



College of Engineering Pune-411 005

(An autonomous institute of the Government of India)

INVITATION OF E-TENDER

For

**Solar PV Plant with Data Acquisition System at College of Engineering
Pune**

Reference No: TEQIP-III/2021/MH/coep/99

Date: 15 /02/2021

Cost of document Rs. 1400/- (Non-refundable)

Website: <https://eprocure.gov.in/eprocure/app>



COLLEGE OF ENGINEERING PUNE SHIVAJINAGAR, PUNE-411005

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Electrical Engineering Department

Reference No: TEQIP-III/2021/MH/coep/99

DATE: 15.2.2021

INVITATION OF E-TENDER

Name of the Work: Solar PV Plant with Data Acquisition System

College of Engineering Pune invites digitally sealed quotations for Supply and installation of “**Solar PV Plant with Data Acquisition System**” at College of Engineering Pune through eProcurement system of the Government of India (<https://eprocure.gov.in/eprocure/app>) as per

Part 1: Technical Bid (Annexure-A) and Part 2: Commercial Bid (Annexure-B) in the prescribed Bid forms.

Digitally Sealed bids are invited for Supply and installation of "Solar PV Plant with Data Acquisition System" at College of Engineering Pune from reputed / experienced organizations/ firms/agencies/companies as mentioned in **Part 1: Technical Bid.**

The details of the work are available in the tender document which can be downloaded from the eProcurement system of the Government of India (<https://eprocure.gov.in/eprocure/app>). A bid is to be submitted online only through the eProcurement system of the Government of India (<https://eprocure.gov.in/eprocure/app>) upto the last date and time of the submission of a tender.

Sr. No.	Tender No & Date	Reference No: TEQIP-III/2021/MH/coep/99 DATE: 15.2.2021
1.	Issue of Online Tender Document	The tender is uploaded on e Procurement system of the Government of India (https://eprocure.gov.in/eprocure/app) from 15/02/2021 to 23.02.2021
2.	Last Date of Online Submission of Tenders	23/02/2021 before 15:00 hours
3.	Online Opening of Tenders	24/02/2021 at 15:00 hours
4.	Tender Fee	Rs. 1400/- (Non-Refundable) Tender fee and EMD of Rs. 7,000/- should be paid by SBI Internet banking or other Bank Internet banking in State Bank MOPS.
5.	Correspondence Address	Electrical Engineering Department, College of Engineering Pune, Shivajinagar, Pune 411005

1.Eligibility Criteria:

- a) The bidder must have executed at least one purchase order for similar kind of work of not less than Rs. 5.00 lakhs (single order) during the last three years.
- b) The vendor/firm/company should have a minimum annual turnover of Rs.50 Lakh in any of the last three financial years (If startup Company should be submit the proof of document, certificate of in Corporation from competent authority).
- c) The bidder should be registered under Shop & Establishment Act/ Companies Act.
- d) The bidder must be registered under GST Registration.
- e) The bidder should have a valid Permanent Account Number (PAN) allotted to the firm/company/proprietor/agency.
- f) The bidder should have a valid authorization letter issued by OEM dated after the date of issue of online tender.
- g) MSMEs registered under MSME Development act 2006 are exempted from payment of Tender Fee and EMD.

Tenders of a bidder/firm/company with inadequate/irrelevant details (failing to fulfill the details above) are liable for rejection. The bidding vendor/firm/company should submit supporting documents online (<https://eprocure.gov.in/eprocure/app>) in this regard.

Pre-Qualification / Eligibility Criteria details:

Sr. No.	Pre-Qualification Criteria	Supporting Documents to be enclosed with the Bid
1.	Bidder should be registered in India under Companies Act 1956	Certificate of Incorporation
2.	The bidder must be a renowned Indian Company with primary business in the domain. It should also be an Original Equipment Manufacturer or an Authorized system Integrator(s)/partner of the principal OEM, in India.	OEM's Authorization letter/ Manufacturer's Authorization form of the Original Equipment Manufacturer
3.	Bidder must have experience of at least 03 years in the relevant field of Supply and installation of (If startup Company should be submit the proof of document, certificate of in Corporation from competent authority) "Solar PV Plant with Data Acquisition System".	Copies of relevant work-order(s)
4.	Bidder should have duly filed Income Tax Returns, Service Tax and other applicable Govt./Statutory body Taxes for the past three years. 2017-2018 2018-2019 2019-2020	Relevant Documents
5.	Prime bidder including the consortium members shall not be under a declaration of ineligibility for corrupt or fraudulent practices or blacklisted with any of the Government agencies.	Self-Certification

