



**INDIAN INSTITUTE OF INFORMATION TECHNOLOGY
DESIGN AND MANUFACTURING KANCHEEPURAM**

**Off Vandalur-Kelambakkam Road, Melakkottaiyur
Chennai-600 127**

**NOTICE INVITING TENDER
(E-PROCUREMENT THROUGH CPPP)**

TENDER NO.: IITDM/19/2024-25/Engg/E48/015; Dt: 17th Mar 2025

**NAME OF WORK: SUPPLY, INSTALLATION, TESTING AND COMMISSONING OF
60KW ON-GRID SOLAR POWER INVERTER.**



**INDIAN INSTITUTE OF INFORMATION TECHNOLOGY
DESIGN AND MANUFACTURING KANCHEEPURAM**
(An Institute of National Importance under MoE, Government of India)
Melakkottaiyur, Off Vandalur-Kelambakkam Road, Chennai – 600 127,
Tamil Nadu.

NOTICE INVITING TENDER (E-PROCUREMENT THROUGH CPPP)

Indian Institute of Information Technology Design and Manufacturing (IIITD&M) Kancheepuram invites **e-tender under SINGLE BID** with prequalification systems from the vendors who fulfils the eligibility as given below in the campus.

| Sl. No. | Particulars | Quantity Required |
|---------|--|-------------------|
| 1 | SUPPLY, INSTALLATION, TESTING AND COMMISSONING OF 60KW ON-GRID SOLAR POWER INVERTER | As per Annexure-3 |

The tender document can be downloaded from the website <http://iiitdm.ac.in> or <https://etenders.gov.in/eprocure/app>

The offers, in the prescribed format shall be submitted through online at <https://etenders.gov.in/eprocure/app> as per the tender document. No tender will be accepted in hard copy, fax, email or any other such means. The intending, bidders must be registered with eWizard procurement <https://etenders.gov.in/eprocure/app>

| | |
|--|---|
| a) Tender Number /Date | IIITDM/19/2024-25/Engg/E48/015; Dt: 17 th Mar 2025 |
| b) Pre-bid meeting / Site visit | 21 st Mar, 2025; 11:00 Hrs. |
| c) Bid Submission due date | 31 st Mar, 2025; 15:00 Hrs. |
| d) Technical Bid Opening | 01 st Apr, 2025; 15:00 Hrs. |
| e) EMD | Rs. 12,000/- (submission of EMD through SBI E'Collect) https://www.onlinesbi.sbi/sbicollect/icollecthome.htm (or) Valid MSE exemption certificate must be attached. |
| f) Security Deposit / Performance Guarantee | Successful Bidder shall submit the Security Deposit at 7.5% of Contract value. |

TERMS & CONDITIONS GOVERNING THE CONTRACT

1. Eligibility Criteria: In order to be considered for the contract of the works as detailed under 'Price Bid' in this Tender Document the tenderer should be:

1.1 "Having Similar "Solar power plants & Inverters installation experience" preferably awarded by the State Govt. / Central Govt. / Autonomous / Reputed corporate institutions, for the value enlisted below and executed on or after 01/01/2020 and Work Order / Purchase Order copy to be enclosed.

(i) Rs. 1.90 lakhs Excl. GST for a single work order

(Or)

(ii) Rs. 1.20 lakhs Excl. GST each for two work orders

(Or)

(iii) Rs. 0.95 lakhs Excl. GST each for three work orders.

2. Earnest Money Deposit:

2.1 **Bidders shall Deposit EMD through SBI E'Collect.** For an amount of Rs. 22,000/- must be paid online, and it shall be received on or before the last date and time of bid submission. Proof of payment for EMD shall be attached along with the technical bid. Physical mode of payment, i.e., **Banker cheque or Demand drafts, is unacceptable.**

2.2 Steps for submission of EMD through SBI E'Collect.

- Go to link - <https://www.onlinesbi.sbi/sbicollect/icollecthome.htm>
- Please select category as "Educational Institutions"
- Please select "IIITDM – KANCHEEPURAM A/C" from drop down list
- Please select "Earnest Money Deposit (EMD)" from Payment Category drop down list
- Kindly fill all tender details, contact details, EMD amount and make payment.
- After successful payment, the payment proof of EMD shall be attached along with the technical bid.

