



KERALA STATE ROAD TRANSPORT CORPORATION
TRANSPORT BHAVAN, FORT, THIRUVANANTHAPURAM-695 023

Telephone No: 0471-2471011, (Extn: 303)

E-mail: sr@kerala.gov.in, Web: www.keralartc.com,

TENDER No. **S001-SRA05/65/2025- Store KSRTC-HQ**

Dtd: **04.04.2025**

NOTICE INVITING TENDER (e-Tender)

For the Supply, Installation and Commissioning of Dash Board Cameras with Driver fatigue detection Sensor camera in KSRTC Buses

TECHNICAL & COMMERCIAL BID

I. Tender in brief:-

Tenders in two bid system are invited from the manufacturers or their authorised dealers for the supply, installation and commissioning of Dash Board Cameras with Driver fatigue detection Sensor camera in KSRTC Buses with warranty and AMC. There shall not be more than one brand offer in tender. Offering more than one brand /type shall make the bid invalid.

a	Tender No. & Date	SRA05/65/2025 ; 04.04.2025
b	Item, Quantity & Specifications	Supply, installation and commissioning of Dash Board Camera with Driver fatigue detection Sensor camera in KSRTC Buses } : 4000 Nos. Warranty : 2 (Two) Years (minimum) from the date of Commissioning AMC : 3 (Three) Years after warranty period For detailed specification see Appendix - I of NIT
c	Sample	Arrange supply and installation of offered make and model of Dash Board Cameras with Driver fatigue detection Sensor camera as per specification in one Bus for sample evaluation as and when informed from this end.
d	Pre bid Meeting	Through video conference
e	Place of Tender Opening	Kerala State Road Transport Corporation, Transport Bhavan, Fort, Thiruvananthapuram.
f	Tender Fee (Non Refundable)	Rs.28000/- (Rs.25000/- + GST @ 12% extra) (Rupees Twenty Eight Thousand only)
g	Earnest Money deposit. (EMD) EMD Exemption NOT allowed.	Rs.5,00,000/- (Rupees Five Lakh only)
h	Mode of Payment of EMD & Tender Fee	Online through SBI Internet Banking/NEFT through e-procurement portal. EMD & Tender Fee should be remitted as a single transaction. Split payment is not allowed.
i	Mode of Submission of Tender	Tender should be submitted online through e-GP website www.etenders.kerala.gov.in
j	Contact address/ Telephone nos. for help in case of any doubt in e-tendering process (Help desk)	Kerala State IT Mission, e-Government procurement PMU & Help desk, Saankethika, Near EPF Office, Vrindavan Gardens, Pattom, Thiruvananthapuram. - 695004 Ph: 0471 - 2577088, 2577188; Toll free No.18002337315; e-mail: etendershelp@kerala.gov.in Website: www.etenders.kerala.gov.in
k	Tender inviting Authority	Chairman & Managing Director, Kerala State Road Transport Corporation, Transport Bhavan, East Fort, Thiruvananthapuram - 695023

II. Scope of the Contract

KSRTC invited tender for the supply, installation and commissioning of Dash Board Cameras with Driver fatigue detection Sensor camera in KSRTC Buses to ensure the safety of passengers especially women's and children's and to monitor the accidents.

The successful bidder shall arrange supply installation and satisfactory working of Dash Board Cameras with Driver fatigue detection Sensor camera in KSRTC Buses as per the schedule given from KSRTC.

The bidder shall offer warranty of minimum two years and shall provide AMC for 3 years after the expiry of warranty period.

III. Specific conditions of the Contract

Supply, installation and satisfactory working of Dash Board Camera with Driver fatigue detection Sensor camera in KSRTC Buses shall be ensured by the contractor.

- a. The successful bidder should be willing to provide 2 year comprehensive onsite warranty and 3 year Annual Maintenance Contract for the Dash Board Camera with Driver fatigue detection Sensor camera in KSRTC Buses after warranty period of two years. Any labour / material cost required during warranty /AMC period for ensuring the working of the Dash Board Camera with Driver fatigue detection Sensor camera in KSRTC Buses should be borne by the supplier. The Annual Maintenance Contract should start on expiry of warranty period. The supplier should furnish the AMC rate upto 5th year in BOQ portion of the tender.
- b. The supplier can inspect the Dash Board Camera and detection Sensor camera fitted in KSRTC Buses as and when required, for ensuring the smooth functioning of the system during warranty and AMC period. The successful bidder shall have to obtain necessary approval from the authority concerned for installation and commissioning of Dash Board Camera in buses, if required.
- c. Any statutory requirement on functioning of the Dash Board Cameras with Driver fatigue detection Sensor camera in KSRTC Buses during warranty and AMC period should be obtained / complied by the successful bidder.
- d. Successful bidder should be able to start the supply and installation of Dash Board Cameras with Driver fatigue detection Sensor camera in Buses within 5 days from the date of purchase order.
- e. All the devices including the accessories supplied should carry comprehensive warranty for a period of two years. On expiration of the comprehensive warranty period, the contractor should provide Annual maintenance contract for three