Seal and signature of Manager / Representative of the firm On behalf of the firm submitting Tender

Telephone:.....

Mobile:.....

Fax:.....

Mail

Contact Person Name and Designation:

2. **Online Bidding Process through the eProcurement system of the Government of India**

(<https://eprocure.gov.in/eprocure/app>):

A Bid / Tender document will be in two-cover systems - Technical Bid (Part 1) and Commercial Bid (Part 2).

Part 1: Technical Bid – A detailed profile of the agency/organization/firm/company, eligibility for selection, tender terms & conditions, etc. – are to be submitted in a separate sealed cover. This should include documents in support of the turnover, experience, list of similar works carried out, client list, Pre-Qualification / Eligibility Criteria, Annexure-A, etc.

Part 2: Commercial Bid - As per the tender, a commercial bid should be indicated in Indian rupees (in figures as well as words). The final offer given by the bidder shall be with respect to the complete cost of the project (Annexure-B).

3. **Submission of Tender Documents online through the eProcurement system of the Government of India** (<https://eprocure.gov.in/eprocure/app>)

3.1 **Format & signing of Bid Document:**

A Bid / Tender document shall be submitted in the prescribed format.

Bids must be accompanied by:

The guidelines to download the tender document, online submission of bids and procedure of tender opening can be downloaded from the website <https://eprocure.gov.in/eprocure/app>.

The date & time of online submission shall strictly apply to all cases. The bidders should ensure that their tender is prepared and submitted online before the expiry of the scheduled date & time. Offers not submitted online within the stipulated time will not be entertained.

If for any reason, any interested bidder fails to complete any of the online stages during the complete tender cycle, the institute will not be responsible and any grievance regarding the same shall not be entertained.

Instruction for submitting bids online through the eProcurement system of the Government of India (<https://eprocure.gov.in/eprocure/app>) are as given below:

3.1.1 **Part 1: Technical Bid** – in the prescribed format sealed and duly signed

Part1: shall contain the following:

1. EMD of Rs.7,000/- to be submitted online through the eProcurement system of the Government of India.
2. Details of bidder's experience and capabilities in the given format (Annexure –A), Balance sheets / audited accounts for the past three years. (2017-2018, 2018-2019, 2019-2020)

3.1.2 **Part 2: Commercial Bid** – in the prescribed format sealed and duly signed (Annexure -B)

Bidders shall submit their online commercial offers only in the eProcurement system of the Government of India in the prescribed format. The price quoted elsewhere shall be liable for rejection.

4. **Acceptance of Tender conditions:**

4.1 The last date for an online submission of a tender document is 23-02-2021 before 15:00 hrs. Bids received online beyond the closing date / time will not be accepted and will be rejected, unopened.

4.2 Part 1 (Technical Bid) will be opened on 24-02-2021 at 15.00 hrs. at the same venue in the

presence of the bidders' representatives willing to attend. In the event of any change in the date of opening, the same will be intimated to all concerned.

- 4.3 Part 2 (Commercial Bid) will be opened only after a technical evaluation of the tenders and only eligible and technically qualified bidders will be invited for a commercial bid opening activity at the same venue in the presence of the bidders' representatives willing to attend. The date of the opening of commercial bids will be intimated to only eligible and technically qualified bidders. In the event of any change in the date of opening, the same will be intimated to all.

