



भारत सरकार/ GOVERNMENT OF INDIA
अंतरिक्ष विभाग/ DEPARTMENT OF SPACE
भारतीय अंतरिक्ष विज्ञान एवं प्रौद्योगिकी संस्थान/INDIAN INSTITUTE OF SPACE SCIENCE & TECHNOLOGY
क्रय एवं भंडार विभाग / PURCHASE & STORES DEPARTMENT
वलियमला पीओ., तिरुवनंतपुरम 695 547/ VALIAMALA P.O, THIRUVANANTHAPURAM 695 547,
केरल, भारत/ KERALA, INDIA
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निविदा आमंत्रण / INVITATION TO TENDER

Date : 22.11.2018

Tender Due on : **03.01.2019 at 14.00 Hrs**

Tender opening on: **04.01.2019 at 10.30 Hrs**

Dear Sirs,

Sealed two-part tenders are invited from accredited manufacturers / suppliers / agents for the supply, installation and commissioning of the following equipment:

Sl. No.	Tender No.	Item Description	Qty/ Nos.	Cost of Tender (Rs.)																		
1.	2018006095	<div>1. SCMOS Camera</div> <div>Specifications :</div> <table><tr><th>Item</th><th>Specification</th></tr><tr><td>1.Sensor size</td><td>Between 1000x1000 and 2000x2000 pixels</td></tr><tr><td>2.Pixel size</td><td>6.0 μm X 6.0 μm (or larger)</td></tr><tr><td>3.Frame rate</td><td>50 frames/sec</td></tr><tr><td>4.Phosphor type</td><td>P46 (photocathode material to be specified)</td></tr><tr><td>5.Intensifier</td><td>Generation 2</td></tr><tr><td>6.SNR (Signal to Noise Ratio)</td><td>Must be high and dark current noise must be less than 2 e-/pixel/sec</td></tr><tr><td>7.Read noise median</td><td>Should not go beyond 5 e-</td></tr><tr><td>8.Pixel well depth</td><td>30,000 electrons or more</td></tr></table>	Item	Specification	1.Sensor size	Between 1000x1000 and 2000x2000 pixels	2.Pixel size	6.0 μm X 6.0 μm (or larger)	3.Frame rate	50 frames/sec	4.Phosphor type	P46 (photocathode material to be specified)	5.Intensifier	Generation 2	6.SNR (Signal to Noise Ratio)	Must be high and dark current noise must be less than 2 e-/pixel/sec	7.Read noise median	Should not go beyond 5 e-	8.Pixel well depth	30,000 electrons or more	01 No.	500+GST @12% (₹560/-)
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9.Digitization	12 bit mode or more
10.Optical gate width	Minimum 5 ns or faster
11.Mode of operation	Single image and burst mode with at least two images
12.Minimum frame separation in burst mode	500ns or shorter
13.Wavelength range	240nm to 850nm.
14.Minimum Quantum Efficiency for the photocathode	no less than 10% at any wavelength below 500 nm
15.Lens	UV 105 mm focal length and spanning the required wavelength range. Must be compatible with the supplied camera
16.Data acquisition and control computer	<p>A suitable computer (ruggedized desktop or laptop) with latest operating system (windows 10 or better) and camera operating and DAQ software pre-installed.</p> <p>The system must include all the necessary hardware and software interfaces with the camera hardware</p> <p>If the data acquisition is possible using a laptop, then that provision should also be offered as an option</p>
17. Storage and transport case	It is expected that the whole system will be transported via a standard four-wheeler vehicle. Hence, a suitable storage and transport case for the camera assembly, interface and the computer is required
18.Warranty	Minimum 2 years

Additional Terms and conditions :

1. The photocathode, intensifier and camera should be a single integrated system.
2. The vendor must supply a complete system including the lens, the camera assembly as stated, the computer interface, the suitable computer and the software apart from any product-specific essential accessories.

		<p>3. Due to the portability requirement of the system, it is desirable to have a laptop based data acquisition and control system. In case such an option is not possible then a ruggedized desktop system may be offered.</p> <p>4. A complete sheet/matrix must be supplied by the vendor stating that the camera system has met with all the necessary specifications.</p>		
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Commercial terms and Conditions Tender No. 201800609501 dated 22.11.2018