- years. The Annual Maintenance Contract (AMC) is inclusive of maintenance, repairs and replacement of all components.
- f. The Annual Maintenance Contract (AMC) is otherwise an extended warranty. All the terms and conditions agreed by the contractor for executing the comprehensive warranty of the devices shall be extended during the period of AMC, only difference being the payment of AMC charges is absent during the period of comprehensive warranty.
- g. The offered Annual maintenance contract (AMC) includes
- i. The cost of labour for all repairs/ and all spares required for replacement during repairs should be borne by the contractor.
 - ii. The contractor shall attend any number of brake down/repair calls as and when informed by the Purchaser/ custodian of the equipment.
 - iii. Minimum 95% uptime of the device should be ensured by the contractor for successful completion of AMC period.
- h. Failure to attend the repairs in time or failure to replace the defective equipments or to provide stand by equipment if the fault/down time exceeds the stipulated period or to ensure the stipulated up-time in an year shall lead to impose of penalty.
- i. In case of any complaint to the Camera device, the contractor should attend within 48hrs and replace/ repair the unit.
 - ii. The faulty device should be repaired and replaced within 4 days
 - iii. If the service level is not maintained a penalty of 5% of AMC charge for the device per day for each day above 48 hours. If the contractor failed to repair the faulty device within 4 days, 5% of AMC charge for the device for each day shall be liable to pay. The maximum Penalty is capped @ 50% of AMC Charge.
 - iv. If the Contractor fails to repair any failures of system within 15 days from the date of reporting the issue, KSRTC reserves the authority to decide the further course of action.
- i. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy service) or works (including turnkey projects) only if the bidder is registered with the Competent Authority, specified in Annexure I

(Declaration certificate for procurement of Goods and services as per Order No. F.7/10/2021-PPD (1)) dtd: 23.02.2023.

Annual Maintenance Contract (AMC):

Bidder should furnish rates for AMC charges in the BOQ portion of the e-tender. KSRTC will examine the feasibility of the AMC rates and necessity of AMC and decide whether the purchase order is to be given with AMC or without AMC. In case, KSRTC found that AMC is not necessary, then no orders for AMC will be given. For such instants, successful bidder should supply the Camera unit with 2 year warranty only. The Annual 50% of AMC charge per year will be made after completing six month from the date of starting the AMC contract and balance 50% AMC charge will be made after completing one year. The AMC payment will be made only if the Camera with driver detection system is working satisfactory in buses.

The contractor shall execute separate agreement and furnish performance security @5% of highest AMC charge per year offered for the due fulfilment of the Annual Maintenance Contract.

Training:-

Successful bidder shall provide training to the employees of the Corporation about the working of the Dash Board Cameras with Driver fatigue detection Sensor camera.

IV. Pre Qualification Criteria

1. The bidder should either be a manufacturer or an authorised dealer of a manufacturer for the supply of Dash Board Camera with Driver fatigue detection Sensor camera.
2. The bidder / its Original Equipment Manufacturer should have a past experience of at least 3 years in the field of supply, installation and commissioning of Dash Board Camera.
3. The bidder should have annual turn over of atleast Rs.50 Lakh per each year for the last three financial years (2021 – 2022, 2022 – 2023, 2023 – 2024).
4. Bidder should have GST Registration.
5. The bidder shall have service support facility in Kerala, as such details shall be furnished.

V. General Conditions of the contract

1. Bidders should remit the required Tender Fee and Earnest Money Deposit (EMD) in 'Online mode' through SBI/NEFT, as per 1(f) and 1(g) of the Notice

Inviting Tender. No exemption in the case of EMD and Tender Fee. Bidders should ensure and convince themselves that the online payments made by them have been successfully transferred. KSRTC shall under no circumstances be responsible for failed transaction of the payments due to non-compliance of any online banking procedure and consequent rejection of tender.

2. Firms who have been blacklisted by the Central Government/ any State Government /any State Transport Undertaking will not be considered.
3. The supplier shall arrange supply, installation and commissioning of Dash Board Cameras with Driver fatigue detection Sensor camera in KSRTC Buses.
4. The bidder should offer onsite warranty for a period of 2 Years and 3 years AMC after warranty period.
5. Bidders should be able to start supply and installation of the item within 5 days from the date of purchase order.
6. Firms who supplied Stores of inferior quality or defective materials, which caused non settlement of claim / pending claim of KSRTC will not be considered. In the event, if the party is ready to settle the claim, Chief executive officer /Chairman & Managing Director of Corporation Shall consider the tender of such firm which is solely at his discretion.
7. Rate Firmness:- The quoted rates shall be firm for a period of 12 months from the date of opening of financial bid. No enhancement of rates once accepted will be considered during the contract period.
8. The details such as name of manufacturer, make/brand etc. should be provided in the tender.
9. Tenders of those bidders who do not successfully remit Tender fee and EMD online or do not upload the above mentioned document (digitally signed) will be rejected. The bidders should possess digital signature for uploading the documents.
10. The successful tenderer shall submit an agreement (Appendix – III) in the prescribed format within 15 (fifteen) days from the date of Purchase Order.

Note: The successful bidder shall have to bear all expenses on account of installation and commissioning of Dash Board Camera with Driver fatigue detection Sensor camera in buses available in depots.

VI. Documents to be uploaded in the e-tender Portal

1. The bidder shall upload Scanned copy of Manufacturing Licence in the case of manufacturer or valid Dealership documents in the case of Dealer.

