

***Tender No.: e-Tender/Technical Services/Work Station with Telecom Equipment/2021-22/007 Dated 20.09.2021.***

***Tender for Supply of Work Station with Telecom Equipment***

ADGP, Technical Services Wing, Punjab Police invites online bids (two bid system) for the purchase of following equipment: -

Sr. No.	Name of the equipment	Qty	Earnest Money (In Rs)	Tender fee in Rs.
1.	Smart safe ESD (Electrostatic Discharge) shockproof workstation	5	50,000/-	500/-
2.	Oscilloscope	5		
3.	Table top Multimeter	5		
4.	0-30 Volt Power Supply	5		
5.	Function Generator	5		

**Note: - Required Technical Specifications of above equipment is specified in Annexure-A.**

**1. Important Dates and other conditions: -**

- |      |                             |   |                              |
|------|-----------------------------|---|------------------------------|
| i)   | Publication of Tender       | : | 23.09.2021 at 1000 hrs       |
| ii)  | Last date of Bid submission | : | 14.10.2021 upto 1600 hrs     |
| iii) | Opening of Technical Bid    | : | 15.10.2021 at 1100 hrs       |
| iv)  | Opening of Financial Bid    | : | To be informed subsequently. |

- For participating in the above e-Tendering process, the bidder shall have to get themselves registered with [www.eproc.punjab.gov.in](http://www.eproc.punjab.gov.in) and get **user ID and Password**. Class 3 digital signature is mandatory to participate in the e-Tendering process. For any clarification/difficulty regarding e-Tendering process, bidders may contact NIC helpdesk No. 0172-2970236/2970284.
- A copy of Tender document can be downloaded from [eproc.punjab.gov.in](http://eproc.punjab.gov.in). The Bidder shall submit the Tender fee of Rs. 500/- (Rupees Five Hundred Only) through online/electronic mode as provided on [eproc.punjab.gov.in](http://eproc.punjab.gov.in).
- The Tender is floated through the e-Tendering process and only e-bids shall be accepted. Bids are invited in two bid systems, i.e. Technical Bid and Financial Bid.
- Bidder shall deposit a processing fee as mentioned in the above portal through online mode provided.
- The Tender shall be uploaded on the [www.eproc.punjab.gov.in](http://www.eproc.punjab.gov.in). For any technical

help, please contact on numbers provided on the said website.

- f. Punjab Police reserve the right to vary the quantity of material at the time of placement of Supply Order/Signing of Contract.
- g. Punjab Police reserve the right to place additional orders at the same rates upto 12 months of placing of supply order.
- h. Punjab Police reserve the right to accept any bid and to annul the bid process and reject all bids at any time, without assigning any reason, prior to placement of supply order/ signing of contract, without thereby incurring any liability to the affected Bidder(s) or any obligation to inform the affected Bidder(s) of the grounds for the Punjab Police's action.
- i. The Bidder shall mention the unit price including GST (as applicable)/any other applicable Tax or Duty and/or any other incidental expenses as per the format of financial bid provided on the **website** [www.eproc.punjab.gov.in](http://www.eproc.punjab.gov.in). The bidder shall be selected on the basis of total price inclusive any taxes and charges, if any.
- j. Bidders are advised to study this Tender document carefully before participating. It shall be deemed that submission of Bid by the bidder has been done after their careful study and examination of the Tender document with full understanding to its implications.

## 2. **Nodal Officer**

The Nodal officer for this Tender is as below:-

Sh. Jasbir Singh, PPS,  
DSP Telecom, Technical Services, Punjab, Chandigarh  
Room No.124, Ground Floor  
Punjab Police Headquarters,  
Sector- 9-A, Chandigarh.  
Contact no. 0172-2748100-06 Extn 2136  
Mobile No. 8283804986

**Note:** For any query, please contact from 9:30 A.M to 4:30 P.M on working days.

### 3. Scope of Work

The selected bidder would be required to supply the required number of equipment as per the following table:

**Note-1: - The quantity may increase or decrease as per requirement of this office or any other reason (s).**

Sr. No.	Name of the equipment	Qty
1.	Smart safe ESD (Electrostatic Discharge) shockproof workstation	5
2.	Oscilloscope	5
3.	Table top Multimeter	5
4.	0-30 Volt Power Supply	5
5.	Function Generator	5

**Note-2 :- Required Technical Specifications of above item are specified in Annexure-A.**

- (i) **Equipment Delivery:** - The selected bidder shall ensure the free on-site delivery of the complete order at the Telecom Store, Punjab Police Training Center, Village Chharbar, Near Banur, District S.A.S Nagar, Punjab.
- (ii) **Warranty:** - Selected bidder shall supply equipment along with the warranty of at-least Three years against manufacturing defects.