5. The Financial bid of all items will be evaluated and compared as a whole.

6. The bidder/vendor/firm/company/agency should have its office in India and round-the-clock contact telephone number for an easy contact.
7. The tender shall be signed by an authorized person and his / her full name and status be indicated below the signature along with an official stamp of the vendor/firm/company.
8. **Delivery Period for Items:** Delivery period is up to 30 days only, from date of issue of the P.O. No extension shall be given for supply. In such case penalty for delay in proportion to the cost of equipment will be at the rate of 0.5 % in the first week; 1.5% for 2nd week, 1.5% for 3rd week, 1.5% for 4th week; maximum limit of 5% shall be charged in case of PO value is 2 Lakhs and above.
9. **Execution Period for Supplied Items:** The entire project is to be executed/ commissioned within 30 days from the release of purchase order.

10. Supply and Installation:

Bidder shall be responsible for successful Installation, Commissioning and testing of the supplied "Electrical Engineering Department" at College of Engineering Pune. Any defective component/ device will be replaced by bidder at his cost.

11. **Service Support:** Onsite comprehensive Support (parts, labor) and calibration of all sensors after every six months has to be provided for a minimum period of 3 years by the bidder from the date of installation and commissioning of systems.

12. Comprehensive Warranty:

Three year Comprehensive Warranty for Supplied items from OEM with hardware/component replacement and calibration of all sensors after every six months for the period of three years. The Supplier shall be fully responsible for the Manufacturer's warranty for all equipment, accessories, spare parts etc. against any defects arising from design, material, manufacturing, workmanship, or any act or omission of the manufacturer / Bidder or any defect that may develop under normal use of supplied equipment during the warranty period. In case the Bidder is unable to fulfill his obligations during the warranty period, the warranty obligations will fully and automatically devolve upon the Manufacturer of the goods. The Bidder shall be fully responsible for getting the product replaced from the principal company or coordinating the same with the principal company during the warranty period.

13. Payment Terms & Conditions:

Payment: 90% payment shall be made at the earliest towards supply of new products on the delivery of items in good condition in stores of Department Name, College of Engineering Pune as mentioned in tender and remaining 10% after its successful installation and commissioning of all Supplied items for "Electrical Engineering Department" at College of Engineering Pune as notified by the purchaser.

14. **Performance Security Deposit / Bank Guarantee:** Performance Security Deposit / Bank Guarantee (Nationalized Bank only) for an amount @ 3% value of the contract (if order is placed) is to be submitted immediately after accepting the purchase order. The performance security must be valid during the warranty period i.e. for **Three years**. The same will be returned without any interest after completion of warranty and support period.

15. **Verification of Bank Guarantees:** Bank Guarantee submitted by the Bidder as EMD/

Performance Security is subject to verification from the issuing bank by purchaser before its acceptance.

16. Offers in bid should be written in English and price should be written in both figures and words.
17. The relevant supporting document(s) should be enclosed along with the offer.
18. Bid(s) received after last date of bid submission will be rejected.
19. The Institute reserves the rights to cancel the tender without any reason thereof and tender fee will not be refunded.
20. The Institute reserves the rights to split the purchase order.
21. Incomplete tenders will be rejected without any consideration
22. The Institute reserves the rights to cancel any of the items of tender without any reason thereof.
23. The Institute reserves the rights to decide the quantity of any of the items of tender for finalizing the purchase order without any reason.
24. The Institute reserves the right to cancel purchase order, before or after the delivery of material, before making payments without giving any reasons thereof.
25. Supplier should take full responsibility of compilation of the project. The supplier should visit the site and understand complete requirement for successful compilation of project. Any components, parts spares required other than mentioned in BOQ should be supplied at no extra cost. COEP shall not entertain any claim for additional payment other than the quoted price.
26. **Please specify the make and model. Attach technical brochure/Catalogue.**

**Annexure -A (To be filled up by the bidder)
Following details required for all bidders**

Sr. No.	Name & Full Address of the firm:	Necessary Documents Submitted (Yes/No)
1.	Registered office with Address (Copy of registration certificate of a firm may be enclosed)	
2.	Pan no./TAN no.	
3.	GST – Registration number	
4.	Previous Purchase order details (for the last three years)	
5.	Legal status (individual, proprietary, partnership firm, limited company, corporation, etc.)	
6.	Name & Addresses of the person who will represent the firm while dealing with the Institute.	
7.	Turnover for the last three financial years 2017-18 2018-19 2019-20	
8.	Do you have experience for at least 3 years in the relevant field of providing	
9.	Have you duly filed Income Tax Returns, Service Tax and other applicable taxes for the last three years 2017-18 2018-19 2019-20	
10.	Have you been blacklisted by any government authority in India? If so, then you will not be eligible. Submit Self-Certification stating that you were not blacklisted in the past.	