1. SPECIAL INSTRUCTIONS TO TENDERERS

- 1.1 The bidder is required to submit quotation for the entire scope in ***TWO PART*** viz, Technical and commercial bid and price bid separately. The first cover shall contain the technical and commercial details along with the format of price quotation without the price superscribing in the cover ***“Technical and Commercial-Tender No. 2018006095, Due on 03.01.2019”***. The second cover shall contain the prices superscribing in the cover ***“price bid-Tender No. 2018006095, Due on 03.01.2019”***. All the covers to be sealed and insert in another cover superscribing the ***“Tender No. 2018006095, Due on 03.01.2019”*** and submit immediately but not later than the due date mentioned against each tender. **If the tender is received after the due date and time, the same shall be summarily rejected.**
- 1.2 The cost of tender **₹560/-** shall be submitted ***along with Technical & Commercial bid by Demand Draft drawn in favour of the Sr. Accounts Officer, IIST and payable at State Bank of India, Valiamala Trivandrum-695 547. In case the Demand Draft is not enclosed with the quotation, the bid shall be summarily rejected.***
- 1.3 **Payment:** Our normal payment term shall be E-Transfer against Sight Draft or 80% Letter of Credit against dispatch documents and balance 20% within 30 days after receipt, installation and acceptance of the item for imports / within 30 days after supply/installation and acceptance for indigenous respectively.
- 1.4 **The Installation, Commissioning & Demonstration of equipment to be done at our campus, Valiamala, Thiruvananthapuram-695 547. All pre-requisites such as foundation drawing, grouting and any consumables needed for carrying out the installation, if applicable, shall be separately mentioned in the technical bid.**
- 1.5 **Delivery terms shall be Ex-works/FOB/FCA for imports & FOR, Valiamala for indigenous.**
- 1.6 **For import cargoes, the purchase order shall be drawn directly to the foreign supplier through agents in India. We have our own freight forwarder and customs clearance at Trivandrum shall be done by us.**
- 1.7 **All duties and taxes, if applicable shall be quoted separately.**
- 1.8 **Accreditation documents such as current income tax/sales tax clearance certificate, GST Certificate, clientele list with previous experience in the similar lines of supply must be provided with documentary evidence), Performance Certificate, authorization for import, after sales support in India etc. shall be explained in detail with proof.**
- 1.9 **Guarantee & Replacement:**
 - a) The supplier shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.
 - b) For a period of Two years (24 months) from the date of installation, commissioning and acceptance of the item. If any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 38 months from the date of commissioning

thereof by the Purchaser who shall state in writing in what respect the stores or any part thereof are faulty.

- 1.10 Earnest Money Deposit (EMD):-** Interest free EMD to ensure the earnestness of the vendor in the participation of the procurement process to the tune of **₹1,35,300/- (Rupees One lakh Thirty Five Thousand and Three Hundred only)** by Demand Draft drawn in favour of the Sr. Accounts Officer, IIST, Valiamala, Trivandrum may be enclosed with Technical & Commercial bid sealed cover. The EMD will be refunded to the unsuccessful tenderers within 30 days after placement of Purchase Order. EMD will be forfeited in case the vendor withdrawn from the quotation. The tender not accompanied with EMD shall be treated as invalid tender and summarily rejected. For direct offers from NSIC, MSMEs, etc. EMD is not applicable.
- 1.10 Security Deposit:-** Interest free Security Deposit @ 10% of the value of Purchase Order shall be payable by successful vendor for satisfactory execution of the Purchase Order.
- 1.11 Performance Bank Guarantee:** 10% of order value shall be submitted by the Vendor for Warranty obligation (24+2 Months).
- 1.12 Liquidated Damages:** The period of completion indicated shall be the essence of the contract. In the event of delayed date of delivery & Installation, the liquidated damages @ 0.5% per week or part thereof subject to a maximum of 10% of the contract value shall be recovered. The delivery date / Completion date to be mentioned in PO is for delivery, customs clearance, inland transportation, installation and commissioning. That means the commissioning should be completed before the delivery date / Completion date.
- 1.13 Force Majeure:** During the continuance of the contract, should a part or whole of the items covered by this contract be delayed in delivery due to reasons of force majeure condition which shall include lockouts, strikes, riots, civil commotions, fire, flood, windstorm, explosion, labour disturbance, act of any Govt. or any agency, judicial action, sabotage act of civil disobedience, act of public enemy, technical failure, accidents, acts of God and war, stoppage of deliveries by Govt. etc, each party undertakes to advise the other as soon as it becomes a way of the circumstance of such force majeure, so that action under the provisions of this contract can be mutually reviewed and agreed upon between contractor and IIST. If the force majeure condition extended over a period of six months, both the parties of the contract shall mutually discussed and arrived at an agreement for the continuation/ termination of the contract forthwith.
- 1.14 Arbitration:** Dispute if any shall be settled mutually, failing which, it will be referred to a one-man arbitrator appointed by Director, IIST in accordance with the Arbitration and Conciliation Act, 1996 and any alteration/modifications thereof, whose decision shall be final and binding on both the parties
- 1.15** IIST reserves the right to either accept/reject any tender/s without assigning any reason/s whatsoever.
- 2. Terms & Conditions of Tender Form No. DOS PM:20, Form No. DOS PM:22 & Form No. DOS PM:23 as per attachment.**

Sd/-
(M.B Subash Chandran)
Dy. Registrar (Purchase)
For and on behalf of Director, IIST
