



Office of the TEQIP-III  
National Institute Of Technology Karnataka, Surathkal  
Post Srinivasnagar Mangalore – 575025

Phone: +91 824 2474081, + 91 824 2473072

Emails: [teqip3@nitk.edu.in](mailto:teqip3@nitk.edu.in), [teqip3procurement@nitk.edu.in](mailto:teqip3procurement@nitk.edu.in)

INVITATION LETTER

Package Code: TEQIP-III/2020/ntis/21

Current Date: 11-Feb-2020

Package Name: AC Grid Source

Method: Shopping Goods

To,

**Sub:** INVITATION LETTER FOR AC Grid Source (**Revised Specs**)

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	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1	AC Grid Source	1	Head of the Department, Department of Electrical and Electronics Engineering, National Institute of Technology Karnataka, Surathkal,	Testing, Installation and satisfactory demo required.

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 III** 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, initialling, 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 **90**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:

Payment Description	Expected Delivery Period (in Days)	Payment Percentage
Satisfactory Delivery & Installation	60	0
Satisfactory Acceptance	60	100

10. Liquidated Damages will be applied as per the below:  
Liquidated Damages Per Day Min %: 1  
Liquidated Damages Max %: 5
11. All supplied items are under warranty of **36** months from the date of successful acceptance of items and AMC/Others is **NA**.
12. You are requested to provide your offer latest by **03:00 PM** on **27-Feb-2020**.
13. Detailed specifications of the items are at Annexure I.
14. Training Clause (if any) **Training is required as per Buyer's needs**
15. Testing/Installation Clause (if any) **Testing, Installation and satisfactory demo required.**
16. Performance Security shall be applicable: **5%**
17. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
18. Sealed quotation to be submitted/ delivered at the address mentioned below,  
**Procurement Coordinator**  
**Office of the TEQIP-III**  
**National Institute of Technology Karnataka, Surathkal,**  
**Post Srinivasnagar Mangalore - 575025**
19. We look forward to receiving your quotation and thank you for your interest in this project.