Seal and signature of Manager
/ Representative of the firm On behalf of the
firm submitting Tender

Telephone:.....
Mobile:.....
Fax:.....
Mail:.....
Contact Person Name:.....
Contact Person Designation:.....

Annexure-A

Part 1: Technical Bid:

"Supply and Installation of "**Solar PV Plant with Data Acquisition System**" at College of Engineering Pune through the eProcurement system of the Government of India.

FORMAT & REQUIREMENTS

1. Tender Ref. No:
2. Name of the Vendor/Bidder:
3. Complete office address of Vendor/Bidder
4. Contact details of an authorized person of Vendor/Bidder who has signed the tender.
 - a) Name.....
 - b) Designation.....
 - c) Phone (Office).....
 - d) Phone (Mobile).....
 - e) E mail.....
5. Due date & Time of submission of the bid:
Tender fee & EMD with online details & bank details.....
6. Submission of technical confirmation to the requirement.
7. Higher technical specification may be considered, subject to competitive price offer.
8. Please specify the make and model. Attach technical brochure
9. Documents to be enclosed with the Technical bid are as given below :
 - a. Duly signed & stamped Tender documents (All pages) as a mark of your acceptance.
 - b. Details of latest Three buyers to whom similar supplies (**Solar PV Plant with Data Acquisition System**) were made should be submitted in the following format:-

Sr. No.	Name of the Client along with contact details
1.	
2.	
3.	

- c. Copies of PAN, GST/ TIN duly Signed & Stamped. Copy of relevant registration documents certifying their entity as a proprietorship/ partnership/ company.
- d. Audited balance sheets for the last 3 years. (2017-2018, 2018-2019,2019-2020)

Signature of the Vendor/Bidder with stamp

Annexure- I

Format of Quotation for " Solar PV Plant with Data Acquisition System "

	Feature	Compliance(Yes/ No)
	Make & Model	
1	<p><u>Solar PV Plant with Data Acquisition System</u> Specifications:- The system should consist of 1 kW Solar PV plant, MPPT charge controller, along with IP 65 grade weather monitoring system which can acquire various environmental parameters like atmospheric pressure, ambient temperature, humidity, wind speed and direction, rain fall, UV index and solar radiation. It should also be able to capture temperature of each panel, plant voltage and current, and load voltage and current with required load bank. This data should be logged and stored in local memory (SD card with capacity of at least 8 GB) and on remote desktop PC with wired and wireless communication and security protection. There should be provision to copy the data from SD card to pen drive. This data should also be displayed on LCD/ LED screen at the plant site.</p> <p>Technical Specifications</p> <p>Sensor Specification: Air Temperature Operating Range: 0 to 125 degree Centigrade Sensor Accuracy: +- 1 degree Centigrade</p> <p>Solar Panel Temperature Sensor 4 Nos Operating Range: 0 to 110 degree Centigrade Scale factor: 10mV/degree Centigrade</p> <p>Relative Humidity Operating Humidity Range: 0%RH to 100%RH</p> <p>Solar Radiation Sensor Output: 0-2VDC Range: 0 to 2000W/m² Spectral Response: 400 to 1100nm</p> <p>Atmospheric Pressure Sensor Detection Range: 15-115kPa Response time: 1msec</p> <p>Air Quality sensor (PM2.5) Detection Range: 10 -500ppm Response time: <90sec</p> <p>Wind Speed Sensor Speed: 0 to 20m/sec Resolution: 1m/sec</p> <p>Wind Direction Sensor: North, East, West, South, North-East, East-South, North-West, South-West</p> <p>Rainfall: Tipping Bucket in mm</p>	

