

POLICE



DEPARTMENT

No. C1-8656/2024/FSL

Forensic Science Laboratory,
Thiruvananthapuram

✉ dirfsl.pol@kerala.gov.in

☎ 04712721533

Dated. 26-10-2024

The Director, Forensic Science Laboratory, Kerala Police Department, Government of Kerala invites online bids from reputed manufacturers/ authorized dealers or reputed vendors for the "Purchase of Two Nos of Advanced Video Spectral Comparator (VSC) for Forensic Science Laboratory and Regional Forensic Science Laboratories". The bidders should comply with the following general conditions in addition to the additional conditions of the instant tender.

Tender No. & Date	08/24-25 dated 24/10/24
Item	Advanced Video Spectral Comparator (VSC)
Quantity	02
Estimated Amount	130,00,000/-
Tender Fees	22,425+GST
Earnest Money Deposit	1,30,000/-
Date and time of publication of e- Tender	24/10/24,3.00PM
Date of submission of e-Tender	24/10/24,3.00PM
Last date and time for online submission of e-tender	11/11/24,3.00PM
Date and time of opening of e- Tender	12/11/24,3.00PM
Place of opening	Forensic Science Laboratory, Thiruvananthapuram
Bid Validity (Total Number of Days up to which the rates are to be firm)	365
Address of Tender Inviting Authority	Forensic Science Laboratory, Kerala, Vazhuthacaud, Thiruvananthapuram - 695010 Ph: 04712721533 e - m a i l : dirfsl.pol@kerala@gov.in Website: www.keralapolice.gov.in

Terms & conditions

1. The supplier should quote the price valid for a period of one year.
2. If the authorized distributor is supplying the items, the Manufacturer/ Principal Company has to submit an authorization letter for the dealer/authorized distributor.



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3. All the quotations are to be enclosed with maximum discount.
4. The purchases are for Forensic Science Laboratory and Regional Forensic Science Laboratories
5. Delivery of the consignment should be made at on the places mentioned in the supply order
6. If the company is dealing with perishable goods, which require Cold Chain Management the delivery should be prompt. If any damages occur the supplier will be responsible for its replacement.
7. Penalty will be imposed on delay in delivery as per the existing rules.
8. In case of purchase of goods viz., consumables, disposables, etc the contractual obligations should be considered as completed when supply is done and the items are inspected and accepted by the Institute.
9. For all supplies above Rs.1 Lakh, the successful tenderer should furnish a Performance Bank Guarantee/ Security Deposit @ 5% of the total assignment (purchase order value) in the form of Fixed Deposit or Bank Guarantee from a Commercial Bank which should be valid for a period of 60 days beyond completion of all contractual obligation of the supplier including warranty (if any).
10. Payment mode is through online after acceptance of goods in good condition at the places mentioned in the supply order.
11. For all ordered goods, Insurance/ liability may be upto the supplier only.
12. If the quote is not according to the above terms and conditions, the same will be summarily rejected

General Condition

1. The Bidder should be a reputed Original Equipment Manufacturers (OEM) or authorized dealer of OEM, who is having an Authorization Certificate from the OEM to participate in the tender floated by Kerala Police. Certificate from the OEM for sales and service, to be produced.
2. One bidder cannot represent two suppliers/ OEMs or quotes on their behalf in a particular tender
3. The OEM/ Bidder should have a well equipped service centre functioning in India (preferably in Kerala) to cater to immediately after sales requirement; copy of Service Centre details must be enclosed along with Tender document. (Preferably bidder should have a Service Centre in Kerala/South India).
4. A reputed vendor can participate in the tender provided the vending outfit is functioning in the market for at least 10 years.
5. The Bidder should have valid GST registration. Copy of GST registration certificate should be enclosed along with the tender.
6. The bidder should have valid PAN/Taxation Index Number. Copy of PAN/Taxation Index Number allocation letter should be enclosed along with the tender.
7. The Bidder must fulfill the following minimum qualification criteria to prove the techno-commercial competence and submit the documents in support thereof
 1. Valid Authorization letter from the OEM to attend this particular Tender.
 2. Certificate of Registration/Incorporation Certificate of the Bidder.
 3. Last 3 year's financial status of the Bidder's/P&L and Balance Sheet/audit report of last 3 years.
 4. The bidder (authorized dealer/distributor) should have the dealership/distributionship for at least 3 (three) continuous consecutive years with the OEM.
 5. The Bidder has to submit a Warranty Certificate along with invoices.
 6. In case of a proprietary item, a certificate by the OEM to be attached
1. Mode of submission of bids: - Online. All Bid documents shall be submitted only in online procedure through the e-GP website www.etenders.kerala.gov.in in their