### 4. Eligibility Criteria for Bidders and documents required to be submitted along with Technical Bid.

- A. This Tender is open to all firms/companies registered in India.
- B. The OEM of the equipment should be registered in India since last 10 years.
- C. The bidder must be in the business of supplying and maintenance of same category equipment for at-least last three years. The bidder shall upload relevant documentary proof regarding the same along with the technical bid.
- D. The bidder or its OEM should have supplied same or similar category products for Rs. 20 lacs., in last two years before the bid opening date to any State/Central Government department/agency or any Government company/PSU or any State/Central Government PSU. The bidder must attach at least one supply order alongwith Technical/financial bid.
- E. In case the bidder is not the OEM of the equipment, the bidder must be authorized to bid for the equipment by the OEM. Bidder shall upload an authorization letter from the OEM, along with the technical bid.
- F. Average annual turnover during the last three financial years (ending 31<sup>st</sup> March 2021) of the

bidding company must be at least Rupees 5 crore. Bidder shall upload the copy of the Balance Sheet and Profit & Loss Accounts for the last three financial years or a certificate from the Chartered Accountant certifying the year wise turnover for the last three financial years (ending 31<sup>st</sup> March 2021) along with technical bid.

- G. Average annual turnover during the last three financial years (ending 31<sup>st</sup> March 2021) of the concerned OEM must be at least Rupees 10 crore in the similar category products. Bidder shall upload the copy of the Balance Sheet and Profit & Loss Accounts for the last three financial years or a certificate from the Chartered Accountant certifying the year wise turnover for the last three financial years (ending 31<sup>st</sup> March 2021) along with technical bid.
- H. Relaxation of Norms in Public procurement for Start-ups based in Punjab shall be given as per the Government of Punjab, Department of Industries and Commerce, (Controller of Stores) Notification No. COS/Start-ups/2019/11288 dated 16.08.2019 and No. COS/PPO-2019/11726 dated 03.09.2019.
- I. Bidder must not be blacklisted by any State/ Central Government, PSU or Government Company. The Bidder must attach an affidavit undertaking the same along with the Technical Bid.
- J. The Bidder is required to submit an undertaking, that the price quoted by them are not higher than those quoted to GeM, other State/ Central Government/PSUs or Government Company during the current financial year. This undertaking shall be uploaded along with Technical Bid.
- K. The OEM/Bidder should have well-staffed and functional support centres in the State. The bidder will have to submit supporting documents regarding the same with the bid.
- L. The bidder will have to submit/upload Technical Data sheet of the offered product with the bid for verification of Technical Specifications.
- M. The bidder will have to submit/upload OEM warranty declaration regarding the offered product with the bid.

## **5. Earnest Money Deposit (EMD)**

The Bidders shall submit the Earnest Money Deposit (EMD), only to through online/electronic mode as provided on eproc.punjab.gov.in. No interest shall be payable by Punjab Police on the Earnest Money deposited by Bidder.

## **6. Performance Bank Guarantee**

The selected bidder shall submit a Performance Bank Guarantee (PBG) amounting to 3 % of the contract value of Goods to be supplied in favour of ADGP/Technical Services, Punjab, Chandigarh within Seven days of the award of the contract/issue of supply order. This PBG will be released after expiry of warranty period.

## 7. Delivery

Free on-site delivery of the equipment shall be made by the selected bidder at Telecom Store, Punjab Police Training Center, Village Chharbar, Near Banur, District S.A.S Nagar, Punjab.

## 8. Period of Validity of Offer

Offer shall remain valid for 365 days, from the last date of submission of the bids. An offer valid for a shorter period may be rejected by Punjab Police as non-responsive.

## 9. Language of the Bid Proposal

The bidder shall submit documents pertaining to bid, supporting documents and all correspondence etc. in English or Punjabi.

