



Indian Institute of Technology Jodhpur

N.H. 62, Nagaur Road, Karwar, Jodhpur - 342030, Rajasthan (India)

☎ 02912801826 | ✉ office_aero@iitj.ac.in

Website: Department: <https://iitj.ac.in/aero> | IITJ: www.iitj.ac.in

INDIAN INSTITUTE OF TECHNOLOGY JODHPUR

Request For Technical Information and Pro Forma Quotations

For Procurement of High Temperature Thermal Camera

1. Introduction

The Indian Institute of Technology Jodhpur (IIT Jodhpur) intends to procure a **High Temperature Thermal Camera** enhancing the institute's research capabilities.

Before initiating the formal procurement process, the Institute invites Technical Information and Indicative Pro Forma Quotations from eligible Original Equipment Manufacturers (OEMs) or their authorised representatives.

2. Purpose

- The objectives are to:
- Obtain technical information from prospective OEMs/authorised representatives.
- Obtain indicative Pro Forma Quotations for estimating the procurement cost.
- Identify suitable systems for high temperature thermal camera for wider applications such as measurements of combustion systems and photothermal performance of various materials
- Evaluate additional accessories for a complete solution with camera, filters, software and other accessories

3. Disclaimer

This document is issued **only for obtaining technical information and indicative Pro Forma quotations.**

Submission of information under this proposal:

- shall **not** be treated as a financial bid;
- shall **not** constitute any commitment on the part of IIT Jodhpur to procure the equipment;
- shall **not** confer any right upon the participating firm for award of any future contract;
- shall **not** automatically qualify the responding firm for participation in any future tender.

The Institute reserves the right to modify the technical specifications, estimated cost, procurement methodology, or procurement timeline based on its requirements.



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4. Equipment Details

- Name of Equipment: **High Temperature Thermal Camera**
- Quantity: **01**
- Broad Functional Requirements:
Attached

(The above requirements are indicative and may be revised after evaluation of the responses.)

5. Eligibility Criteria

Interested firms should:

- Be an Original Equipment Manufacturer (OEM) or an authorised distributor/dealer.
- Have experience in supplying similar equipment.
- Have adequate installation and after-sales service support in India.

6. Information/Documents to be Submitted

The interested firms shall submit the following (*Annexure-I*):

1. Company Profile.
2. Details of the OEM.
3. Product Brochure/Catalogue.
4. Detailed Technical Specifications.
5. Compliance with the Broad Functional Requirements.
6. List of previous users/clients with installation reports
7. Details of Warranty.
8. Details of After-Sales Service Support.
9. Authorization Letter from OEM (where applicable).
10. Any additional technical information relevant to the offered equipment.

7. Pro forma Quotation

- Interested firms are requested to submit a Pro forma Quotation (*Annexure-II*) along with their Request for Technical Information and Pro Forma Quotations response. Indicative **Pro Forma** quotation in Indian Rupees (INR), including the cost of the equipment, essential accessories, taxes, duties, freight, insurance, installation, commissioning, training, and any other associated charges. Wherever applicable, the Annual Maintenance Contract (AMC) and/or Comprehensive Maintenance Contract (CMC) charges and spare parts shall be quoted separately as additional charges.
- Expected delivery schedule and other relevant technical and commercial information.

Important Note:



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- The **Pro Forma** quotation is required only for cost estimation and budget planning purposes.
- The prices quoted shall be indicative/non-binding.
- The Pro Forma quotation shall not be treated as a financial bid.
- Submission of a **Pro Forma** quotation shall not confer any right or preference in the subsequent procurement process.

8. Presentation/Demonstration

The Institute may invite for a technical presentation or product demonstration. The date and venue shall be communicated separately.

9. Submission:

Interested firms may submit their Proforma Quotations on or before the due date in sealed cover or through email (as applicable).

The envelope/email should be superscribed as:

"Request For Technical Information and Pro forma Quotations for Procurement of High Temperature Thermal Camera"

8. Important Dates

Activity	Date
Publication	03/08/2026
Last Date for Submission	12/08/2026
Technical Presentation (if required)	To be informed
Clarification Meeting (if required)	To be informed

10. General Terms & Conditions

1. This **Request for Technical Information and Pro forma Quotations** is issued only for obtaining technical information and **Pro Forma** estimates.
2. The Institute reserves the right to accept or reject any or all responses without assigning any reason.
3. Submission of a **Request for Technical Information and Pro forma Quotations** does not create any contractual obligation.
4. The Institute may seek additional information, technical clarifications, demonstrations, or presentations from any participant.
5. The Institute may modify the technical requirements based on the responses received.



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6. The final technical specifications may be prepared by the User Committee after evaluating all **Request for Technical Information and Pro forma Quotations** responses.
7. The subsequent procurement, if any, shall be carried out through an appropriate procurement method in accordance with the GFR 2017 and applicable procurement rules.
8. Participation in this **Request for Technical Information and Pro forma Quotations** does not automatically entitle any firm to participate in or receive any preference during the subsequent tender process.