2.3 In the case of payment failure/ mismatch of particulars leads to cancellation of bid.

2.4 For the successful bidder, the EMD will be retained/ adjusted against the security deposit.

2.5 For the unsuccessful bidders, EMD amount will be refunded within 30 days from the date of issue of work order.

2.6 The bidder shall enclose cancelled cheque/bank details to refund the EMD amount in case of unsuccessful bids.

2.7 EMD shall be forfeited if any tenderer withdraw their offer within the bid validity period.

2.8 **Valid proof of MSE exemption shall be uploaded for to waive off the EMD and the classification of the enterprises should be updated in the current financial year i.e., 2024-25.**

3. Security Deposit & Contract Agreement:

- 3.1 3.1 On receipt of notification of the award, the successful bidder shall be required to send the acceptance of the work order within 07 working days.
- 3.2 Successful Bidder shall submit the **Security Deposit of 7.5%** of the Contract value in the form of a Crossed Demand Draft/Pay Order/Banker's cheque/FDR drawn/Bank guarantee in favor of "The Registrar, IIITDM Kancheepuram," payable at Chennai within 07 (SEVEN) working days of the receipt of Notification of Award (NOA) / Award of Work order from IIITDM Kancheepuram (the Defect Liability Period as specified (i.e., 60 months after completion of work + 02 months).
- 3.3 The successful bidder shall be required to sign a detailed contract agreement & commence the work within 07 working days from the date of receipt of the work order.
- 3.4 In case of failure to commence the work by the Contractor within 07 days after signing of the contract or handover of the site, the Institute shall be at liberty to terminate the Award and forfeit the Security Deposit.

4. Preparation of bids - Single bid system (simultaneous receipt of separate technical and financial bids):

- 4.1 **Techno commercial bid** shall consist of prequalification & Price bid document along with supported documents as detailed below:
- 4.1.1 Complete prequalification papers, Name of the Agency and also commercial terms etc., offered (**Note: Price column in this cover should be kept blank**).
- 4.1.2 Duly filled and digitally signed Bid submission & self-declaration Proforma (As per Annexure – 1), EMD transaction details/ MSME exemption certificate, Cancelled cheques/ Bank details & GST Certificate.
- 4.1.3 Duly filled and digitally signed copy of Technical Qualification Proforma (**As per Annexure – II**) along with a copy of the similar work order as per the eligibility criteria referred to in clause no. 1.
- 4.1.4 The Institute will contact the organization about the satisfactory execution of work if required and this shall be taken into account for the evaluation of technical bid.
- 4.2 **Price bid** indicating item-wise price for the items mentioned in the technical bid, special concession in rates if any applicable for Educational Institutions shall also be offered and indicated clearly.
- 4.3 **The covers should be submitted through online CPPP portal <https://etenders.gov.in/eprocure/app> before due date and time.**

4. Technical terms:

- 5.1 The selected contractor will have to carry out the supply, installation, testing and commissioning of 60KW On Grid solar power inverter for existing solar power plant and shall ensure performance & efficiency of the plant, which have been listed under the 'Price Bid' of this tender document. He / She shall be under obligation to carry out all of the works stipulated

in the contract.