## 10. Amendment of Tender Document

The amendments, if any, in any part of the Tender Document shall be uploaded in form of corrigendum on website: [www.eproc.punjab.gov.in](http://www.eproc.punjab.gov.in) and will also be available on websites [www.punjabpolice.gov.in](http://www.punjabpolice.gov.in) and [www.punjab.gov.in](http://www.punjab.gov.in). All prospective bidders are advised to check these websites from time to time for any updates.

## 11. Withdrawal of Bid

No bid or any part of it will be permitted to be withdrawn/changed subsequent to the deadline for the submission of the bids.

## 12. Evaluation of Bids

The duly formed Tender Committee and Technical committee will technically and commercially evaluate the bids of all as per the following schedule/pattern: -

(A) Conditional bids shall be summarily rejected.

(B) The **Technical bids** shall be evaluated as per the following:

(B.1) Compliance to eligibility criteria: Compliance to the eligibility criteria and supporting documents specified in this Tender document. Non-compliance of ANY eligibility criteria shall result in dis-qualification of the bid.

(B.2) Compliance to the equipment specifications specified in this Tender: The bids found eligible according to the eligibility criteria would then be checked for compliance to the equipment's technical specifications mentioned in this Tender document. Non-compliance of any required specification shall result in dis-qualification of the bid.

(B.3) Live demo of the proposed equipment: The bidders would be required to give a live demonstration of the equipment (if required by Punjab Police) to the Technical Committee in Room No. 118, Level-1, PPHQ, Sector -9, Chandigarh.

(C) The Tender Committee, on the recommendation of Technical Committee, may disqualify any bid if the proposed equipment fails to meet the requirements on any one

or more of the above-mentioned parameters.

- (D) The Financial Bids of only the technically qualified bidders would be opened by the Tender Committee. The date and time for opening of the Financial Bids shall be notified separately. The bid with the lowest financial offer shall be awarded the contract and the bidder shall be selected on the basis of total price inclusive of all applicable taxes and charges, if any.

### **13. General criteria for Disqualification**

Punjab Police will have the discretion to disqualify any bid(s) if: -

- A. The Bidder fails to provide the information required in the Bid Proposal or any additional information as requested by Punjab Police during the Tendering process.
- B. The Bidder not fulfilling any terms & conditions specified in Tender document.
- C. Material inconsistencies in the information uploaded.
- D. Misrepresentations in the Bid Proposal or any supporting documentation.
- E. Incomplete or conditional bids that do not fulfil all or any of the conditions specified in this Tender document and/or bids not quoted as per the Tender document.
- F. Use of unfair means.
- G. Bids found unsigned, bids signed by unauthorized person and unsigned corrections in the bids.
- H. Bid offer with price variation clause.
- I. Price quoted in the Technical Bid.
- J. Non-compliance of any requirement of this Tender document.

### **14. Acceptance of the Bid**

Punjab Police reserve the right to accept any bid, reject all or any bids and to annul the Tendering process at any time without assigning any reason, thereby without incurring any liability to the affected bidder(s) or any obligation to inform the affected bidder(s) of the grounds of the action.

### **15. Cross Checking**

Punjab Police reserve the right to contact and verify information, references and data uploaded by the bidder in the bid.

### **16. Cost involved in Tendering**

The Bidder shall bear all costs associated with the preparation and submission of their Bid, including the cost of live demonstration of the proposed model of the equipment. Punjab Police will in no case be responsible or liable for any costs.

### **17. Return of EMD to unselected bidders**

The Earnest Money Deposit (EMD) of the disqualified / unselected bidder(s) will be returned back to their account (from which the amount was paid) automatically.

## **18. Right to vary quantities at the time of award**

Punjab Police reserve the right to vary the quantities and/or split the order among the selected bidder(s) and re-fix a delivery schedule. Punjab Police also reserve the right to order additional quantities during the contract period at a price not more than the unit price quoted in the contract/supply order.

## **19. Additional Information/Clarification**

Punjab Police reserve the right to seek any additional information and samples, as they may deem necessary to evaluate the bid. Bidders shall provide such additional information or clarification as sought by Punjab Police within the provided time frame.

## **20. Bidder's obligation to carefully examine the Tender document**

The bidder is expected to examine all the instructions, forms, terms & conditions and specifications in the Tender document carefully. Failure to furnish all the information required by the Tender document may result in rejection of the bid.