designated online covers. Details of covers are given separately. No other mode of submission shall be accepted and such tenders will be rejected outright.

2. Cover details: - No. of covers - 2. Technical Bid cum and Financial Bid. In the case of Foreign Equipments, the rate must be quoted in Indian Rupees. The

documents to be uploaded under each online covers are specified in the website.

3. Downloading of e-Tender documents: - The tender document can be downloaded from the e- GP website www.etenders.kerala.gov.in from the date and time of publication of e-tender onwards to last date and time for online submission of e - tender. Downloading of tender documents will not be possible after the date specified above.

4. Submission of e-Tender documents: - The digitally signed tender document and other specified documents shall be submitted online through the e-GP website www.etenders.kerala.gov.in well in advance before the last date and time mentioned above. No submission shall be allowed after the last date mentioned above.

5. Payment of Tender Fees: - A non-refundable tender fee shall be paid in online mode through the e-GP website www.etenders.kerala.gov.in at the time of bid

submission. No other mode of payment shall be accepted. The tenders of bidders who do not remit fees through online will be rejected outright.

6. Payment of Earnest Money Deposit (EMD): - The EMD shall be paid in online mode through the e-GP website www.etenders.kerala.gov.in at the time of bid submission. No other mode of remittance shall be accepted.

7. Exemption from payment of EMD: - Bidders who are registered with Store Purchase Department, Kerala or National Small Scale Industries Corporation Ltd., New Delhi (for the items tendered) are exempted from submission of EMD. Those bidders claiming exemption shall submit valid registration certificate from the SPD, Kerala or NSSIC, New Delhi.

8. Tenders of bidders who do not remit EMD online or do not upload documental proof (digitally signed) for exemption of EMD will be rejected outright.

9. Withdrawal and re-submission of e-Tender: - The Bidders are at liberty to withdraw the submitted tender/documents and to submit fresh tender/documents till the last date and time of submission of the e-Tender after which withdrawal/re-submission will not be allowed. www.etenders.kerala.gov.in at the Forensic Science Laboratory, Police Headquarters, Vazhuthacaud, Thiruvananthapuram on the date and time mentioned above in the presence of the Bidders/ authorized representatives who wish to attend at the above address. If the tender opening date happens to be a holiday or non- working day due to any valid reason, the tender opening process will be done on the next working day at the same time and place

specified. Any change in the opening date/time/venue due to other reasons shall be informed by way of Corrigendum published in the e- GP website. The Technical Bids will be evaluated by a Technical Evaluation Committee and those that do not conform to the specifications or to the satisfaction of the Committee will be rejected. The financial bids of the Technically qualified Tenderers only will be considered for opening. The date of opening of financial Bids will be intimated to the concerned technically qualified tenderers, over phone/Fax/e- mail. This will be with in 7 to 10 days of evaluation of technical bid.

