochemical Workstation

This is a TWO - PART bid. Price details shall NOT be mentioned in technical Bid, failing which the offer will be considered as invalid. -Foreign vendors are not permitted to quote. Quotations directly from foreign OEM/ or from agents quoting on behalf of foreign OEMs are not allowed to participate in this tender. -Only Class-I and Class-II Local suppliers as per Make in India Policy are eligible to participate in the bid. -a.The percentage of local content should be specifically mentioned in the offer, without which it will be summarily rejected. b.Preference will be given to Class-I Local Supplier and in their absence, Class-II Local Supplier will be considered. -Last minute clarification on tenders will not be entertained. -This is an E Tender. Hence Postal/Fax/Email tenders will not be accepted. -Technical Bids will be opened at the scheduled due date & time . No further intimation will be sent to you in this regard. Interested parties can attend the Technical Bid Opening to know the details.

A.1 Tender Schedule

Bid Submission Start Date :	09-05-2023 09:30
Bid Clarification Due Date :	25-05-2023 10:45
Bid Submission Due Date :	27-06-2023 14:00
Bid Opening Date :	27-06-2023 14:01
Price Bid Opening Date :	30-06-2023 14:00

B. Tender Attachments

NA

Instructions To Vendors

1. PPP Make in India(Non- Divisible Items-All Classes of Suppliers)

1. A committee (with an external expert from a practicing cost accountant or practicing chartered accountant, if required) constituted for independent verification shall verify the self-declarations & auditor's / accountant's certificates on random basis, as per the requirements.

2. a) The subject item falls under Non-divisible category. b) The offers are sought from all classes of suppliers.

3. Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) Minimum 20% but less than 50% : Class-II local supplier. c) Less than 20% : Non-local supplier.

4. False declarations will be in breach of code of the integrity for which a bidder or its successor's will not be eligible/debarred for purchase preference from further tenders / pending tenders for two years along with other actions as may be applicable.

5. In case of a complaint received from any local supplier indicating a need for review / verification of Local content of successful vendor / awarded vendor, for accepting a complaint from such complainant (w.r.t the false declaration given by the successful vendor on the local content), a complaint fee of Rs.2Lakhs or 1% of the locally manufactured items being procured (subject to a maximum Rs. 5Lakhs), whichever was higher, to be paid by demand draft by the complainant. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

6. In cases the quoted price is in excess of Rs.1000 Lakhs (including duties, taxes and freight & Insurance) the 'Class-I & II local supplier shall 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 case of suppliers other than companies) giving the percentage of local content.

7. In line with Public Procurement (Preference to Make in India), Order 2017 & its amendments issued by Govt. of India from time to time with a view to support the Indian industries, ISRO has implemented "Purchase Preference Policy". The "Purchase Preference" is applicable for the "Class-I Local Supplier"

for the goods/ services/ works covered in this tender, subject to the following terms & conditions:-

8. 'L1' means the lowest technically accepted tender / bid / quotation (i.e. lowest landed cost including duties, taxes and freight & Insurance).

9. 'Local content' means the amount of value added in India (i.e. indigenous items/services added in the offered products/ services/ works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent.

10. 'Margin of purchase preference' means the maximum extent to which the price quoted by the "Class-I local supplier" above the L1 (landed cost).

11. Purchase Preference Policy:- Goods/Works which are not divisible (ie., required quantity is 1 or as a package) and Services:

a) If L1 is from a 'Class-I local supplier', the contract will be awarded to L1 bidder.

b) If L1 is not from a 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference (i.e. 20%) and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price (inclusive of duties, taxes and freight & insurance).

c) In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on, and order/contract shall be awarded accordingly. In case where none of the 'Class-I local supplier' within the margin of purchase preference agree to match the L1 price, then the order/contract shall be awarded to the original L1 Bidder.

12. The 'Class-I & II local supplier' should provide a "Self Certification" along with technical offer indicating that the item offered meets the minimum local content [as per Sl. No.(3)] as called for in the tender and provide the percentage of local content along with details of the location(s) at which the local value addition is made. In case of two bid tenders, it is mandatory to indicate compliance to MLC(minimum Local Content) in technical bid zone.