- 5.2 The Inverter shall have a warranty period of minimum 5 years from the date of satisfactory completion of Installation at the site and during the warranty period, in case of any repair.
- 5.3 The contractor shall ensure that the proposed on grid solar inverter shall support to following Input parameters i.e., it shall have 4 MPPT's with an input voltage ranging from 180 Volts to 1000 Volts & input current of ranging from 32 to 40 Amps or better edition.
- 5.4 Further, the contractor shall ensure that the proposed on grid solar inverter shall have to provide following output grid parameters i.e., 3-Phase, Neutral & Earth terminals, 60kW (Active power), 415 Volts Nominal rated AC output voltage, 92 Amps rated current, less than 0.3% Total Harmonic Distortion, 50 Hz rated frequency, 0.99 Power Factor as per the regulations of TNERC.
- 5.5 The On Grid solar inverter shall have an efficiency of more than 98% to utilize the generated energy optimally.
- 5.6 The inverter shall have features of RS 485/ RS 232 communication to monitor the PV generation remotely and shall comply with respective Indian Standards like IS 16169 & 16221 and its amendments up to date.
- 5.7 The solar inverter shall have inbuilt protection system from Over current, short circuit, DC reverse connection detection, Islanding, surge arrestor, Insulation resistance, leakage current detection etc. It shall be Ingress Protected of Minimum IP65.
- 5.8 **The bidders are advised to propose a suitable 60KW solar power inverter with the due consideration of following parameters of existing solar power plant:**
 - 5.8.1 **The Solar PV modules are connected in such a way that a total of '210' solar PV panels having '10' strings.**
 - 5.8.2 **In which, '3' strings shall be connected to MPPT-1, other '3' strings shall be connected to MPPT-2 and another '4' strings shall be connected to MPPT-3 and MPPT-4 can be used as future extension or as redundancy.**
 - 5.8.3 **Each string contains an array of 21 PV panels and each PV panel is capable to generate 240W_{peak} with ($V_{mp} = 30$ volts, $V_{oc} = 36.6$ volts & $I_{mp} = 8$ amps $I_{sc} = 8.5$ amps).**
 - 5.8.4 **To connect the grid, the existing 50KVA isolation transformer & switchgears shall be utilized and connected to the output of the on grid solar inverter.**
- 5.9 The Grid tied solar inverter shall be of reputed make and shall got approved by the Engineer-In-Charge before procurement made. The product brochure along with warranty card shall be submitted to the Engineering-In-Charge of IIITDM, Kancheepuram.
- 5.10 After the execution of work, the contractor shall submit the actual drawings indicating single line wiring diagram & block diagram from end to end point.
- 5.11 IIITDM Kancheepuram has Power to issue instructions etc., from time to time issue besides Drawings if any, in regard to:
 - 5.11.1 Minor addition, reduction, omission or substitution of any work included in the Contract.

- 5.11.2 Minor variation or modification of the design, quality, character of any work.
- 5.11.3 Minor variation in the dimensions of any part of the works.
- 5.11.4 Minor discrepancy in the Drawings if any, or between the Bill of Quantities and / or Specification.
- 5.11.5 The removal from the site of any material brought thereon by the Contractor & the substitution of any other material.
- 5.11.6 If any person deputed by the contractor found guilty / misconduct / not performing the duty, IIITDM has a right for a dismissal of the person/(s) from the works, the contractor has to replace the another suitable person within a given time frame at without any additional cost to IIITDM Kancheepuram.
- 5.11.7 The opening up of or inspection of any work covered up, all other instructions issued to him covering other aspects of the Contract.
- 5.11.8 Execution of wiring bare joints in wires and cable are not allowed. Under extra ordinary conditions Terminal blocks with required safety measures must be used instead of joints without any additional cost.
- 5.11.9 During the execution any minor wall/flooring/table cutting and finishing (providing hy-lam sheets/dummies/cement concrete etc.) also to be carried out without any additional cost.
- 5.12 The requirements given in the ‘Schedule of Work’ are only indicative and not exhaustive. Contractor shall be required to complete the project. The decision of IIITDM Kancheepuram authorities in this regard shall be final and binding on the Contractor.
- 5.13 Engineer-in-charge or any other representative/official deputed by the IIITDM Kancheepuram shall have the right to inspect or to test the materials to establish their conformity to the ordered specifications. The Contractor shall provide all reasonable facilities and assistance to such representative without any charges to the IIITDM Kancheepuram in this regard. Further, IIITDM Kancheepuram may direct the Contractor to get any/all materials/samples tested from specified organization(s) for conforming to the tendered specifications at the cost of the Contractor. In case, any inspected or tested material fails to conform to the ordered specifications, or workman ship is found to be unsatisfactory, IIITDM Kancheepuram may reject them and Contractor shall either replace the rejected material or make alternative arrangements necessary to meet the stipulated specifications and rectify the defects pointed out in the workman ship, at no additional cost to IIITDM Kancheepuram.
- 5.14 Work shall be executed and completed as per the technical terms and conditions of this document. In case the Contractor fails to complete the assigned work within specified Period, IIITDM Kancheepuram may recover Liquidated Damage and/or terminate the Contract and/or forfeit the Security Deposit. IIITDM Kancheepuram on its part would be required to handover the site to the Contractor free from any encumbrance.
- 5.15 The Contractor shall, at his own expense, arrange for the safety provisions as appended to these conditions or as required by the Engineer-in-Charge, in respect of all labor directly or indirectly employed for the performance of the works and shall provide all facilities in connection therewith.