2. The bidder / its Original Equipment Manufacturer should upload the copy of past experience of at least 3 years in the field of supply, installation and commissioning of Dash Board Cameras with Driver fatigue detection Sensor camera in KSRTC Buses.
3. The bidder should have annual turn over of atleast Rs.50 Lakh per each year for the last three financial years (2021 – 2022, 2022 -2023, 2023 – 2024). Please upload ANNEXURE-C after filling all the columns and duly filled, signed and stamped by the bidder certified by Chartered Accountant / Auditors.
4. The bidder should upload the GST Registration Certificate.
5. The bidder should upload the details of service centre facility in Kerala with full address, Phone Number / Toll free number.
6. This Notice Inviting Tender (all pages) duly filled, signed and stamped by the bidder in each page should be scanned and uploaded.
7. Please upload the Technical Data of the offered Dash Board Cameras with Driver fatigue detection Sensor camera.
8. Certificates from competent authority for offered make and model of Dash Board Camera shall be uploaded
9. Certificates from competent authority for offered make and model of Driver fatigue detection Sensor camera shall be uploaded
10. Scanned copy of the details of warranty offered by the manufacturer with **Make and Brand** duly signed and stamped by the bidder with full address and date should be uploaded. There shall not be more than one Brand offer in the tender for one item. Offering more than one Brand for one item will make the bid invalid.
11. Scanned copy of bidder's information in ANNEXURE-A after filling all the columns duly signed and stamped by the bidder should be uploaded.
12. Scanned copy of specification sheet as per Annexure -B shall be duly filled signed and stamped by the bidder with full address and date should be uploaded.
13. The documents to prove the past experience of at least 3 years in the field of supply, installation and commissioning of Dash Board Cameras with Driver fatigue detection Sensor camera. A certificate / proof / Tax Invoice showing the details shall be uploaded along with Annexure - E.
14. Bidders who have been blacklisted by the Tender Inviting Authority or by any State Govt. or Central Government / Organization should not participate in the tenders during the period of blacklisting. An affidavit as per format in

Annexure- D (Anti-Blacklisting Affidavit) should be submitted along with the technical bid.

15. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy service) or works (including turnkey projects) only if the bidder is registered with the Competent Authority, specified in Annexure I (Declaration certificate for procurement of Goods and services as per Order No. F.7/10/2021-PPD (1)) dtd: 23.02.2023. Declaration / documents to comply the above condition shall be uploaded.

VII. Instructions for submitting Financial bid :-

- a) The rates shall be submitted in BOQ portion of the corresponding Tender published in website www.etenders.kerala.gov.in. The Corporation will not pay any other amount. The bidder shall quote the rate for the supply and installation of the Dash Board Camera with all accessories and Driver fatigue detection Sensor camera in one Bus having 2 year warranty and 3 year AMC charge, discounts, GST separately in BoQ as follows.
- i. Basic price for supply and installation of Dash Board Camera with all accessories in one bus including two years warranty.
 - ii. Basic price for supply and installation of Driver fatigue detection Sensor camera with all accessories in one bus including two years warranty.
 - iii. AMC charge for Dash Board Camera with Driver fatigue detection Sensor camera in one bus per year for 3 years. The cost of all consumables and spares required for repair and preventive maintenance during warranty and AMC period shall be borne by the bidder.
- b) The price bid evaluation will not be on the basis of price quoted for the camera alone. A sample calculation is shown in Appendix – II.
- c) The rates shall be submitted in **BOQ/PRICE BID link** available in the e-tender portal available in www.e-tender.kerala.gov.in.
- d) GST amount in Rupees should be calculated exactly and entered in the respective column of BOQ. **In the BOQ the GST is to be mentioned in rupees**, not in %, therefore bidders are requested to upload the rate accordingly.
- e) If the amount of GST is not entered in the respective column of BOQ, such bidders will not be eligible for revised levies declared from time to time.

VIII. TENDER PROCESS:

The tender evaluation will be undertaken in four rounds.

Round 1- Opening of technical bid documents.

Round 2- Evaluation of the technical bid documents.

Round 3- Sample Demonstration

Round 4- Opening of Price Bid.

1. Round 1- Opening of technical bid documents

The documents uploaded shall be opened at the time and date mentioned. The prospective bidders or their authorized representatives can present, if required by them.

2. Round 2 – Document evaluation:- The format for submission of the technical bid as per annexures and submission in any other format or absence of requisite information will lead to rejection of bids in the round 2 evaluation itself. The prospective bidders are advised to submit all information and supporting documents that are required to prove their competency and claims for technical evaluation.

The commercial terms and documents submitted as part of the bids shall be scrutinized by a Bid Evaluation Committee constituted by the Tender Inviting Authority.

The Tender Inviting Authority may call for additional documents/clarifications through e-tender portal.

The list of those who come out of the evaluation of the documents successfully as well as those rejected (with reasons for rejections) will be published on the website of KSRTC (www.keralartc.com) and objections/remarks against the list will be invited. The objections /remarks received before the date and time specified in the notice will be considered by the Tender Inviting Authority and the final list of successful bidders of round 2 will be published.

3. Round 3-Sample Evaluation - The successful bidders in Round 2 evaluation shall have to install the offered make and model of Dash Board Camera with Driver fatigue detection Sensor camera and its accessories in one bus for evaluating the performance for a minimum period of 15 days. Round 3

Evaluation result shall be published after sample evaluation. The objections /remarks received before the date and time specified in the notice will be considered by the concerned committee and the final list of successful bidders of round 3 will be published.

4. Round 4 –Opening of Price Bid.

The bidders who are qualified in round 3 shall be considered for Round -4. The BOQ/PRICE BID of those bidders who do not satisfy even any one of the pre-qualification condition will not be opened.

