



# Bundelkhand Institute of Engineering & Technology, Jhansi

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## INVITATION FOR QUOTATION

TEQIP-II/2016/UP2G04/Shopping/57

08-Jun-2016

To,

### Sub: Invitation for Quotations for supply of Goods

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	Brief Description	Quantity	Delivery Period(In days)	Place of Delivery	Installation Requirement (if any)
1	Procurement of Solar PV Emulator	1	30	BIET Jhansi	

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase II** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.
3. Quotation,
  - 3.1 The contract shall be for the full quantity as described above.
  - 3.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
  - 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.
  - 3.4 Applicable taxes shall be quoted separately for all items.
  - 3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
  - 3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **30** days after the last date of quotation submission.
6. Evaluation of Quotations,  
The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which
  - 6.1 are properly signed ; and
  - 6.2 confirm to the terms and conditions, and specifications.
7. The Quotations would be evaluated for all items together.

8. Award of contract:

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

9. Payment shall be made in Indian Rupees as follows:

**Delivery and Installation - 90% of total cost**

**Satisfactory Acceptance - 10% of total cost**

10. All supplied items are under warranty of **12** months from the date of successful acceptance of items.

11. You are requested to provide your offer latest by **14:00** hours on **24-Jun-2016** .

12. Detailed specifications of the items are at Annexure I.

13. Training Clause (if any) **nil**

14. Testing/Installation Clause (if any) **installation and demonstration**

15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.

16. Sealed quotation to be submitted/ delivered at the address mentioned below,  
TEQIP office BIET Kochhabhanwar, Kanpur Road, Jhansi, UP

17. We look forward to receiving your quotation and thank you for your interest in this project.

(Authorized Signatory)  
Name & Designation

## Annexure I

Sr. No	Item Name	Specifications
1	Procurement of Solar PV Emulator	<p>Solar PV Emulator with following specs: 4 input channels, supply voltage- 230V AC/ 50Hz, output: Short Circuit Current(Isc)/Channel-0-10 A, Open Circuit Voltage(Voc)/Channel, 0-50 VDC, Max Output Power /Channel-400 W, Maximum Channels in Series-4, Maximum absolute voltage at output-200 VDC, Voltage Slew Rate Range-0.01V/ms-2V/ms*, Current Slew Rate Range-0.01A-1A/ms or INF, Modes of Operation- Fixed Mode, Table Mode, Simulator Mode, Programming Mode, Physical Box having Connector at Output: Banana Type, Number of leads in output connector-4, Operating Environment- Indoor Use. Useful for following research insight:MPPT algorithm testing, Inverter control testing for different operating conditions, Analysis and characterization of solar stand alone PV system, Analysis and characterization of grid connected system, Micro-grid and smart grid control testing, Performance analysis of various PV panels in different geographic locations and at different seasons/time. Having three native modes:</p> <ul style="list-style-type: none"> <li>• Fixed Mode – User can set fix V &amp; I Value and Emulator will work like a normal power supply.</li> <li>• Table Mode – User can set the time span (max12 hours) and can download associated panel data. Behavior of panel for the set time span can be emulated. Each channel has storage for maximum 12 tables so that emulator can emulate the behavior of 4 different panels at the same time.</li> <li>• Simulator Mode – Preconfigured table can be downloaded and emulated. This table will run forever once started till user stops emulator. Maximum 10 such tables can be downloaded.</li> </ul> <p>? 4- channel configuration</p> <ul style="list-style-type: none"> <li>• Compared to other single or at best double channel offerings, IgrenEnergi's 4-channel PV emulator reduces investments, provides flexibility and saves precious research time.</li> <li>• 4 independent channels can be connected in series or in parallel to accomplish what the user objectives. Each channel can be independently configured for the different modes (Fix, Table or Simulator)</li> <li>• Real data, real results</li> <li>• 25 years of meteorological database for accurate solar radiation and temperature values from across the world.</li> <li>• Comprehensive database of solar panel models from various manufacturers and of different ratings. Users can select manufacturer and rating for panel and carry out emulations for a specific location and conditions.</li> <li>• Actual measured meteorological data of earth is used to simulate IV curve. Authenticity of data ensures reliability of emulation results.</li> </ul> <p>Boost Converter:- Input DC Voltage:70-90 Volts O/P DC Voltage:-120-150 Volts O/P DC Current:-22 Amps Switching Frequency:-65Khz Gate Driver Controls</p>



**FORMAT FOR QUOTATION SUBMISSION**  
(In letterhead of the supplier with seal)

Date: \_\_\_\_\_

To:

\_\_\_\_\_  
\_\_\_\_\_

Sl. No.	Description of goods (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
<b>Total Cost</b>							

Gross Total Cost (A+B): Rs. \_\_\_\_\_

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. ----- (Amount in figures) (Rupees ----- amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of ----- months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact No: \_\_\_\_\_