10. Technical Evaluation: - All tenderers who quote for the supply of above equipment are required to be ready for live demonstration on technical evaluation time. Date and place will be informed later

11. All Bidders who participates in e-tender should produce hard copies of all relevant documents related to e tender at the time of technical evaluation, without fail

12. Note to Bidders:

i. Bidders have to procure legally valid Digital Certificate (Class III) as per Information Technology Act, 2000 for digitally signing their electronic bids. Bidders can procure the same from any of the website www.etenders.kerala.gov.in.

ii. Bidders are advised to note the Tender_Id and Tender No. & Date for future reference.



iii. All uploaded documents should contain the signature and the office seal of the bidder/ authorized persons and should be digitally signed while uploading. Documents uploaded without digitally signing shall entitle rejection of the tender.

iv. In the case of Foreign Equipments, the rate should be quoted in Indian Rupees. C1-8656/2024/FSLf6565e Preference will be given to those who are ready to supply the item without opening Letter of Credit. Ordinarily, non advance payment will be made for procuring the above item. In case advance payment has to be made, a clear case has to be made out by the Tenderer. However this will be only on extraordinary circumstances.

1. For obtaining Digital Signature Certificate and help on e-tendering process, contact Kerala State IT Mission, e-Government Procurement PMU & Helpdesk, Basement floor of Pension Treasury 18002337315; e-mail: etendershelp@kerala.gov.in; Website: www.etenders.kerala.gov.in on all government working days from 9:30 am to 5:30 pm.

2. The Director, Forensic Science Laboratory is empowered to reject any tender without assigning any reason. document, please contact Director, FSL, Or Manager FSL, Thiruvananthapuram – 10 on all Government working days from 10:30 am to 5:00 pm. (Ph. No. 0471-2722136)(Ph. No. 0471- 2722155)

Note:

Bidders are advised to go through the conditions in the notice inviting tender and the tender document carefully and comply them to avoid out right rejection of their tender. For any litigation relating to this order, the jurisdiction will be Thiruvananthapuram City.

Specifications of High-Resolution Video Spectral Comparator (HRVSC) for Security and Questioned Document Examination

1. High-Resolution Imaging: Advanced system with a 12-Megapixel or more High-Resolution Color/ IR camera, Spectral Range of 350- 1100nm, over 70x or more Optical Range, and 1x to 10x digital zoom in 1x to 10 steps. Provides up to 300x Total Magnification on a 32" 4K monitor.

2. Field of View: Standard field of view at least 210 x 160 mm; enhanced field of view of 300 x 210 mm for A4-sized paper using stitching with the XY stage.

3. Optical Filters: Includes UV pass, UV cutoff, visible pass filters, and a Motorized Adjustable Linear Polarize Filter for cross-polarized imaging.

4. Imaging Capabilities: Supports Super Resolution - Auto Image Stitching, and High-Resolution Imaging (HRI), producing 130- 140 MP images and HDR images under 365 nm UV.

5. Illumination: Preferably LED-based, with options for High-Power Filament Lamps/Tungsten- Halogen Spotlights or Narrow-band spotlight LEDs for IR examination. Includes Both white and IR floodlights, as well as transmitted spotlights, must utilize High-Power Spot LEDs and Flood LED Arrays.

6. IR Luminescence Examination: Supports IR examination with either High-pass, Low-pass, and Band-pass excitation filters for Halogen Spotlights (or) Optically pre-filled LEDs with high-pass emission filters, offering over 250 light combinations. It must cover the entire standard field of view of at least 200 x 150 mm and ensure continuous operation of all light sources for at least 5 hours without requiring cooling

7. Incident Light: The system must include LEDs with fixed White and IRC1-8656/2024/FSLf6565e illumination. It must feature a selectable module for wavebands ranging from 600

nm to 1000 nm, Oblique side lights must feature both white and IR LEDs, featuring programmable variable angle steps for automated adjustment.

8. Light Sources: Includes UVA (400 nm & 365 nm), UVB (312/313 nm), and UVC (254 nm) light sources with safety interlocks for UVB and UVC operation.