- IX. **Selection of suppliers:** The selection of suppliers will be made from among the technically qualified bidders who are pre qualified by uploading all the mandatory documents mentioned in the prequalification criteria and qualified in Round-3 evaluation.
- X. Opening of Tender will be done at the time and date mentioned in the e - tender portal at the Office of the Chairman and Managing Director, KSRTC, Transport Bhavan, Fort, Thiruvananthapuram.
- XI. **Payment:-**
- i. 90% of the agreed price of the device shall be made within 30 days of supply, installation and satisfactory working of Dash Board Camera with all accessories and Driver fatigue detection Sensor camera in buses.
 - ii. 10% of the balance of agreed price of device shall be made after 90 days from the date of installation and its satisfactory working of camera in buses.
- XII. **Liquidated damages for non supply and performance:-** The successful bidders shall supply the ordered quantity of materials as per the delivery schedule given by KSRTC. If materials are not supplied as per supply schedule given by KSRTC, liquidated damages will be realised from the supplier at the rate of 0.5% of the Cost of item per week for each week or part there of, up to a maximum deduction of 10% of the Contract prices and there after the Corporation will consider the termination of the contract at the risk and cost of the contractor.
- XIII. **Earnest Money Deposit:-** The EMD will not carry any interest. The EMD will be forfeited if the successful Bidders fail to execute agreement and furnish Security deposit, or in the event of withdrawal of offer once made or in the event of putting forth any conditions which are against or contradictory to the conditions of this Notice Inviting Tender.
- XIV. **Security Deposit:-** The successful Bidder has to furnish a Security Deposit

equivalent to 5% of the total value of purchase contract awarded to them, before executing the agreement. *The security deposit carries no interest.* The EMD amount will be adjusted in the security deposit in the case of successful bidders. The Security Deposit can be remitted either in the form of Demand Draft from any Nationalised/Scheduled Bank drawn in favour of FA & CAO, KSRTC, Thiruvananthapuram, payable at Thiruvananthapuram or in the form of Bank Guarantee from any Nationalised/Scheduled Bank with a claim period of minimum 3 months beyond the expiry of the contract including warranty period. The security deposit will be forfeited if the contractor fails to complete the supply as per the schedule issued by KSRTC or in the event the Bidder fails to settle any claim including the warranty claims. The security deposit will be refunded only after the satisfactory completion of the contract including warranty claims or penalty settlement.

- XV. **Agreement:-** The successful Tenderer shall have to execute an agreement within 15 days from the date of issue of purchase order, incorporating the Terms & Conditions of Tender and as per Kerala Stores Purchase Manual. The agreement has to be executed in the prescribed form issued from KSRTC, in Rs.200/- INDIAN STAMP PAPER after furnishing the Security deposit equivalent to 5% of the total value of purchase contract awarded to them, as per provisions of Kerala Store Purchase Manual, for the due fulfilment of the contract. If the bidders are not willing to execute the Agreement and Security deposit, their offer will not be considered.
- XVI. The Corporation reserves the authority to consider the offer in part or full as desired.
- XVII. The bidders have the liberty to resubmit fresh tender/documents till the last date and time of submission of the e-tender.
- XVIII. Resubmission of offer will not be allowed after the time and date fixed for bid submission. The offer once made cannot be withdrawn or modified after the closing of e-tender under any circumstances. Withdrawal or modification of the offer once made in e-tender will result in the forfeiture of EMD remitted. In such cases the bidder will not have the right to claim the refund of EMD.
- XIX. The Chairman and Managing Director, KSRTC, Thiruvananthapuram reserve the right to make any modifications or additions in this notice in the event if it is felt that it is in the public interest.
- XX. The decisions of the Chairman and Managing Director, KSRTC will be final and legally binding in these tender proceedings.

XXI. Resolution of disputes

If dispute or difference of any kind shall arise between the Tender Inviting Authority and the successful tenderer in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.

If the parties fail to resolve their dispute or difference by such mutual consultation within twenty one days of its occurrence, then, unless otherwise provided in the tender document, either the Tender Inviting Authority/ User Institution or the successful tenderer may give notice to the other party of its intention to commence arbitration, as provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India.

Venue of Arbitration: The venue of arbitration shall be the place from where the contract has been issued, i.e., Trivandrum, Kerala.

Disputes if any shall be settled through mediation and the Company will notify mediating official from time to time and only when mediation is failed, litigation with in the jurisdiction of the courts at Thiruvananthapuram and Ernakulam need to be sought.

XXII. INSTRUCTIONS TO BIDDERS

- a) Tender shall be made in English.
- b) The rates quoted should be for door delivery at the specified locations.
- c) In case of NEFT, remittance should be made only to the 22 digit beneficiary account number as seen in the remittance form which is available in the e-portal while submitting tender.
- d) **ON LINE PAYMENTS:-** The bidders shall seek clarification from ***Kerala State IT Mission, e-Government procurement PMU & Help desk, basement floor of Pension Treasury Building, Uppalam Road, Statue, Thiruvananthapuram. Help Desk No. Ph: 0471 - 2577088, 2577188; Toll free No.18002337315; e-mail: etendershelp@kerala.gov.in ; Website: www.etenders.kerala.gov.in*** and make himself conversant with procedure for online payment of the Tender Fee and EMD. **KSRTC shall under no circumstance be responsible for failed transactions due to non compliance of the above procedure.**

e) The bid will be opened online through the e-GP website www.etenders.kerala.gov.in at the KSRTC, Transport Bhavan, Fort, Thiruvananthapuram on the date and time mentioned above in the presence of the Bidders/authorised representatives available. If the e-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.

f) **DIGITAL SIGNATURE CERTIFICATE**:- Bidders will have to procure legally valid Digital Certificate as per Information Technology Act, 2000 for digitally signing their electronic bids. Bidders can procure the same from any of the license certifying authority of India. For obtaining Digital Signature Certificate and help on e-tendering process, please contact Kerala State IT Mission, e-Government procurement PMU & Help desk, basement floor of Pension Treasury Building, Uppalam Road, Statue, Thiruvananthapuram. Ph: 0471 - 2577088, 2577188; Toll free No.18002337315; e-mail: etendershelp@kerala.gov.in ; Website: www.etenders.kerala.gov.in on all government working days from 9.30 A.M to 5.30 P.M.

g) Bidders are advised to note the Tender ID and Tender No. & Date for future reference.

h) All uploaded scanned documents should contain the signature and the office seal of the bidders and should be digitally signed while uploading in e-tender portal. Documents uploaded without digitally signing shall entitle rejection of the Tender.

i) 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. No submission shall be allowed after the last date mentioned.