## **21. Prices**

- A. The prices quoted in financial bid should be in **Indian Rupees** only.
- B. Price will be calculated as total price of the equipment inclusive of GST and any other applicable Taxes/Duties
- C. The prices quoted shall remain constant throughout the period of contract and shall not be subject to any upward modification whatsoever.
- D. A bid uploaded with a variable price will be treated as non-responsive and would be rejected.
- E. No upward revision shall be allowed in case of any fluctuation in the foreign currency.
- F. Punjab Police reserves the right to place additional orders at the same rates upto 12 months of placing of supply order.
- G. Bidder should certify that they have read and understood the terms and conditions applicable to the bidder and they undertake to supply as per these terms and conditions.
- H. The bid offer shall remain valid for 365 days, from the last date of submission of the bids. A bid offer valid for a shorter period may be rejected by Punjab Police as non-responsive.

## **22. Delivery SLA and penalty on SLA**

### **A. Delivery SLA and Penalties**

- (i) Supply of the equipment shall be completed within 45 days from the date of placement of supply order at the site as mentioned here in before in the Tender document.
- (ii) If the selected bidder fails to complete the task within the delivery period prescribed above, the delayed consignment will be subject to 2% penalty per consignment per month or part thereof recoverable on the value of stores supplied, subject to upto maximum of 10% of the Contract value.
- (iii) In case of non-payment of penalty by the selected bidder, recovery will be made from his dues or Performance Bank Guarantee. Provided that:
  - a. No recovery of penalty will be made, if Punjab Police accept the delayed completion of task and decide that the delay was due to reasons beyond the control of the bidder.

- b. On the failure of the selected bidder to complete the task within the stipulated period, ADGP/Technical Services or authority authorized by him/her can affect the Risk purchase. The said purchase at the cost of selected bidder will be made within 6 months from technically pre-qualified bidders who have participated in the bid or after inviting short-term Tenders. The excess cost thus incurred will be recovered from the selected bidder from his pending bills or Earnest Money / Performance Bank Guarantee or through court of law. This procedure will be adopted after serving a registered notice to the selected bidder to seek his explanation within 15 days and in the event of the selected bidder failing to reply or being unable to explain up to the satisfaction of ADGP/Technical Services.
- (iv) Where a part of consignment is rejected by Punjab Police subsequent to the inspection, the supplier will re-offer the material for inspection within 14 days from the date of issue of rejection note, after removing the defects. Any delay beyond the period of 14 days will invite a penalty @ 2% per month or a part thereof.
- (v) The unexcused delay in the completion of task by the selected bidder in the prescribed delivery period may render him liable to any or all of the following penalties: -
- a. The penalty as mentioned in this Tender document.
  - b. Forfeiture of earnest money/ PBG/Security Deposit.
  - c. Black listing or debarring from participating in any Tender released by Punjab Government in future.
  - d. Technical Services Wing of Punjab Police may initiate the risk purchase mechanism as specified in this Tender.

### **23. Warranty and Penalties**

- A. During the warranty period, the bidder would be required to address the complaints within 24 hours.
- B. If the complaint is not addressed within the stipulated period of 48 hours, a penalty upto @ 0.05% of the total contract value per day will be levied on the bidder.
- C. If, however, the complaint is not addressed within 5 days period, a penalty upto @ 0.1% of the total contract value will be levied on per day basis, after the expiry of 5 days.
- D. No recovery of penalty will be made, if Technical Services Wing of Punjab Police accepts the delayed completion of task and decides that the delay was due to reasons beyond the control of the bidder.

### **24. Responsibilities during Warranty period**

- A. It shall be the responsibility of the selected bidder to effect necessary repairs and maintenance of equipment as and when required, during the contract period, otherwise it shall be treated as non-performance on the part of the selected bidder and penalty as mentioned in this Tender document shall be invoked.
- B. The Performance Bank Guarantee shall be kept by Technical Services wing of Punjab



Police as a security during the warranty period. Penalty on SLA shall be deducted from the Dues/ PBG.