13. The ink-signed certificate shall be provided on vendors letter head along with the offer (in case of online tender, copy of ink-signed certificate shall be uploaded along with your offer under concerned tab. Original in Hard copy shall be produced on request). In case of non-submission of certificate, the purchase preference shall not apply.

14. The margin of Purchase Preference shall be up to 20%.

15. The Public Procurement (Preference to Make in India), Order 2017 issued by Govt. of India indicates that if there are any general or specific restrictive clauses to restrict participation of Indian

companies in those countries procurement tenders, reciprocity clause need to be invoked as per the order. Hence, if ISRO or Govt. of India come across that Indian suppliers of an item are not allowed to participate and / or compete in procurement by your government, the bid submitted by you will be not be considered and excluded from eligibility for procurement. Please note this point.

16. Works means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'. Works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

2. PROFORMA FOR INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER where the indent value is Rs. 2.00 lakhs & above for indigenous stores items

1. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.

(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.

(d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

2. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.

(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.
(d)

Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

3. ACCEPTANCE OF STORES:

(a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by the purchaser at the Contractor's own risk, expense and cost.

(b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the purchaser, whose decision shall be final.

(c) If, in the opinion of the purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor.

(d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. (c) above, the purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

4. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.

5. a) Your offer should be valid for 90 days from the date of opening of the tender.

b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.

6. DESPATCH: The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

7. d) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

8. GUARANTEE & REPLACEMENT:

(a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.

(b) For a period of twelve months after the acceptance of the stores, if any defects are discovered

therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty.

(c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser, provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

(d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.

(e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the Stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or any other period or as to whether the nature of defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

(f) To fulfill guarantee conditions outlined in (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser)

9. **PACKING FORWARDING & INSURANCE:** The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

10. Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.

11. **PRICES:** Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

12. **REJECTED STORES:**

Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

13. Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be

mentioned in the price bid template. If nothing is mentioned, then it will be presumed that the rate quoted is inclusive of all taxes/duties.

14. SECURITY DEPOSIT: Wherever, the Purchase Order value is Rs. 5.00 Lakhs or more, on acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause regarding Delivery. (b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

15. TERMS & CONDITIONS OF TENDER

16. TEST CERTIFICATE: Wherever required, test certificates should be sent along with the despatch documents.

17. The authority of the person signing the tender, if called for, should be produced.

18. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.

19. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.

20. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.

21. The term Contractor shall mean, the person, firm or company with whom or with which the order for the supply of Stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.

22. The term Purchaser shall mean the President of India or his successors or assigns.

23. The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.

3. Specific Terms and Conditions to Tender

1. CUSTOMS DUTY: We are eligible for concessional payment of Customs Duty vide Notification Ref: 050/2017 CUSTOMS Dtd. 30/06/2017 Sl. No. 539(b) as amended by Notification No. 5/2018 dtd.25/01/2018. Please Note.
2. If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.
3. In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre / Udyog Adhar / NSIC Registration Certification along with your offer.
4. Liquidated Damages: The delivery period quoted should be realistic. The delivery period so quoted and mentioned in the order is the essence of the order/contract. In case of delay in delivery of material as per the delivery schedule, Liquidated Damage @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value shall be levied. Wherever, installation and commissioning is also involved, the supply will be deemed to have been completed only when the entire Stores is supplied, installed and accepted.
5. Note: SD, LD and PBG clauses are mandatory and offers of the vendors who have not agreed for the above conditions will be excluded from the procurement process. Micro and Small Vendors are not exempted from the submission of Security Deposit. Only Govt Departments/PSUs/PSEs can submit Indemnity Bond instead of Bank Gurantee towards SD/PBG.
6. Offer Validity:- Please keep and confirm the offer validity minimum 90 days[in case of Single part Tender]from the date of opening of tender/180 days [For Two Part Tenders, 120 Days after opening Part-I and 90 days after opening Part-II].
7. Our standard delivery term is FOR, VSSC. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lumpsum amount.
8. Our standard payment term is 100% within 30 days for indigenous orders.
9. Performance Bank Guarantee: Wherever products offered carry warranty, the warranty should be for one year or as per manufacturers standard warranty term. Against such cases, please confirm submission of Performance Bank Guarantee. The Performance Bank Guarantee should be for 3% of the order value covering the warranty period obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of the warranty period. Alternately vendors can request for withholding 3% payment till completion of the warranty period.