XXIII. Bidders are advised to go through all conditions of the Notice Inviting Tender and the Tender documents carefully and to comply them to avoid rejection of their tender.

XXIV. The selected Bidder shall not be entitled to seek any deviation in the Agreement.

XXV. Furnishing of any false information / fabricated document would lead to rejection of the tender at any stage.

XXVI. The Tenderer shall bear all costs associated with the preparation and submission of its bid and Kerala State Road Transport Corporation, Thiruvananthapuram, hereinafter referred to as "Tender Inviting Authority", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

XXVII. Conditional tenders will be summarily rejected

For CHAIRMAN AND MANAGING DIRECTOR

I/We hereby accept all the above terms and conditions in its entirety.

Signature of bidder:

Name of bidder:

Address of bidder:

Telephone No. of bidder:

Mobile No. of bidder"



Appendix – I

Specifications of Supply, Installation and Commissioning of Dash Board Camera and its Standard Accessories with Driver fatigue detection Sensor camera in KSRTC Buses

1	Digital Video Recorder (DVR)
	Supports minimum 4-channel 2MP analog cameras and 4-channel 2MP IP cameras input
	H.265/H.264 video compression with support for Instastream technology
	Penta-Brid (HDCVI/AHD/TVI/CVBS/IP) video input support
	Aviation connectors for durability and reliability
	Minimum 500 gb HDD (up to 2TB) storage
	At least 2 USB 2.0 ports
	Built-in GPS for real-time location tracking
	3G/4G support for remote connectivity
	VGA and HDMI video outputs
	SIGNAL TYPE Analog/AHD/CVI/TVI 2.0/TVI 3.0/Network
	Operating temperature range: -30°C to +70°C
	Vibration-resistant design
	Power input: DC 6-36V with built-in UPS
	Support for DSM (Driver State Monitoring), ADAS (Advanced Driver Assistance Systems), and BSD (Blind Spot Detection)
2	Inside Camera – 1 No.
	Image Sensor: 1/3" 2MP CMOS or better
	Resolution: 1920x1080 (Full HD) at 30fps
	Lens: 3.6 mm fixed lens, minimum 100° Horizontal Field of View
	Minimum Illumination: Color : 0.01 lux@F2.0, AGC ON; B/W : 0 lux with IR
	Day/Night: IR Cut Filter with auto switch
	Wide Dynamic Range: 120dB
	Video Compression: H.265/H.264
	Operating Temperature: -30°C to +60°C
	Ingress Protection: IP54 or better
	Power Supply: DC 12V ± 10%
3	Rear Camera – 1 No.
	Specifications similar to Inside Camera

	Lens optimized for rear-view monitoring
4	Footstep Camera – 1 No. Specifications similar to Inside Camera Lens and positioning optimized for front and rear footstep area monitoring
5	Dash cam with DMS Should have a road facing camera and the driver monitoring camera DMS(Driver Monitoring System) <ul style="list-style-type: none"> a) Eyes closing b) Tired yawning c) Looking Around d) Bowing for a long time e) Smoking detection f) Phone calling g) Face detection Image Sensor: 1/3" 1MP CMOS or better Resolution: Front 1080P ADAS/125Angle Resolution Rear 720P IR night vision DMS/105Angle Video encoding H.264/H.265, default H.264 Video standards PAL , NTSC Video resolution Total 1080P at 100 fps Compression format G .711A Lens: 4mm fixed lens Minimum Illumination: 0.1 Lux IR Range: 3 meters minimum Operating Temperature: -30°C to +70°C Power supply DC: +9V ~ +36V Operation Humidity 20% to 80% Ingress Protection: IP54 or better Certification CE/FC Hardware Memory : DDR3 2Gb + TF card(512G) or better GNSS : GPS+BDS (with external G-mouse) Sensor : 3-axis acceleration sensor or better LED : Red(power), Blue(Video recording/TF card) I/O ports : 2 digital input,1 digital output for relay, 1 RS232

6	DISPLAY
	VGA Resolution: 1920 × 1080P/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz
	HDMI Output Resolution: 1920 × 1080P/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz, 1024 × 768/60Hz
	Display Split 9 Channel/4 Channel / 1Channel
	OSD Camera title, Time, Video loss, Alarm, Motion detection, Recording
	RECORDING <ul style="list-style-type: none"> ● Video Compression H.265/H.264 or higher ● Audio Compression G.711U/G.711A or higher ● Resolution 5MP_Lite (1296×1952), 4MP_Lite(1280×1440), 3MP_Lite(1024×1536), 1080N(960×1080), 720P(1280×720 4*20fps) or higher
	PLAYBACK & BACKUP <ul style="list-style-type: none"> ● Decode Capability 2CH 1080P@30fps ● Smart Phone Playback 4 Channel ● Backup Mode USB Device(with format FAT 32)/Network/FTP
7	General Requirements
	All cameras must be shock and vibration resistant
	Suitable mounting brackets for secure installation in buses
	Aviation connector interface for power and video output where applicable
	Mobile network compatibility for real-time monitoring
	Compatible with common video management systems for public transport
	Minimum 2-year warranty on all equipment
8	Software and Monitoring
	Central command center software for real-time monitoring of DMS cameras
	AI-based analytics for driver behavior monitoring and vehicle safety

Place:

Date:

Signature :

Name and Address of the Tenderer

(Seal of the Tenderer)



Appendix – II
KERALA STATE ROAD TRANSPORT CORPORATION

SAMPLE PRICE EVALUATION

The price bid evaluation will not be on the basis of price quoted for the dash board camera alone, but including cost of supply, installation, commissioning and the AMC for the period of 3 years as detailed follows. In the sample calculation the warranty is taken as 2 year and AMC as 3 years after the expiry of warranty period for the dash board camera (ie from the 3rd year till 5th year).

