



Indian Institute of Technology Jodhpur

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

☎ 0291-2801826 | ✉ office_enauto@iitj.ac.in

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

INDIAN INSTITUTE OF TECHNOLOGY JODHPUR

Request For Technical Information and Pro Forma Quotations

For Procurement of Solar Energy Demonstration unit

1. Introduction

The Indian Institute of Technology Jodhpur (IIT Jodhpur) intends to procure **Single Solar Collector System** for academic and research purposes.

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

2. Purpose

The objectives are to:

- Obtain technical information from prospective OEMs/authorized representatives.
- Obtain indicative Pro forma quotations for estimating the procurement cost.

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.

4. Equipment Details

- Name of Equipment: **Solar Energy Demonstration unit**
- Quantity: **One**
- Broad Functional Requirements: **Attached**

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



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5. Eligibility Criteria

Interested firms should:

- Be an Original Equipment Manufacturer (OEM) or an authorized 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:

- 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.



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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 _____"

10. Important Dates

Activity	Date
Publication	17-07-2026
Last Date for Submission	26-07-2026
Technical Presentation (if required)	To be informed
Clarification Meeting (if required)	To be informed

11. 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 an **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.
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.

12. Contact Details

Name: Ashish Khinchi

Designation: Junior Technical Assistant

Department: Energy and Automotive Engineering

Email: ashishkhinchi@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 Specifications

Solar Energy Demonstration Unit

Solar Collector Specifications	
Collector Type	Flat Plate Collector
Absorber Material	Black-coated metal absorber
Collector surface area	320 mm * 340 mm
Slewing Range	0° to 60°
Flat Plate Collector Absorber Surface Specifications	
Absorber Plate Type	Interchangeable flat absorber plate
Number of Absorber Plates	Minimum 2
Absorber Plates	Absorber, selective coating Absorber, blackened coating
Artificial light source	
Number of Lamps	16-24 Lamps
Lamp Rating	75 W -100W each
Light Source	Halogen Reflector Lamps
Lamp Power	1000-2000 W
Illuminance	0–3 kW/m ²
Illuminance / Solar Radiation Sensor	Digital
Circulating Pump	
Pump Type	Submersible Pumps
Operating Voltage	12 V DC
Power Consumption	18 W
Maximum Head	4-6 m
Maximum Flow Rate	10-20 L/h



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Recommended Operating Flow Rate	6–7 L/h
Adjustable Flow Range	0–24 L/h
Temperature Measurement System	
Number of Temperature Sensor	Minimum 5
Sensor Type	PT100
Range	0–100°C
Flow Measurement	
Flow Meter Type	Impeller Flow Meter
Measuring Range	0–0.5 L/min (0–30 L/h)
Signal Output	0–5 V
Water Storage Tank Specifications	
Tank Type	Insulated Hot Water Storage Tank
Tank Material	Stainless Steel (SS)
Heat Exchanger	Integrated Spiral Coil Heat Exchanger
Working Fluid	Water
Temperature Measurement	PT100 RTD Temperature Sensor
Tank Capacity	12 L (Approx.)
Stirrer Mechanism in the Water Tank Specifications	
Stirrer Type	Motor-driven Stirrer
Stirrer Material	Stainless Steel (SS304)
Shaft Material	Stainless Steel (SS304)
Blade Type	Two-blade / Four-blade
Drive	DC Geared Motor
Operating Voltage	12 V DC
Speed	30–60 RPM (typical)
Mounting	Top-mounted on water storage tank



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Electrical Specifications	
Supply Voltage	230 V AC
Frequency	50 Hz
Phase	Single Phase
Pump Supply	12 V DC
Lamp Supply	230 V AC
Data Acquisition System (DAQ)	
System Type	Computer-based Data Acquisition System (DAQ)
Software	Data Acquisition Software
Communication Interface	USB
Operating System	Windows 11
Data Display	Real-time graphical and numerical display
Data Logging	Continuous recording of experimental data
Measured Parameters	Temperature, Flow Rate, Solar Irradiance
Calculated Parameters	Temperature Difference (ΔT), Thermal Power, Collector Efficiency
Data Export	CSV/Excel compatible
Optional Accessory Interchangeable Parabolic Trough Collector	
Type	Parabolic Trough Collector
Compatibility	Fully interchangeable with supplied Solar Energy Demonstration Unit
Reflector	High Reflectivity Mirror ($\geq 90\%$)
Mirror Geometry	Precision Parabolic
Aperture Width	400-450 mm
Trough Length	400-450 mm



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Reflective Area	Minimum 0.17 m ²
Focal Length	Approximately 100 mm
Absorber Tube	Selective Coated Copper Tube
Glass Cover	Double Wall Evacuated Borosilicate Glass Tube
Mounting	Quick Interchange Mechanism
Tilt Adjustment	Compatible with main trainer
Data Acquisition	Uses Main Trainer DAQ