10. Please quote applicable GST separately.

(a) We are eligible for partial exemption of IGST vide Notification No: 47/2017-Integrated Tax (Rate) dtd 14/11/2017 and 45/2017-Central Tax (Rate) dtd 14/11/2017 issued by Dept. of Revenue, Ministry of Finance. Necessary Exemption Certificates will be issued on demand.

(b) We are eligible for partial exemption of CGST and SGST vide Notification No: 45/2017 dtd 14/11/2017 and No: 169/2017/TAXES dtd 15/11/2017 respectively. Necessary Exemption Certificates will be issued on demand.

11. Please upload the Technical Details / Catalogue / Data Sheets (wherever applicable)

12. Security Deposit: Wherever the offer value is Rs. 5.00 Lakhs or above, the successful tenderer should submit Security Deposit @ 3% of the order value by way of Bank Guarantee / FD Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of all contractual obligations. If the Contractor is called upon by the Purchaser to deposit, Security and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor. In case if Security Deposit is submitted and the contractor fails to execute the order, then the security deposit will be forfeited.

13. The other attached forms are our standard terms and conditions, which are to be complied with. If any conflict arise between the specific terms and standard terms, then in those cases, the specific terms will prevail over the standard terms.

14. Wherever samples are required to be submitted along with the quotation, offer without sample will not be considered.

4. Instructions to Vendors

1. Last minute clarification on tenders will not be entertained.

2. This is an E Tender. Hence Postal/Fax/Email tenders will not be accepted.

5. Conditions for BIDDER FROM A COUNTRY WHICH SHARES LAND BORDER WITH INDIA

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender, only if the bidder is registered with the Competent Authority.

Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

2. Any false declaration and non-compliance of the above would be a ground for immediate rejection of offer or termination of the contract and further legal action in accordance with the laws.

3.

Validity of Registration: Registration should be valid at the time of submission of bids and should be valid at the time of placement of order.

C. Bid Templates

C.1 Technical Bid - Electrochemical Workstation

1. Electrochemical Workstation

Item specifications for Electrochemical Workstation

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Channel Requirements	1. Two channels with Potentiostatic and Galvanostatic electrochemical impedance measurement capability and separately programmable. 2. All channels should be independent and simultaneous measurement facility should be possible. 3. Up gradation facility for additional 6 channels or more should be provided in a single enclosure.	Yes / No / Explain		
2	Cell terminal connections	Should be capable of testing up to 5 electrode systems including ground point.	Yes / No / Explain		
3	Voltage Range (Cell Control)	± 10 V	Yes / No / Explain		
4	Current (Cell Control)	± 5 A or more continuous	Yes / No / Explain		
5	Potential resolution (Cell Control)	300 μ V or lower	Yes / No / Explain		
6	Current resolution (Cell Control)	<0.005% of the dynamic range, <1nA on the 10 μ A range	Yes / No / Explain		
7	Accuracy (DC) (Cell Control)	<0.1% of FSR	Yes / No / Explain		
8	Rise time (Cell Control)	(10%-90%) 100 μ s or lower	Yes / No / Explain		

9	Voltage Range (Voltage measurement)	± 10 V, in minimum three ranges	Yes / No / Explain		
10	Voltage resolution (Voltage measurement)	0.002% or lower of FSR, down to 100 μ V or lower	Yes / No / Explain		
11	Acquisition speed (Voltage measurement)	1,00,000 samples/second or more	Yes / No / Explain		
12	Accuracy (DC) (Voltage measurement)	< 0.2 % of FSR	Yes / No / Explain		
13	Current range (Current measurement)	$\pm 10\mu$ A to ± 5 A or more (in multiple ranges)	Yes / No / Explain		
14	Resolution (Current measurement)	< 0.005% of the range down to 1nA or lower	Yes / No / Explain		
15	Acquisition speed (Current measurement)	1,00,000 samples/second or more	Yes / No / Explain		
16	Accuracy (DC) (Current measurement)	<0.1 % of FSR	Yes / No / Explain		
17	Input Impedance	> 1T Ω // < 20 pF	Yes / No / Explain		
18	Bias current	<20 pA	Yes / No / Explain		
19	Frequency range	1MHz to 10 μ Hz	Yes / No / Explain		
20	Amplitude	Potentiostatic mode: 1 mVpp (or lower) to 1 Vpp (or more), Galvanostatic mode: 0.1% (or lower) to 50% (or more) of the current range	Yes / No / Explain		
21	Input/output slots	a. 2 Analog inputs or more: Should be able to record from external sources at voltage range of ± 10 V. b. 1 Analog output or more: To control external devices at voltage range of ± 10 V c. External trigger: Should be possible	Yes / No / Explain		