Description	Bidder I (a)	Bidder II (b)	Bidder III (c)	Bidder IV (d)
End Rate for supply, installation and commissioning of "Dash Board Camera with all accessories in one bus including 2 year warranty (As per specification of NIT).	30,000	32,000	10,000	20,000
End Rate for supply, installation and commissioning of "Driver fatigue detection sensor camera with all accessories in one bus including 2 year warranty (As per specification of NIT).	15,000	10,000	5,000	2,000
3 rd Year AMC charge after warranty period as per Clause No. IV of NIT	2,000	1,000	500	600
4 th year AMC Charge	2,000	1,000	550	650
5 th year AMC Charge	2,000	1,000	600	700
Total	51,000	45,000	16,650	23,950
Status	L4	L3	L1	L2

Place:

Date:

Signature :

Name and Address of the Tenderer

(Seal of the Tenderer)



ANNEXURE "A"

(Proforma of Certificate be furnished along with Technical Bid)

KERALA STATE ROAD TRANSPORT CORPORATION

GENERAL INFORMATION ABOUT THE TENDERER

1	Name of the Tenderer					
	Registered address of the firm with GSTIN					
	State		District			
	Telephone No.		Fax			
	Email		Website			
Contact Person Details						
2	Name		Designation			
	Telephone No.		Mobile No.			
Communication Address						
3	Address					
	State		District			
	Telephone No.		Fax			
	Email		Website			
Type of the Firm (Please ✓ relevant box)						
4	Private Ltd.		Public Ltd.		Proprietorship	
	Partnership		Society		Others,	
	Registration No. & Date of					
Nature of Bussiness (Please ✓ relevant box)						
5	Original Equipment			Authorized Dealer		
	Manufacturer			/Representative		
	Direct Importer			Others, specify.		
Key personnel Details (Chairman, CEO, Directors, Managing Partners etc.)						
6	in case of Directors, DIN Nos. are required					
	Name		Designation			

	Name		Designation	
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Bank Details				
7	Bank Account No.		IFSC Code	
	Bank Name & Address		Branch Name	
	Tel No		Email ID	
8	Whether any criminal case was registered against the company or any of its promoters in the past?			Yes / No
9	GST No.			
10	GST in (%)			
11	BIS CM/L No (if available)			
12	Make & Brand			
13	Turnover of the Firm for the last 3 years			Year 2020-2021 =Rs Year 2022-2023 =Rs Year 2023-2024 =Rs
14	Other relevant Information provided *			
Date:		Office Seal		Signature of the tenderer / Authorised signatory

**ANNEXURE -B****SPECIFICATION SHEET****Tender for the Dash Board Cameras with Driver fatigue detection Sensor camera
in KSRTC Buses**

Tender No. S001-SRA05/65/2025- Store KSRTC-HQ

Dtd: 04.04.2025

Technical Specification

Make :

Brand :

SI No	Specifications	Conformance of specification Yes/ No.	Remarks if any
1	Digital Video Recorder (DVR)		
	Supports minimum 4-channel 2MP analog cameras and 4-channel 2MP IP cameras input		
	H.265/H.264 video compression with support for Instastream technology		
	Penta-Brid (HDCVI/AHD/TVI/CVBS/IP) video input support		
	Aviation connectors for durability and reliability		
	Minimum 500 gb HDD (up to 2TB) storage		
	At least 2 USB 2.0 ports		
	Built-in GPS for real-time location tracking		
	3G/4G support for remote connectivity		
	VGA and HDMI video outputs		
	SIGNAL TYPE Analog/AHD/CVI/TVI 2.0/TVI 3.0/Network		
	Operating temperature range: -30°C to +70°C		
	Vibration-resistant design		
	Power input: DC 6-36V with built-in UPS		
	Support for DSM (Driver State Monitoring), ADAS (Advanced Driver Assistance Systems), and BSD (Blind		

	Spot Detection)		
2	Inside Camera – 1 No.		
	Image Sensor: 1/3" 2MP CMOS or better		
	Resolution: 1920x1080 (Full HD) at 30fps		
	Lens: 3.6 mm fixed lens, minimum 100° Horizontal Field of View		
	Minimum Illumination: Color : 0.01 lux@F2.0, AGC ON; B/W : 0 lux with IR		
	Day/Night: IR Cut Filter with auto switch		
	Wide Dynamic Range: 120dB		
	Video Compression: H.265/H.264		
	Operating Temperature: -30°C to +60°C		
	Ingress Protection: IP54 or better		
	Power Supply: DC 12V ± 10%		
3	Rear Camera – 1 No.		
	Specifications similar to Inside Camera		
	Lens optimized for rear-view monitoring		
4	Footstep Camera – 1 No.		
	Specifications similar to Inside Camera		
	Lens and positioning optimized for front and rear footstep area monitoring		
5	Dash cam with DMS		
	Should have a road facing camera and the driver monitoring camera		
	DMS(Driver Monitoring System)		
	h) Eyes closing		
	i) Tired yawning		
	j) Looking Around		
	k) Bowing for a long time		
	l) Smoking detection		
	m) Phone calling		
	n) Face detection		
	Image Sensor: 1/3" 1MP CMOS or better		
	Resolution: Front 1080P ADAS/125Angle		
	Resolution Rear 720P IR night vision DMS/105Angle		
	Video encoding H.264/H.265, default H.264		
	Video standards PAL , NTSC		
	Video resolution Total 1080P at 100 fps		
	Compression format G .711A		
	Lens: 4mm fixed lens		
	Minimum Illumination: 0.1 Lux		
	IR Range: 3 meters minimum		