- 5.16 The Contractor shall be responsible for providing constant and adequate supervision of the work to ensure compliance with the provisions of laws relating to safety and for taking all practical steps necessary to prevent accidents.
- 5.17 Stores and Materials required for the works brought by the Contractor shall be stored by the Contractor only at places approved by the Engineer-in-Charge. Storage and safe custody of material shall be the responsibility of the contractor. The contractor shall ensure that no materials/ wastes/equipment are dumped at the site. Proper cleaning and debris removal should be done daily
- 5.18 No compensation shall be payable to the contractor for any damage caused by rains, lightning, wind, or storm during the execution of work. He shall make good all such damages at his own cost, and no claim on this account will be entertained.

5. Commercial terms:

- 6.1 **The work shall be executed and completed within ‘30 working days’ (Excluding Sundays and Public holidays) from the date of Commencement of the Work.** In case, the Contractor fails to complete the assigned work within specified Work Completion Period, IIITDM Kancheepuram may recover Liquidated Damage and/or terminate the Contract and/or forfeit the Security Deposit. IIITDM Kancheepuram on its part would be required to handover the site to the Contractor free from any encumbrance.
- 6.2 Item Rates quoted on the ‘Price bid or Techno commercial bid” by the bidder shall be valid and constant during the entire period of contract and will not be subject to any variation on any account whatsoever.
- 6.3 Measurements of all items having financial value shall be recorded in Measurement books so that a complete record is obtained of all works performed under the contract. Measurements shall be taken jointly by the IIITDM Kancheepuram official designated for the purpose and the Contractor.
- 6.4 Payment of bills shall be made against supply, acceptance and after verification of the bill by the Institute after deduction of taxes and TDS as per applicable rules. Running account bill/Final bill shall be submitted by the contractor after execution of work and completion certificate shall be furnished by the Institute after completion of work in full. Payment to be made only for the work actually done.
- 6.5 The Institute will verify the quality of the material, workmanship through internal or third party quality team and the release of payment is subject to satisfactory quality assurance report.
- 6.6 The Contractor shall take at his/her own cost, necessary insurance cover in respect of staff and other personnel to be employed or engaged by him/her in connection with the afore mentioned services personnel by services to be rendered.
- 6.7 Statutory deductions of taxes at source will be carried out from the payment due at the prevalent rates as prescribed by the government.
- 6.8 No accommodation shall be provided within the premises. The contractor shall be solely responsible for arranging suitable accommodation for all staff and personal employed or engaged by him outside the premises.
- 6.9 The product shall have a warranty of ‘60’ months. If any defect noticed during the warranty period, the contractor shall make good the defective, failing which the PBG will be forfeited and suitable actions may be taken off.

7. Other conditions:

- 7.1 The institute reserves the right to reject any or all the bids without assigning any reasons thereof. No tenderer shall have any cause of action or claim against IIITDM Kancheepuram for rejection of his/her bid.
 - 7.2 The IIITDM, Kancheepuram is having a right to cancel the awarded work at any point of time in case of the contractor's performance is not up to the mark by giving termination letter.
 - 7.3 The tender document is not transferable and Conditional Tenders / Non-compliance of any of the conditions set in tender document shall render the bid liable for rejection.
 - 7.4 IIITDM Kancheepuram reserves the right to seek any clarification from the bidders or waive any minor deviation in the provisions governing the contract at its sole discretion.
- 8 Further, refer & comply with the in detail **“Tender general terms and conditions”** available at IIITDM > FORMS > ENGINEERING SECTION > TENDER GENERAL TERMS AND CONDITIONS” enclosed in the mentioned web link. These conditions are part and parcel of contract agreement.

Sd/-
Registrar
IIITDM Kancheepuram

BID SUBMISSION & SELF DECLARATION PROFORMA

Name of the Work/AMC: SUPPLY, INSTALLATION, TESTING AND COMMISSONING OF 60KW ON-GRID SOLAR POWER INVERTER.