22	Software features	<p>Software should be user friendly and support building our own techniques/program and the following software packages are required</p> <ol style="list-style-type: none"> 1. Battery testing software 2. Voltammetry software including Cyclic voltammetry, Linear Sweep voltammetry, Chronoamperometry, Chronopotentiometry, Chronocoulometry etc 3. Pulse software including differential pulse, normal pulse, square wave voltammetry etc. 4. Should support techniques like galvanostatic intermittent titration technique (GITT) and potentiostatic intermittent titration technique (PITT) 5. Impedance spectroscopy software. 6. Equivalent circuit fitting software for impedance analysis 7. Analysis tools for Battery, Impedance with 2D, 3D view facility should be provided. 	Yes / No / Explain		
23	Accessories required	<ol style="list-style-type: none"> 1. Ag/AgCl Reference Electrode both Aqueous and non Aqueous media: 2 Nos. 2. Standard Calomel electrode: 2 Nos 3. Battery holder for coin cell and cylindrical cell should be provided: 2 Nos each 	Yes / No / Explain		
24	Interface	USB/ Ethernet	Yes / No / Explain		

25	Instrument Control	A Desktop Computer i7 or better Configuration with 1TB or more SSD, with back up drive (2TB HDD), 20/21" color monitor, Windows OS, Wired Keyboard and Mouse shall be provided.	Yes / No / Explain		
26	Installation and commissioning	1. Installation and commissioning of the equipment has to be carried out by supplier at our laboratory in VSSC and the performance has to be demonstrated. 2. Onsite training must be provided to VSSC personnel on the installed equipment for operation and data processing.	Yes / No / Explain		
27	Warranty and AMC	System shall be warranted for a minimum period of 2 year from the date of installation of the equipment at VSSC. Separate quote for AMC for five years after the warranty period should be included. AMC cost will be considered for grading, along with equipment cost. Quote for both comprehensive and non-comprehensive AMC. Number of visits per year: One preventive & One breakout visit	Yes / No / Explain		

[Document : Specification Committee report](#)

[Document : GeM Non-availability certificate](#)

[Document : Minutes of NARC meeting](#)

Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Upgradation of equipment in future	The equipment should be flexible enough to accommodate the futuristic developments in relevant field in terms of the number of channels / upgrade for high current / upgrade for high voltage as well as other additional features such as booster add on, which are not included in the present specification, as future upgrades.	Yes / No / Explain		
2	Track record of supplier	Since the item is required for characterization and evaluation of testing sophisticated samples, only companies having proven track record in the manufacturing of electrochemical test systems will be considered.	Yes / No / Explain		
3	List of previous customers	List of customers to whom similar units were supplied elsewhere shall be given along with the offer. End user details should include model No, year of supply , end user full contact details (Telephone/Email) to be furnished (Minimum 2 end users) along with offer	Yes / No / Explain		
4	Authorisation certificate	Vendor shall be original manufacturer/authorized representative of the system. Vendor shall provide the authorization certificate from the principals for the offered system along with the cost quote.	Yes / No / Explain		
5	Electrical power & UPS requirement	Party shall give the electrical power & UPS requirement of the total system	Yes / No / Explain		