	Operating Temperature: -30°C to +70°C		
	Power supply DC: +9V ~ +36V		
	Operation Humidity 20% to 80%		
	Ingress Protection: IP54 or better		
	Certification CE/FC		
	Hardware		
	Memory : DDR3 2Gb + TF card(512G) or better GNSS : GPS+BDS (with external G-mouse) Sensor : 3-axis acceleration sensor or better LED : Red(power), Blue(Video recording/TF card) I/O ports : 2 digital input,1 digital output for relay, 1 RS232		
6	DISPLAY		
	VGA Resolution: 1920 × 1080P/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz,1024 × 768/60Hz		
	HDMI Output Resolution:1920 × 1080P/60Hz, 1280 × 1024/60Hz, 1280 × 720/60Hz,1024 × 768/60Hz		
	Display Split 9 Channel/4 Channel / 1Channel		
	OSD Camera title, Time, Video loss, Alarm, Motion detection, Recording		
	RECORDING <ul style="list-style-type: none"> ● Video Compression H.265/H.264 or higher ● Audio Compression G.711U/G.711A or higher ● Resolution5MP_Lite (1296×1952),4MP_Lite(1280×1440),3MP_Lite(1024×1536), 1080N(960×1080),720P(1280×720 4*20fps) or higher		
	PLAYBACK & BACKUP <ul style="list-style-type: none"> ● Decode Capability 2CH 1080P@30fps ● Smart Phone Playback 4 Channel ● Backup Mode USB Device(with format FAT 32)/Network/FTP 		
7	General Requirements		
	All cameras must be shock and vibration resistant		
	Suitable mounting brackets for secure installation in buses		
	Aviation connector interface for power and video output where applicable		
	Mobile network compatibility for real-time monitoring		

	Compatible with common video management systems for public transport		
	Minimum 2-year warranty on all equipment		
8	Software and Monitoring		
	Central command center software for real-time monitoring of DMS cameras		
	AI-based analytics for driver behavior monitoring and vehicle safety		

I/We hereby declare that the information furnished above are true, to the best of my / our knowledge and belief.

Place:
Date:

Signature with Name, Address & Seal of
Tenderer.



Annexure- C

(Proforma of Certificate be furnished along with Technical Bid)

ANNUAL TURN OVER STATEMENT

The Annual Turnover of M/s_____ for the past three years are given below and certified that the statement is true and correct.

Sl. No.	Year	Turnover in Lakhs (Rs)
1	2021 – 2022	
2	2022 – 2023	
3	2023 – 2024	
Total		
Average Turnover per year		

Date:

Signature of Auditor/ Chartered Accountant
(Name in Capital)

Address :

Registration No:

Seal:



Annexure - D

(Proforma of Certificate be furnished along with Technical Bid)

AFFIDAVIT

**Format for Affidavit certifying that Entity / Promoter(s)
/Director(s)/Partners of Entity are not blacklisted**

I, M/s. (Name of the firm), having registered office at
..... hereby certify and confirm
that we or any of our promoter(s) /director(s) are not barred by Department of
Transport, Govt. of Kerala/ or any other entity of Government of Kerala or
blacklisted by any state government or central government / department /
organization in India from participating in Tender/s, either individually or as
member of a Consortium as on the (Last date of submission of
tender).

We further confirm that we are aware that, our bid for the captioned tender would
be liable for rejection in case any material misrepresentation is made or discovered
at any stage of the Bidding Process or thereafter during the contract period.

Dated thisDay of, 20....

Name of the Applicant

.....

Signature of the Authorized Person

.....

Name of the Authorized Person



Annexure – E

(Proforma of Certificate be furnished along with Technical Bid)

The details of supplied Dash Board Camera to various customers during the last 5 years is furnished below

Name of customer	Specification of Dash Board Camera	Quantity supplied	Invoice No. with date

I/We hereby declare that the information furnished above are true, to the best of my / our knowledge and belief.

Place:
Date:

Signature with Name, Address & Seal of
Tenderer.

For Reference only

(To be submitted by the successful bidder only after receiving purchase order)

Appendix - III

(To be furnished in Indian Stamp paper worth Rs. 200/-)

KERALA STATE ROAD TRANSPORT CORPORATION

FORM OF AGREEMENT

(for Contract for Supply of Specific Quantity)

Agreement executed on (date) between
.....
..... (herein after called "the Contractor") and the **Kerala State Road Transport Corporation** (herein after called "the Corporation").

WHEREAS the Contractor has tendered for the supply of articles for the use of the Corporation as per Notice Inviting Tender No: dated: which tender notification shall form part of this Agreement as if incorporated herein.

AND WHEREAS the Corporation have been pleased to accept the offer in respect of the articles mentioned in the copy of the order attached (Which shall form part of this agreement as if incorporated herein).