Tender No.: IIITDM/19/2024-25/Engg/E48/015; **Dt:** 17th Mar, 2025.

The Registrar,
IIITDM, Kancheepuram,
Chennai – 600 127.

Dear Sir,

- 1.1 I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking/Autonomous Body etc., at anywhere in the country.
- 1.2 I/We hereby offer to quote for work as defined in 'Price Bid' and the relevant Annexures at the quoted price given in the 'Price Bid' Proforma as per Annexure-3 and agree to hold this offer open till 03 months from the due date.
- 1.3 I/We have read, understood and comply with all Terms and Conditions stipulated in the Tender document necessary for submission of this bid.
- 1.4 It is further stated that I/We have fully read and understood the 'Price Bid' and Terms and Conditions in the Tender Document governing this contract and shall abide by them in toto, if awarded the Contract.
- 1.5 The EMD amount will be returned to the unsuccessful bidder, as mentioned in the tender document.
- 1.6 **I/We do hereby agree that if our Firm has not provided a valid MSE Certificate (the classification of the enterprises should be updated in the current financial year, i.e., 2024-25) and work completion certificate along with work order, it will not be considered for the further evaluation process.**

Date:

Yours faithfully,
Digital Signature

Note: This form duly typed on the letterhead of the bidder and duly signed should be uploaded forming Annexure-1 of this Bid document.

TECHNICAL QUALIFICATION PROFORMA

| | |
|---|--|
| Name of the Work/AMC: | SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 60KW ON-GRID SOLAR POWER INVERTER |
| Tender No.: | IIITDM/19/2024-25/Engg/E48/015; Dt: 17 th Mar, 2025. |
| Name of the bidder (Firm): | |
| Contact details of the bidder: Registered corporate/ works office address: | |
| Mobile: | |
| Email Id: | |
| GST No.: (Please enclose the copy of GST) | |
| PAN No.: | |
| EMD Payment details/MSME Details: (Please enclose valid proof) | |
| Bank details/Cancelled cheque for EMD refund: (Please enclose valid proof) | |
| Bid Submission & Self declaration Proforma: (Please enclose the annexure-1) | |
| Experience: Details of similar Solar power plants & Inverters installation experience preferably awarded by the State Govt. / Central Govt./ Autonomous/ Reputed corporate institutions/ organizations for a value not less than: a) Rs. 1.90 lakhs Excl. GST for a single work order (Or) b) Rs. 1.20 lakhs Excl. GST each for two work orders (Or) c) Rs. 0.95 lakhs Excl. GST each for three work orders. | |
| Details of Manpower availability: (Number with their qualification & experience): (Add separate sheet if required) | |

Declaration:

I/We hereby declare and affirm that I/We have read and understood the terms and conditions of the contract as stipulated in NIT.

Digital Signature

PRICE BID

| NAME OF THE WORK: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 60KW ON-GRID SOLAR POWER INVERTER | | | | |
|---|---|-------------|------------|-------------------|
| Tender No.: IIITDM/19/2024-25/Engg/E48/015; Dt: 17 th Mar, 2025. | | | | |
| Sl. No. | Description | Unit | Qty | Amount Rs. |
| 1 | Supply, Installation, Testing & Commissioning of 60KW On Grid Solar Power Inverter (3 Phase, 4 MPPT model) suitable for the existing Solar PV module set up as required with 60 months' warranty. The product shall comply with respective Indian Standards like IS 16169, 16221 & TNERC regulations and its amendments up to date. Make: Havells/ Polycab/ Goodwe/ Thea/ Kaco | Job | 01 | |
| Total Amount in Rs. (Excl. GST) | | | | |

Total Amount in Words: Rupees

Note: Total amount will be taken into consideration for arriving at L-1.

- **GST & Taxes will be paid extra as applicable.**
- **Site visit is compulsory.**

Declaration:

1. I/ We hereby declare and affirm that I/ We have read and understood the terms and conditions of the contract as stipulated in NIT.
2. I/ We further declare that all the materials etc., are locally manufactured/ procured.

Date:

Digital Signature