



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 Thermal Energy Storage 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: **Thermal Energy Storage 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

Thermal Energy Storage Demonstration Unit

Buffer Storage Tank	
Storage Tank Type	Vertical insulated buffer storage tank for thermal energy storage and heat distribution
Storage Capacity	150-200 Litres
Tank Material	Stainless Steel SS304 or better
Tank Construction	Welded pressure vessel with corrosion-resistant inner surface
Number of Heat Exchangers	Minimum One heat exchanger
Heat Exchanger Material	Copper or Stainless Steel
Heat Exchanger Type	Helical/Spiral Coil
Tank Insulation	High-density Polyurethane Foam (PUF) or Mineral Wool
Insulation Thickness	Minimum 50 mm
Outer Jacket	Powder-coated steel or aluminium
Maximum Operating Temperature	90°C
Maximum Operating Pressure	5-10 bar
Temperature Sensor Ports	Minimum 6 sensor pockets
Pressure Relief Valve	Integrated safety valve
Corrosion Protection	Internal anti-corrosion protection
Mounting	Floor-mounted integrated frame
Bivalent Storage Tank	
Storage Tank Type	Vertical bivalent thermal storage tank
Storage Capacity	200-250 Litres



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Tank Material	Stainless Steel SS304 or better
Heat Exchangers	Minimum two heat exchanger
Coil Material	Copper/Stainless Steel
Coil Configuration	Upper and Lower Heat Exchanger
Heat Source Compatibility	Solar Collector, Heat Pump, Boiler or Equivalent
Tank Insulation	High-density PUF
Insulation Thickness	Minimum 50 mm
Operating Temperature	Minimum 95°C
Maximum Working Pressure	Minimum 5 bar
Pressure Relief Valve	Provided
Sensor Ports	Multiple sensor pockets
Drain Valve	Provided
Outer Finish	Powder-coated steel
Circulating Pump	
Pump Type	High-efficiency hot water circulating pump
Pump Construction	Maintenance-free centrifugal circulation pump
Pump Body Material	Brass/Cast Iron/Stainless Steel
Impeller Material	Engineering Polymer/Stainless Steel
Maximum Flow Rate	3-5 m³/h
Maximum Head	4 -6 m
Speed Control	Variable speed preferred
Motor Type	High-efficiency induction or ECM motor
Protection Class	IP44 or better



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Duty	Continuous (S1)
Dry Run Protection	Preferred
Noise Level	Low-noise operation
Heating Controller	
Controller Type	Microprocessor-based intelligent heating controller
Inputs/Outputs	Minimum 16 configurable I/O (expandable)
Temperature Control	Differential temperature control
Pump Control	Automatic and Manual
Heating Source Control	Solar collector, heat pump, auxiliary heater
Display	LCD/TFT graphical display
User Interface	Keypad/Touch buttons
Programming	User programmable
Data Storage	Internal memory
Communication	CAN Bus
Ethernet	LAN Interface
Remote Monitoring	Preferred
Alarm Functions	Sensor failure, over-temperature, pump failure
Software Upgrade	USB/Ethernet
Protection	Over-voltage and short-circuit protection
Temperature Measurement	
Sensor Type	PT100 RTD Class A or equivalent
Number of Sensors	Minimum 17
Temperature Sensor	16 Sensors: 50–180°C



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Temperature Sensor	1 Sensor: 0–40°C
Accuracy	$\pm 0.5^{\circ}\text{C}$
Resolution	0.1°C
Sensor Housing	Stainless Steel
Sensor Mounting	Threaded immersion type
DAQ Compatibility	Required
Calibration	Factory calibrated
Flow Measurement	
Flow Meter Type	Electronic flow meter
Measuring Principle	Turbine/Impeller/Magnetic
Measuring Range	20–3000 L/h
Accuracy	$\pm 2\%$ FS
Output	Analog/Digital
Display	Real-time
DAQ Interface	Compatible
Pressure Measurement	
Number of Sensors	Minimum 2
Sensor Type	Electronic Pressure Transmitter
Measuring Range	0–6 bar
Output	Analog/Digital
DAQ Compatibility	Required
Electrical Specifications	
Power Supply	230 V $\pm 10\%$, 50 Hz
Alternate Supply	230 V AC, 60 Hz



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Optional Supply	120 V AC, 60 Hz
Phase	Single Phase
Earthing	Mandatory
Emergency Stop	Required
Data Acquisition & Software	
DAQ System	PC-based multi-channel data acquisition
Communication	USB/Ethernet/CAN
Live Monitoring	Real-time display
Data Logging	Automatic
Graph Plotting	Real-time trends
Export	CSV/Excel
Software	Windows-compatible
Report Generation	Automatic