## 25. Inspection/Tests of the Equipment

- A. The inspection of the equipment may be carried out by Technical Services Wing of Punjab Police who shall have the power to inspect/verify the equipment supplied as per the supply order at any time before, during or after commissioning and to reject the same or any part or portion, in case of non-compliance of the supply order/contract specifications.
- B. The inspection of the stores to be supplied under this supply order shall be carried out at destination or any other place to be specified in the supply order/contract.
- C. Selected bidder shall neither claim nor be entitled to payment for any damage that rejected supplies may suffer from any harm whatsoever incidental to a full and proper inspection of such supplies.
- D. Rejected supplies, if any, shall be removed by the selected bidder at their own expense within 10 days after notice has been issued to them of such rejection, and failing such removal of rejected goods, the Technical Services wing of Punjab Police will be at liberty to charge the selected bidder the market rent for the space occupied by such rejected goods.

## 26. Payment Schedule

Sr. No.	Milestone	Payment
1	100% Delivery and Physical Inspection of equipment and successful commissioning.	100% of the contract value (after deducting penalties, if any)

## 27. Invoicing

- A. Invoice along with Delivery Challan in duplicate are to be sent by the selected bidder to the consignee. The duplicate of Delivery Challan will be returned by the respective indenting officers with the quantities or numbers received duly noted and signed thereon to the selected bidder.
- B. The payment shall be released after the inspection/verification of the equipment by Punjab Police and will be subject to the clearance of Bills by concerned Treasury of Punjab Government.

## 28. Sub- Contracting of the order

The selected bidder shall not assign or sublet the contract supply order without prior written approval of Punjab Police.

## 29. Compliance with laws and permits

The selected bidder shall comply with all relevant rules, regulations, ordinances, codes and

laws relating to the work or the conduct thereof and shall secure and pay for any permits and/or licenses necessary for the execution of the work and selected bidder shall be responsible for the same.

### **30. Forfeiture of Earnest Money Deposit and Performance Bank Guarantee**

- A. If the Bidder withdraws his bid before the expiry of validity or after the acceptance of the bid, the Earnest Money Deposited by the bidder will be forfeited.
- B. If the Bidder fails to comply with any of the terms, conditions or requirement of order and the technical specifications as indicated in the Tender document, the Earnest Money deposited by the Bidder will be forfeited.
- C. In case selected bidder fails to comply with the terms and conditions of this Tender then the earnest money deposit and performance bank guarantee will be forfeited.

### **31. Cancellation of Order**

#### **A. In the event of the selected bidder: -**

- (i) Failing to fulfil the order, or
- (ii) commit breach of any terms and conditions of this contract/supply order, or
- (iii) found repeatedly supplying goods liable to rejection hereunder, or
- (iv) failing, declining, neglecting or delaying to comply with any demand or requisition or otherwise not executing the same in accordance with terms of this contract/supply order, or
- (v) the bidder or their agent or servants being guilty of fraud in respect of this contract, or
- (vi) bidder and/or any of their partners or representatives found promising or offering any bribe or any pecuniary benefit or otherwise to any official/person connected with this Tender, or
- (vii) the bidder or any of their partners become insolvent or apply for relief as insolvent debtor or commence any insolvency proceedings or make any composition with their creditors or attempt to do so,

Punjab Police shall be at liberty to cancel the supply order forthwith, to blacklist the bidder, to reclaim all or part of the money paid to the bidder and to initiate any criminal/civil proceedings against the bidder and/or their partners.

- B. During the currency of execution of this supply order, if the selected bidder becomes bankrupt or otherwise insolvent or is likely to become insolvent or bankrupt, Punjab Police may, at any time, cancel the order by giving written notice to the selected bidder. Notwithstanding anything above, such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to Punjab Police.

### **32. Consequences of Cancellation of Order**

- A. Upon cancellation of order, the selected bidder shall deliver or cause to be delivered all data and records required from or on account of the Technical Services wing of Punjab

Police.

- B. Cancellation of order shall not affect any continuing obligations of the selected bidder under this Contract, which, either expressly or by necessary implication, are to survive its expiry or termination, such as but not limited to confidentiality obligations of the selected bidder.
- C. Upon cancellation of order for any reason whatsoever, the selected bidder shall return any and all confidential information and any other property of Punjab Police to the Technical Services Wing of Punjab Police.
- D. Punjab Police may procure product/ services similar to those undelivered, upon such terms and in such manner, as they deem appropriate, at the risk and responsibility of the selected bidder and the selected bidder shall be liable for any additional costs for such services.
- E. The selected bidder shall continue the performance of the contract/ supply order to the extent of not being terminated.
- F. Upon cancellation of contract/ supply order for reasons whatsoever, Punjab Police shall have the right to impose any or all of the following penalties: -
  - (i) Forfeiture of Earnest Money deposited
  - (ii) Forfeiture of PBG
  - (iii) Black listing of the bidder
  - (iv) Initiation of civil/criminal proceedings as the case may be
  - (v) Any other penalty as deemed appropriate