Nodal Officer (Procurement)  
TEQIP-III, NITK Surathkal

**Annexure I**

Sr. No	Item Name	Specifications																																																																																																									
1	AC Grid Source	<table border="1"> <tr> <td>AC Output Rating</td> <td>-</td> <td>Output Phase 1 or 3 selectable</td> </tr> <tr> <td>Max. Power</td> <td>-</td> <td>4.5kVA Per Phase 1.5kVA</td> </tr> <tr> <td>Voltage Range</td> <td>-</td> <td>0~350V/Auto</td> </tr> <tr> <td>Voltage Setting Accuracy</td> <td>-</td> <td>0.1% of RD+0.2% of FS or better</td> </tr> <tr> <td>Voltage Resolution</td> <td>-</td> <td>0.1 V</td> </tr> <tr> <td>Distortion</td> <td>-</td> <td>&lt; 0.3% @50/60Hz</td> </tr> <tr> <td>Line Regulation</td> <td>-</td> <td>0.10%</td> </tr> <tr> <td>Load Regulation</td> <td>-</td> <td>0.20%</td> </tr> <tr> <td>Maximum Current (1-Phase Mode) RMS</td> <td>-45A/22.5A</td> <td>or better</td> </tr> <tr> <td>Peak (CF=4)</td> <td>-360A/180A</td> <td></td> </tr> <tr> <td>Maximum Current (each phase in 3-Phase Mode) RMS</td> <td>-15A/7.5A</td> <td></td> </tr> <tr> <td>Peak (CF=4)</td> <td>-60A/30A</td> <td>or more</td> </tr> <tr> <td>Frequency Range</td> <td>-</td> <td>15Hz~2000Hz or more</td> </tr> <tr> <td>Accuracy</td> <td>-</td> <td>0.01%</td> </tr> <tr> <td>DC Output (1-Phase Mode) Power</td> <td>-75% of Full Load</td> <td>or more</td> </tr> <tr> <td>DC output Voltage (1-Phase Mode)</td> <td>-247.5V/495V</td> <td>or more</td> </tr> <tr> <td>DC output Current (1-Phase Mode)</td> <td>-33.75A/16.875A</td> <td></td> </tr> <tr> <td>DC Output (3-Phase Mode) Power</td> <td>-75% of Full Load</td> <td></td> </tr> <tr> <td>DC output Voltage (3-Phase Mode)</td> <td>-247.5V/495V</td> <td>or more</td> </tr> <tr> <td>DC Output Current (3-Phase Mode)</td> <td>-11.25A/5.625A</td> <td>or more</td> </tr> <tr> <td>Input Rating Voltage Operating Range (WYE)</td> <td>-3Ø 200-240V±10%VLN</td> <td></td> </tr> <tr> <td>Input Power Factor</td> <td>-0.97</td> <td>or better</td> </tr> <tr> <td colspan="3"><b>Measurement</b></td> </tr> <tr> <td>Voltage Range</td> <td>-</td> <td>0~175V/0~350V/Auto</td> </tr> <tr> <td>Accuracy</td> <td>-</td> <td>0.1% of RD+0.2% of FS or better</td> </tr> <tr> <td colspan="3"><b>Current</b></td> </tr> <tr> <td>Accuracy (RMS)</td> <td>-</td> <td>0.2% of RD+0.2% of FS or better</td> </tr> <tr> <td>Accuracy (peak)</td> <td>-</td> <td>0.2% of RD+0.4% of FS or better</td> </tr> <tr> <td>Power Accuracy</td> <td>-</td> <td>0.2% of RD+0.4% of FS or better</td> </tr> <tr> <td>Power Line Distortion Simulation</td> <td>-LIST/PULSE/</td> <td>STEP functions</td> </tr> <tr> <td>Waveform Synthesis</td> <td>-</td> <td>50 orders @50/60Hz - -</td> </tr> <tr> <td>Harmonics Measurement Voltage/Current</td> <td>-</td> <td>50 orders @50/60Hz</td> </tr> <tr> <td>Efficiency</td> <td>-</td> <td>&gt;80% or more</td> </tr> <tr> <td>Protection</td> <td>-</td> <td>OVP,OCP,OPP,OTP,FAN</td> </tr> <tr> <td>Safety &amp; EMC</td> <td>-</td> <td>CE mark</td> </tr> </table>	AC Output Rating	-	Output Phase 1 or 3 selectable	Max. Power	-	4.5kVA Per Phase 1.5kVA	Voltage Range	-	0~350V/Auto	Voltage Setting Accuracy	-	0.1% of RD+0.2% of FS or better	Voltage Resolution	-	0.1 V	Distortion	-	< 0.3% @50/60Hz	Line Regulation	-	0.10%	Load Regulation	-	0.20%	Maximum Current (1-Phase Mode) RMS	-45A/22.5A	or better	Peak (CF=4)	-360A/180A		Maximum Current (each phase in 3-Phase Mode) RMS	-15A/7.5A		Peak (CF=4)	-60A/30A	or more	Frequency Range	-	15Hz~2000Hz or more	Accuracy	-	0.01%	DC Output (1-Phase Mode) Power	-75% of Full Load	or more	DC output Voltage (1-Phase Mode)	-247.5V/495V	or more	DC output Current (1-Phase Mode)	-33.75A/16.875A		DC Output (3-Phase Mode) Power	-75% of Full Load		DC output Voltage (3-Phase Mode)	-247.5V/495V	or more	DC Output Current (3-Phase Mode)	-11.25A/5.625A	or more	Input Rating Voltage Operating Range (WYE)	-3Ø 200-240V±10%VLN		Input Power Factor	-0.97	or better	<b>Measurement</b>			Voltage Range	-	0~175V/0~350V/Auto	Accuracy	-	0.1% of RD+0.2% of FS or better	<b>Current</b>			Accuracy (RMS)	-	0.2% of RD+0.2% of FS or better	Accuracy (peak)	-	0.2% of RD+0.4% of FS or better	Power Accuracy	-	0.2% of RD+0.4% of FS or better	Power Line Distortion Simulation	-LIST/PULSE/	STEP functions	Waveform Synthesis	-	50 orders @50/60Hz - -	Harmonics Measurement Voltage/Current	-	50 orders @50/60Hz	Efficiency	-	>80% or more	Protection	-	OVP,OCP,OPP,OTP,FAN	Safety & EMC	-	CE mark
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**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>							

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. \_\_\_\_\_