11. Contact Details

Name: Dr Himanshu Dave

Designation: Assistant Professor

Department: Aerospace Engineering

Email: himanshudave@iitj.ac.in



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Annexure-I

Request For Technical Information and Pro forma Quotations Response Format

1. Name of the Firm:
2. Registered Address:
3. Name of OEM (if applicable):
4. Contact Person:
5. Email:
6. Phone:
7. Product Name and Model:
8. Brief Technical Description:
9. Compliance with Broad Functional Requirements:
10. List of previous users/clients with installation reports:
11. After-Sales Service Details:
12. Any Additional Features:
13. Remarks (if any).



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Annexure-II

Format for Pro forma Quotation

Sl. No.	Description	Amount (INR)
1	Indicative Pro forma quotation in Indian Rupees (INR), including the cost of the equipment, essential accessories, taxes, duties, freight, insurance, installation, commissioning, training, and any other associated charges.	

Warranty Period: _____

AMC/CMC Charges (after warranty): _____

Delivery Period: _____

Authorized Signatory

Name: _____

Designation: _____

Company Seal & Signature



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Technical Specification - High Temperature Thermal Camera

Sl. No.	Equipment/ Component	Technical Specification
1	Thermal Camera System	Scientific-grade cooled/uncooled infrared thermal imaging camera suitable for quantitative temperature measurements of combustion systems, flames, exhaust plumes, investigate the photothermal performance of graphene nanoribbons, conjugated polymers, and heterogeneous photocatalytic materials under visible, red, and near-infrared irradiation. Close-focus or macro-imaging capability is desirable
2	Detector	Cooled or uncooled detector with minimum infrared resolution of 640×480 pixels (preferably more), pixel pitch $\leq 15 \mu\text{m}$
3	Temperature Measurement Range	Continuous temperature measurement from -20°C to at least 2000°C using interchangeable calibrated measurement ranges. Higher temperature ranges (up to 3000°C) shall be preferred. Measurement accuracy shall be better than $\pm 2^\circ\text{C}$ or $\pm 2\%$ of reading, whichever is greater.
4	Thermal Sensitivity (NETD)	Noise Equivalent Temperature Difference (NETD) $\leq 75 \text{ mK}$ at 30°C (preferably $\leq 50 \text{ mK}$).
5	Frame Rate	Full-frame acquisition rate of at least 50 Hz. Higher frame rates of 100–200 Hz with windowing
6	Integration Time	User-selectable integration time suitable for low-radiance as well as high-temperature applications. Automatic and manual gain control shall be available.
7	Optics	Interchangeable infrared lenses including standard lens ($\sim 25 \text{ mm}$) and telephoto lens ($\sim 50\text{--}100 \text{ mm}$). Lens shall be calibrated for radiometric measurements and supplied with protective carrying cases.
8	Optical Filters	Appropriate neutral density filters and high-temperature attenuation filters. Optional narrow-band filters for combustion diagnostics shall be quoted separately.
9	Radiometric Capability	Full radiometric recording where every pixel stores calibrated temperature information. Real-time emissivity correction, reflected temperature compensation, atmospheric attenuation



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		correction and user-defined calibration tables shall be available.
10	Synchronization	External hardware triggering and synchronization with high-speed cameras, optical diagnostics, pressure transducers and DAQ systems through TTL input/output signals is preferable
11	Data Acquisition Interface	Gigabit Ethernet and/or Camera Link interface for continuous streaming. High-speed onboard memory of at least 16 GB for standalone acquisition.
12	Software	Image acquisition and analysis software with lifetime floating license installable on unlimited institute computers. Software shall support Windows 11 and provide real-time temperature visualization, image enhancement, temperature statistics, line profiles, emissivity correction, temperature calibration, video recording and export to MATLAB, Python, CSV and TIFF formats.
13	Protective Housing	High-temperature protective enclosure with infrared-transparent window, air purge system and mounting provisions suitable for laboratory environments.
14	Calibration	Factory calibration traceable to national or international standards. A calibration certificate covering all supplied temperature ranges shall be provided.
15	Accessories	Complete accessory package including tripod adapter, optical bench mounting hardware, power supply, trigger cables, Ethernet/Camera Link cables, protective transport case, spare desiccant cartridges and cleaning kit.
16	Documentation	Complete user manual, software manual, calibration certificates, application notes, maintenance manual and programming interface documentation (SDK/API).
17	Installation & Training	Complete installation, calibration, commissioning and minimum five-day on-site training covering hardware operation, radiometric measurements, software analysis and combustion applications.
18	Warranty	Minimum three-year comprehensive warranty covering detector, Stirling cooler, electronics, optics and software. OEM shall provide long-term availability of spare parts and service support in India.