### **33. Force Majeure**

If the selected bidder is prevented from performing any of its services under the Contract Agreement due to causes such as fire, Acts of God, or elements, embargoes, governmental orders, the selected bidder shall be excused from the non-performance of its obligations during the period that such cause continues to exist, but if such cause continues to exist and prevents performance by the selected bidder of its obligations for more than 60 days, ADGP/Technical Services Wing of Punjab Police may terminate the Contract Agreement in whole or part thereof effective upon delivery to the selected bidder of written notice of such termination. Upon termination of the Contract Agreement under this Section, the provisions regarding consequences of cancellation set out in this Tender here in before shall apply.

### **34. Dispute resolution mechanism**

The Bidder and the Purchaser shall endeavor their best to amicably settle all disputes arising out of or in connection with the Contract in the following manner:

- a) The Party raising a dispute shall address to the other Party a notice requesting an amicable settlement of the dispute within seven (7) days of receipt of the notice.
- b) The matter will be referred for negotiation between Nodal Officer of Purchaser or the Purchaser and the Authorized Official of the System Integrator. The matter shall then be resolved between them and the agreed course of action documented within a further period of 15 days.

In case of any dispute between the Parties and which does not settle by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration and such dispute may be submitted by either party for arbitration within 20 days of the failure of negotiations. Arbitration shall be held in Chandigarh and conducted in accordance with the provisions of Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Each Party to the dispute shall appoint one arbitrator each and the two arbitrators shall jointly appoint the third or the presiding arbitrator.

The "Arbitration Notice" should accurately set out the disputes between the parties, the intention of the aggrieved party to refer such disputes to arbitration as provided herein, the name of the person it seeks to appoint as an arbitrator with a request to the other party to appoint its arbitrator within 45 days from receipt of the notice. All notices by one party to the other in connection with the arbitration shall be in writing and be made as provided in this tender document.

The arbitrators shall hold their sittings at Chandigarh. The arbitration proceedings shall be conducted in English language. Subject to the above, the courts of law at Chandigarh alone shall have the jurisdiction in respect of all matters connected with the Contract/ Agreement even though other Courts in India may also have similar jurisdictions. The arbitration award shall be final, conclusive and binding upon the Parties and judgment may be entered thereon, upon the application of either party to a court of competent jurisdiction. Each Party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the Parties unless the award otherwise provides. The Bidder shall not be entitled to suspend the Service/s or the completion of the job, pending resolution of any dispute between the Parties and shall continue to render the Service/s in accordance with the provisions of the Contract/Agreement notwithstanding the existence of any dispute between the Parties or the subsistence of any arbitration or other proceedings.

### **35. Acquaintance with all conditions**

The bidder should acknowledge that they have made themselves fully acquainted with all the conditions and circumstances under which the supplies required under the contract will have to be made or furnished and with all the terms, clauses, conditions, specifications and other details of the contract and the bidder shall not plead ignorance of any of those as excuse in case of complaint against or on rejection of supplies tendered by them or with a view either to asking for encashment of any rates agreed to in the contract or to evading any of their obligations under the contract.

**Annexure-A**

1	<b>Smart safe (Electro Static discharge ESD) shockproof workstation</b>	
	<b>Parameter</b>	<b>Specification</b>
a	Design	1. Modular in design for easy assembly and dismantling with scope for future upgrade. 2. Strong, sturdy and durable. 3. The table frame should be made of aluminium profile for better strength and complete grounding. the frame should provide grounding path for static charges to the ESD floor though levellers. 4. Overall table dimensions: 1600mm (L) x 850mm (D) x 1500mm (H) & working height 780mm. 5. The vendor should provide along with the quote a design/drawing in three views of the table proposed to be supplied capturing all the specification requirements, without any major deviations. Minor changes if any required at the time of execution should be accommodated by the qualified vendor.
b	Work top	ESD Safe Platform. Dimension :- Aluminum table - 1600mm (L) x 850mm (D) x 1500mm (H) & working height 780mm. 4 pieces of aluminum Leg profile- 100x100 mm Right angle profile 28.4 mm thick ergo line, Volume conductive ESD work top with front edges rounded by 50 mm 40 X 40 mm heavy duty table frame made of aluminum Completely grounded with special set of screws
c	Frame	1. Aluminium frame/leg profiles for complete ESD properties. The frame should be able to discharge static charges generated on the external surface of the frame. The frame should be designed to be sturdy enough to carry the weight requirements of the complete table.
d	6U Instrument Rack	6U Instrument Rack 6U Instrument Rack of 500mm depth for instrument integration