9. XY Stage: Software-controlled motorized XY stage with 0.01 mm precision and a travel range of at least 70x45 mm or more travel range. Can be fixed or removable for high performance- positioning. (Optional module)

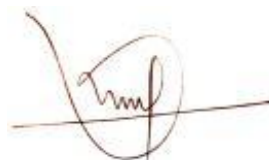


10. Hyper Spectral Imaging (HSI): Module with a wavelength range of 400 nm to 1000 nm or more, adjustable in 1 to 99 nm increments. Provides spectra for any point instantly and captures >100 image cubes in under 3 minutes with 5 nm incremental steps.
11. Micro spectrometer: integrated high precision grating-type micro spectrometer for real-time measurement of Absorption, Reflectance, Transmission, and Fluorescence Spectra. Should have a Spectral Range from 350 nm to 1000 nm. with a spectral resolution of 0.5 nm to 2.5 nm, should include D50 LED) and Halogen lamp as illuminates.
12. Spectroscopy Software: Includes color measurement capabilities (lab. values). chromaticity charts. dominant wavelength, color purity, complementary color, R1%, XY zoom controls, intensity selection points, and Report Generation.
13. Other Examination Modules: includes coaxial retro reflective module.
14. OVD Analysis: Examines OVD, DOVD, Holograms. and Kinegrams with at least 40 LEDs for Horizontal and Vertical illumination. Includes software for Animation and Generalized image for comparison with questioned OVDs.
15. Optical Variable Ink Viewer: Mirror accessory for simultaneous viewing optical variable inks.
16. Latent Imaging: Latent Scrambled imaging module with Block and for capturing multiple images under controlled illumination (white and IR LEDs)
17. 3D Imaging Module: Essential inbuilt 3D Imaging Module for capturing multiple images under controlled illumination (white and LEDs), allowing for detailed surface topography and Precise Virtual Measurements. Supports Color Maps, Invert, image Rotation, and enhancement of indentions and raised features.
18. RFID and Document Processing: Should have an integrated RFID chip reader for e-passport processing compliant with ICAO standards. BIS & BSI certified. Includes IPI Decoder module, OCR, MRZ processing, and Barcode reading for 1D, 2D and QR formats.
19. Calibration Function: System should generate calibration certificate or reports using a NIST traceable wavelength calibration light source and including white reference plates, UV color & color standards and other relevant calibration standards. Features automated diagnostics for motors, light sources, filters and halogen lamp life, with failure detection and on-screen/diagnostic profile reports in PDF. Annual calibration by an OEM trained engineer in compliance with NABL standard is required.
20. Reference Ink Standards: Includes standards for UV 400 nm, UV 365 nm, UV 313 nm, UV 254 nm, 980nm Anti-Stokes, Hologram, Phosphorescent Ink, Iridescent Ink. metameric Inks. IR luminescent Inks, IR fluorescent Ink. Optical Variable Inks (OVI), and Polarization Ink E, t c.,
21. Reference Database: Lifetime license for a database covering bank notes, Coins, and Passports, VISAs from over 200 countries. Includes free updates during the warranty period, with an optional subscription for continued updates.
22. Macro and Script Automation: The system includes versatile tools for document examination and allows the creation of custom workspace or unlimited programmable macros, enabling the automation and restoration of image capture parameters across all illumination modes"
23. Software Features: Covers all QDE applications with lifetime support for free updates. includes image storage, retrieval, and recording, with features such as quick parameter restoration, advanced superimposition, live video comparison, macro programmability, super resolution, multi-focus, glare compensation, automation, measurement tools, image annotation and enhancement, and full-screen video recording.
24. Computer System and examination accessories: Includes a latest-generation computer system with i7 10th or latest Gen, 16GB RAM, 1TB HDD, Integrated or Dedicated graphics with dual Monitor Support, wireless Keyboard & Mouse, 32" 4K UHD Monitor and a compatible color laser printer with scanner, compatible UPS with 4 Hours Power Backup, an external hard disk with a minimum capacity of 2 TB for continuous data backup to ensure secure reliable storage. Quartz glass holding plate



continuous data backup to ensure secure remote storage, dual 12-gauge fireproofing plates and paper weights to keep examination documents flat during analysis and a suitable ambiance of the installation of instrument including a heavy duty working table (6 x 3 feet). and a revolving c1-rair.

25. Warranty and Support: Includes minimum 2 -year warranty on-site operational training at the consignee's site post installation, and remote desktop support for uninterrupted operation and additional technical assistance.



PRADEEP SAJI K
Director FSL



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