UV Index Sensor

Response wavelength: 200nm-370nm

Output setup Time: 1msec

Power Supply: 12V/5Amp DC**Weather Monitoring structure**

Minimum Tower Dimension (in mm): 2000 X 300 X300

Material: MS

Paint: Weather shield, waterproof

Pilot Lamp indication

Voltage and Current Measurement

Measure Voltage range: up to 40VDC

Measure current range: 30A

Sensitivity: 100mV/A

Main Controller unit

Microcontroller: 8bit Microcontroller

Sensor connection: Through metal din connector

Enclosed: IP65 cabinet

Connectivity: 802.11 b/g/n Wireless LAN, Wi-Fi zigbee, USB & Ethernet

RAM: 1GB

Memory: 20GB (upgradable)

OS: Linux

Ethernet: 10/100 Base T Ethernet socket

Video Output: HDMI port provided

Software:

Data Monitoring and Data logging

Local Storage

Solar PV module 4 Nos

Max power : 250W

Open circuit voltage : 43.2V (system voltage will be 24 Volt)

Short circuit current : 7.3A

Voltage at max power : 37V

Current at max power : 6.7A

Charge controller

Solar PV Module Input Voltage:24-50V

Max Current :40A

Battery voltage :24V

Technology :MPPT

Charging Stage :Bulk, Absorptions and Float

SMPS with protection circuit : 26-30V (variable), 10 Amp

Load: - 24 Volt, 5 A load, made up of 6 numbers of lampsSignature of the tenderer
with stamp

Annexure-B

Part 2: Commercial Bid

Supply and installation of "**Solar PV Plant with Data Acquisition System**" at College of Engineering Pune through the eProcurement system of the Government of India.

FORMAT & REQUIREMENTS

Tender Ref. No.:

Name of the Tenderer/Bidder:

The offer with rates for the schedule of requirements of items, as elaborated under, to be submitted. Adhering to the format given below is a pre-requisite for considering your quotations:

However quantity may increase/ decrease

The format of commercial offer is as below:

Sr. No.	Description	Qty	Rate per unit in Rs. (exclusive of all taxes)	Total Amount in Rs. (exclusive of all taxes)
1	Solar PV Plant with Data Acquisition System	1		
	Total amount in Rs.			
	Installation charges for all items			
	GST@ 18%			
	Total amount (Inclusive of all Taxes) in Rs.			
	Total amount (inclusive of all taxes) in words Rupees			

The rate quoted shall be in accounting units (A/U) and should be quoted as basic price. All other costs including freight, insurance packaging and forwarding, all taxes, duties/levies to be quoted separately.

Signature of the Vendor/Bidder with stamp

Sd/-
Head

Department Name,
College of Engineering, Pune -05

[Covering letter to submitted by the bidder]

To,
The Director,
College of Engineering Pune,
Shivajinagar, Pune -411005,

Sub: Tender for "Supply and Installation of "Solar PV Plant with Data Acquisition System" at College of Engineering, Pune.

Sir,

I have carefully gone through the tender document regarding the prequalification of agencies/ vendors for "Supply and Installation of "Solar PV Plant with Data Acquisition System" at College of Engineering Pune .

I shall be bidding in this tender as the sole representative of my company. I hereby declare that

1. All the information related to my company, customer base, projects, financial details, data sheet of the products offered etc., provided in my offer is true and without any alteration /modification.
2. All the provisions of this tender document are acceptable to my company. No violation of the terms and conditions as mentioned in the tender document has been made.
3. I declare that my company or any member of the company has not been debarred / black listed by any Government / Semi -Government organizations in India.
4. I certify that the period of validity of bid is 120 (one hundred and twenty) days from the last date of submission of proposal I further certify that I am authorized signatory of my company and I am, therefore competent to make this declaration.

Yours faithfully,

(Signature of the bidder)

Seal and signature of Manager
/Representative of the
company/firm On behalf of the
company/
Firm submitting tender
Telephone:
Mobile:
Fax:
Mail:
Contact Person Name:
Contact Person Designation:
.....

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List of Documents attached by the Bidder