e	Electrical fittings	<p>1) Electrical raceway – For mounting switches, socket and safety device and should have chamber for media guidance. Mounted at 45 degrees for ergonomic integration of devices</p> <p>a) 32A MCB.  b) Tube light ON/OFF switch.  c) 15 numbers of 6/15A combined universal socket &amp; switch.  d) 3 core, 2.5 sq. mm mains cord, as per site requirements with 15 amp plug to connect to external power socket.</p> <p>2) Overhead lighting – Two 20W LED tube light with reflector. The tube lights should be fixed on an adjustable extended arm at a height of 1500mm from ground level.</p>
f	Safety	<p>MCB  Safety &amp; switch module single phase  Consists of 2 Pole Single phase MCB</p>
g	Socket module	<p>Socket module  4x 2 Socket module with switch &amp; 2x 1 Socket module with switch for mounting power sockets</p>
h	ESD properties and Testing	<p>1. All static dissipative materials/surfaces should have surface resistivity in the range of <math>1 \times 10^5</math> to <math>1 \times 10^9</math> Ohms/sq and all conductive in the range of <math>1 \times 10^3</math> to <math>1 \times 10^5</math> Ohms/sq.</p> <p>2. Resistance to groundable point should be in the range of <math>1 \times 10^6</math> to <math>1 \times 10^9</math> ohms.</p> <p>3. The measurements of surface resistivity and surface to ground resistance should be carried out as per ANSI / ESD S4.1 standards and test certificate should be provided. The readings should satisfy the norms set in ESD standards ANSI/ESD-S 20.20-2014. The product shall also comply to IEC 61340 ESD standard and TUV certificate should be provided for the same.</p> <p>4. The ESD parameters also needs to be measured at the end of the warranty period &amp; should be as per the standard.</p>

	Other requirements	<p>1. The OEM should be ISO certified.</p> <p>2. The qualified vendor should be ready to provide a sample of the ESD wood, aluminium frame (Min 1 feet length) etc and demonstrate the ESD properties as and when demanded during the execution of the order.</p> <p>3. The qualified vendor shall demonstrate a sample model of the table at customer site. After satisfactory evaluation remaining order shall be executed. The sample model should fulfil all the requirements as detailed in the specifications. Minor changes in dimension or other accessories shall be incorporated in the balance quantity.</p> <p>4. Table to table continuous cable routing and interconnecting of adjacent tables should be carried out aesthetically by the vendor. The necessary accessories for cable routing needs to be provided by the vendor.</p>
i	Warranty	Minimum 1-year mandatory from date of installation and acceptance of the ESD workstation
j	Instrument Integration	Instrument Integration Instrument Integration:- Oscilloscope, DMM, Function Generator & DC Power Supply
k	Access Control System	Instrument i.e Oscilloscope, DMM, Function Generator & DC Power Supply should control through Path Wave test software by which instruments configure, control, and monitor multiple bench instruments from a single screen automate workflows from test set up to report generation access lab instruments remotely with your peers, to test, analyze, and share manage an entire lab through a single screen interface
<b>2</b>	<b>Table Top Digital Multi-meter</b>	
	Ø Digital multi-meter should have benchtop form factor with more than 10 input measurement capability includes: DC voltage, DC current, true RMS AC voltage, AC Current, two- and four-wire resistance, frequency, continuity, diode test, temperature, and capacitance.	
	<b>Parameter</b>	<b>Specifications</b>
	Voltage	DC Voltage: 100mV to 1000V AC Voltage: 100mV to 750V
	Current	DC Current: 10mA to 3 A AC Current: 10mA to 3 A
	Resistance	2 – Wire & 4 – Wire Resistance: 100Ω to 100 MΩ
	Capacitance	1 nF to 10mF
	Frequency & Period	20Hz to 300KHz
	Continuity & Diode	Yes, 1V
	Max. Reading Rate	110 rdgs/s
	Memory	Standard 5000 reading,

