



Department of Electrical Engineering  
Indian Institute of Technology, Delhi  
Hauz Khas, New Delhi 110016

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Date: May 6, 2024

Quotations are invited for Development of EO sensor core using custom CMOS image sensors for riflescope. The required specifications are given below. Complete technical information should be provided along with the Technical bid. Email bids are also acceptable. Please refer to the last page on Terms and Conditions for details on how and when to submit Technical and Financial bids.

The scope of the work include

1. Design of EO sensor core to be included in riflescope using the custom developed CMOS image sensors. The form factor of the electronic boards are to be less than 4mm x 4mm for integration in riflescope.
2. Complete characterization and documentation of the core boards.

**Required Specifications for the characterization boards for EO sensor core using custom CMOS image sensors**

1. Format: 1140 x 1140
2. Detector: CMOS Digital image sensor
3. Optical format: 1/2.8
4. Spectral response: 0.4 to 0.7  $\mu\text{m}$
5. Frame rate: 25 Hz
6. Shutter type: Rolling shutter
7. Data Acquisition: USB UVC H.264
8. image processing: Gamma correction, Binning, FLIP Horizontal/Vertical
9. Video interface: PC interface USB 2.0

10. Power supply: 5 V
11. Operating temperature : -40 to 125°C
12. stack of three boards. Power board, controller board and sensor board
13. Dimensions : All boards are to be designed with dimensions less than 4 mm x 4 mm
14. Optics: Custom optics
15. Maintenance: Firmware update through USB.

## Terms and Conditions

1. The quote should reach the following address on or before **20.05.2024, 10 AM**.  
Dr. M. Sarkar  
Electrical Engineering Department  
Block II, Room 333  
IIT Delhi, Hauz Khas  
New Delhi, 110016      email: [msarkar@ee.iitd.ac.in](mailto:msarkar@ee.iitd.ac.in)
2. Please quote prices for FOB New Delhi, inclusive of all taxes and duties.
3. Quote should be in Indian Rupees for agents of Indian manufacturers, or in foreign currency, for agents of foreign manufacturers, and needs to be valid for at least three months.
4. Attach all the technical literature and a list of similar installations done in India.
5. If the quote is being submitted by a representative of the manufacturer, a valid agency-ship or dealership certificate authorizing the agent to quote to IIT Delhi on behalf of the manufacturers should be enclosed. **The principal and the vendor, both, are not allowed to quote for the same product.**
6. Complete set of manuals for the operation of the equipment should be given.
7. Please specify all of your terms and conditions clearly, including delivery period.
8. Mode of payment for purchases in foreign currency are through irrevocable letter of credit, or through wire transfer on delivery. Only bank charges within India are payable by IIT Delhi, all bank charges outside India are the responsibility of the seller. For purchases in INR, payment is on delivery.
9. The Institute reserves the right to accept or reject any or all quotations without assigning any reasons thereof.