6	Attending of breakdown	Party shall have service facility to attend breakdowns within 48 hrs.	Yes / No / Explain		
7	Documentation	Operation, maintenance & software manual, consisting of circuit diagram, component schedule, calibration certificate and calibration procedure shall be supplied along with the equipment.	Yes / No / Explain		
8	Catalogues and leaflets of the equipment	Quotation shall consist of construction details with well-supported catalogues and leaflets along with make and model number of each components without which their offer will not be considered.	Yes / No / Explain		
9	Dimension and weight of the equipment	Dimension and weight of the equipment shall be provided.	Yes / No / Explain		
10	Essential Spares (Optional)	Party shall give quote for essential spares required for the machine for the smooth operation for five years as optional items. Shelf life of the spare parts shall be indicated.	Yes / No / Explain		
11	Break up of cost in offer	Party has to give breakup of the offer. The cost of standard configuration, options, the cost of PC and peripherals (spares), system, software etc.	Yes / No / Explain		
12	Compliance matrix	Party shall enclose a compliance / deviation matrix with respect to each of the specification along with their offer for easy comparison without which the offer will not be considered.	Yes / No / Explain		

Supporting Documents required from Vendor

1. Split up cost for main equipment, subsystem, accessories, spares, installation & commissioning and AMC charges to be provided (Price Bid Related)

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Taxes and other costs,	Yes / No / Explain	
2	Security Deposit (Applicable if Offer Value is Rs. 5 Lakhs or above. MSME/NSIC Units are NOT EXEMPTED from the payment of SD. Bank Guarantee @ 3% of Order Value valid till 60 days from the date of supply to be submitted. Mandatory compliance required. Only Government Bodies/PSUs/PSEs can submit Indentity Bond in lieu of BG. In the event of non-performance of contractual obligations, SD will be forfeited).	Yes / No / Explain	
3	Delivery Terms.	Yes / No / Explain	
4	Delivery Period	Yes / No / Explain	
5	Liquidated Damages (Applicable beyond the delivery period mentioned in this tender @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value. Mandatory compliance required).	Yes / No / Explain	
6	Warranty(2 years)	Yes / No / Explain	
7	Performance Bank Guarantee (PBG) Bank Guarantee @ 3% of Order Value valid till the completion of warranty period plus 2 months claim period to be submitted. Mandatory compliance required. Only Government Bodies/PSUs/PSEs can submit Indemnity Bond in lieu of BG. In the event of non-performance of warranty obligations, PBG will be forfeited).	Yes / No / Explain	

8	Payment Term: (Our Default payment term: For indigenous orders: 100% within 30 days after receipt and acceptance of item at our site. NOTE: CONSEQUENT TO COVID 19 PANDEMIC AND AS PER EXTANT GUIDELINES FROM DEPARTMENT OF SPACE, NO ADVANCE PAYMENT IS PAYABLE TO THIS TENDER).	Yes / No / Explain	
9	Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) More than 20% but less than 50% : Class-II local supplier. c) Less than or equal to 20% : Non-local supplier. Mention your category.	Yes / No / Explain	
10	Local content means the amount of value added in India (i.e. indigenous items/services added in the offered products/services/works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent. Indicate extent of Minimum Local Content in offered product/service and location of such value additions.	Yes / No / Explain	
11	The Class-I & II local supplier should provide a Self Certification along with your offer in PDF format indicating that the item offered meets the minimum local content as called for in the tender as mentioned above and provide the % of local content along with details of the location(s) at which the local value addition is made. In case of two part tenders, it is mandatory to indicate compliance to MLC(minimum local content) in technical bid itself. Confirm attachment of Self declaration along with the offer.	Yes / No / Explain	
12	PO Placement Address (with Name and Contact Details of sales person concerned).	Yes / No / Explain	
13	Any Other Terms	Yes / No / Explain	
14	Offer Validity	Yes / No / Explain	

15	Non-comprehensive AMC for 5 years	Yes / No / Explain	
----	-----------------------------------	--------------------	--

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	Electrochemical Workstation	1.00 Sets		-		

Common charges (Applicable for all items)

Packing & Forwarding Charge	
Essential Spares Cost (lumpsum)	
Optional Accessories-Lumpsum	
Transportation Charges	
Installation & Commissioning Charges	
Training Charges	
NC-AMC Charges for 5 Years,excluding Taxes	