	Temperature	Thermistor
	Display	7inch dual-measurement color display
	Interface	USB, LAN with compatible software to connect and control the instrument and to build custom test sequence with the integrated test flow app to automate and visualize test result, perform unrestricted data logging and statistical analysis
	Warranty	Should have standard 3 Years warranty
	Manufacture should have its own NABL accredited service center and calibration lab in India.	
<b>3</b>	<b>Oscilloscope</b>	
	Parameter	Specification
	Bandwidth	50 MHz
	Number of Channel	2 Analog Channel
	Maximum Sample Rate	1 GSa/s on all Channels
	Time Base Range	5ns/div to 50 sec/div
	Time base accuracy	50 ppm or higher
	Memory Depth	200kpts or higher
	Waveform update Rate	≥ 100,000 or higher
	Vertical Sensitivity	500μV/Div to 10 V/div
	Vertical Resolution	8 Bits
	Display	≥7 inch
	PC Interface	USB and LAN Interface with compatible software to connect and control the instrument and to build custom test sequence with the integrated test flow app to automate and visualize test result without the need for instrument programming.
	USB and LAN Interface with compatible software to connect and control the instrument and to build custom test sequence with the integrated test flow app to automate and visualize test result without the need for instrument programming.	
<b>4</b>	<b>Function Generator</b>	
	Number of channels	2
	Frequency Range	Sine: 1 μHz to 20 MHz with resolution of 1μHz Square & Pulse: 1 μHz to 20 MHz with resolution of 1μHz.
	Standard waveforms	Sine, square, ramp, pulse, triangle, Gaussian noise, pseudorandom binary sequence (PRBS), DC.
	Built-in arbitrary	Cardiac, exponential fall, exponential rise, Gaussian pulse, haversine, Lorentz, D-Lorentz, negative ramp, sinc.
	Amplitude range	1 mVpp to 10 Vpp into 50 Ω, 4-digit resolution 2 mVpp to 20 Vpp into open circuit, 4-digit resolution.
	Resolution	16 Bit



	Modulation types	Amplitude modulation (AM), frequency modulation (FM), phase modulation (PM), frequency shift keying (FSK), binary phase shift keying (BPSK), pulse width modulation (PWM).
	Resolution and sampling rate	16 bits/250 MSa/s
	Sweep	Linear, Logarithmic and frequency list
	Display	Large 7inch WVGA color display for a simultaneous parameter set up, signal viewing
	Interface	USB, LAN with compatible PC software makes it simple to connect and control your function generators, load custom arbitrary waveforms from files.
	Manufacture should have its own NABL accredited service centre and calibration lab in India.	
5	<b>0 to 30 Volt Power Supply</b>	
	Parameter	Specifications
	Number of Output	3
	DC power Output (Watt)	90W
	Output Voltage Range For DC Power Supply (V)	0 to 6V 5A 0 to 30V,1A 0 to 30V ,1A
	Load and Line Regulation	Voltage: < 0.01% + 2 mV Current: < 0.2% + 10 mA
	Programming accuracy	Voltage: 0.1% + 5 mV at 5V/0.05% + 10 mV at 30V Current: 0.1% + 10 mA at 5A/0.2% + 5 mA at 1A
	Readback accuracy	Voltage: 0.1% + 5 mV at 5V/0.05% + 10 mV at 30V Current: 0.1% + 10 mA at 5A/0.2% + 5 mA at 1A
	Load transient recovery time	<50 uS
	Output ripple and noise (20 Hz to 20 MHz) Normal Mode Voltage	<1mVrms/5mVpp
	Output ripple and noise (20 Hz to 20 MHz) Normal Mode Current	< 4 mArms
	Display	7-inch large WVGA color display to display the voltage and current for all three channels with different views.
	Interface	USB, LAN with compatible PC software makes it simple to connect and control, See measurement value in voltage, current, power and output status. Use the intuitive output limit-setting and control. Log data, capture screenshots, and save a system's current state. Export measurement data in the desired format quickly
	Individual knobs for voltage and current	