AND WHEREAS the Contractor has as security for the due fulfillment of his obligations under this deed deposited ` being percent of the estimated value of the contract in cash / in the form of Demand Draft of Bank / in the form in a letter of Guarantee from Bank approved by the Corporation.(scheduled banks)

NOW THESE PRESENTS WITNESS AS FOLLOWS:

(1) (A) In case where along with the tender samples have been forwarded to the Corporation and the samples approved, the contractor agrees to supply the materials according to the approved samples. In other cases, the contractor agrees to forward samples to Corporation for approval, if so required, and then to supply materials according to such approved samples. When samples are not required the contractor agrees to supply according to standard specification. Samples forwarded by the contractor to the Corporation will not be paid for and shall be the property of the Corporation, but the Corporation is at liberty to return them to the contractor on the completion of his contract or to pay for them at agreed rates if they so choose. All Samples must be clearly labeled showing to what particular items tendered for they relate and they should be of sufficient size and quantity to enable the Corporation to see if the supplies made are according to the approved samples.

(B) The Contractor hereby declares that the goods sold to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and particulars contained in the copy of the order attached herewith the contractor hereby guarantees that the said goods would continue to conform to the description and quality aforesaid for a period of months from the date of delivery of the said goods to the Corporation and that notwithstanding the fact the Corporation may have inspected and/or approved the said goods, if during the aforesaid period of months the said goods be discovered not to conform to the description and quality aforesaid or have deteriorated (and the decision of the Corporation in that behalf will be final and conclusive) the Corporation will be entitled to reject the said goods or such portion thereof as may be discovered not to conform to the said description and quality. On such rejection the goods will be at the contractor's risk and all the provisions herein contained relating to rejection of goods etc: shall apply. The contractor shall if so called upon to do, replace the goods etc. or such portion thereof as is rejected by the Corporation. Otherwise the contractor shall pay the Corporation such damages as may arise by

reason of the breach of the condition herein contained. Nothing herein contained shall prejudice any other right of the Corporation in that behalf under this contract or otherwise.

- (2) Requests for enhancement of rates once accepted will not be considered except where Corporation has prior to the actual supplies, expressly agreed in writing for any price variation under specified circumstances. Conditions of the sale or other specified terms and conditions, if any printed on the quotation sheets of the contractor or attached with the Contractor's tender or any other letter or paper from the contractor will not govern this contract nor bind the Corporation in any manner what so ever unless such terms have been expressly accepted by the Corporation in writing.
- (3) The articles and quantities to be supplied are as shown in the copy of the Order No dated herewith attached, which shall be considered as part of this agreement. The contractor agrees to supply the quantities of the articles shown in the order at the rates tendered by him for each articles within the time fixed.
- (4) In the case of goods delivered by shipment, the contractor, shall where the expected tonnage of goods is more than 200 tones, deliver the goods through the Thiruvananthapuram port, if so required by the Corporation.
- (5) The contractor agrees that time is the essence of this contract.
- (6) If the contractor defaults in the due supply of all or any of the articles correctly and promptly as above, the Corporation is at liberty to procure the same from elsewhere without cancelling the contract as a whole. If Corporation incur, in thus procuring such materials, a higher cost than the agreed rate, such excess cost may be deducted by the Corporation from the Contractor's bill or adjusted or otherwise realized from his security deposit or recovered from him by other means. The Contractor agrees,

that he shall not be entitled to claim the excess, if any, of the tendered rate over such cost to Corporation.

- (7) All payments to the contractor for supplies effected satisfactorily will be made after scrutiny of his bills.
- (i) Either by Corporation cheques payable at the Government Treasuries.
 - (ii) Or by drafts on the Reserve Bank of India, at any of its principal branches in India.
 - (iii) Or in case of supplies from Abroad by drafts or otherwise as may be agreed to:
- (8) All incidental expenses incurred by the Corporation for making payments outside the District in which the claim arise shall be borne by the contractor.
- (9) The contractor shall not assign or make over in part or wholly the contract or the benefits or burdens hereof. The contractor shall not underlet or sublet the execution of the contract or any part thereof without the consent in writing of the corporation. The Corporation shall have absolute power to refuse any such consent or rescind such consent (if given) at any time. The contractor shall not be relieved from his obligation, duty or responsibility under this contract even if consent to let or subject is given by the Corporation.
- (10) NOT WITH STANDING the provisions contained to Clause 5, the Corporation shall have the right to cancel contract for any default on the part of the contractor in the due performance thereof.
- (11) It shall be lawful for the Corporation from and out of any money for the time being payable or due to the contractor from the Corporation under this contract or otherwise to set off any loss, expense, cost or damages, sustained or incurred by the Corporation by reason of the cancellation of the contract.

- (12) The security deposit shall subject to the conditions specified herein be returned to the Contractor within three months after the expiration of the contract.
- (13) The Contractor agrees that any communication addressed to him may be handed over to him or his agent personally or left at his residence or place of business or may be sent by prepaid post to his address as mentioned in this deed.
- (14) The contractor agrees that all sums found due to the Corporation under or by virtue of these presents shall be recoverable from him and his properties, movable and immovable, under the provisions of the Revenue Recovery Act, for the time being in force as though they are arrears of land revenue or in any other manner as the Corporation deem fit.
- (15) Any dispute arising out of this Tender procedure shall be under the Jurisdiction of Thiruvananthapuram court.

In witness where of the contractor and Sri, Controller of Purchase & Stores, for and on behalf of the **Kerala State Road Transport Corporation** have hereunto set their hands.

Signed, Sealed and delivered by:

Shri.

..... (Name & Address of Contractor)

..... (Signature of Contractor)

In the presence of witnesses:

1. (Name) (Signature)

2. (Name) (Signature)

Signed, Sealed and delivered by:

Shri: Controller of Purchase & Stores, for and on
behalf of the **Kerala State Road Transport Corporation**

..... (Signature)

In the presence of Witnesses:

1. (Name) (Signature)

2. (Name) (Signature)