Office of the Dean Research and Consultancy Indian Institute of Engineering Science & Technology (IIEST), Shibpur Howrah-711 103

Project Code: DRC/DST/CEGESS/HS/019/17-18

Centre of Excellence for Green Energy & Sensor Systems Indian Institute of Engineering Science & Technology (IIEST), Shibpur Howrah-711 103

Ref.: Tender Advt. No. CGE 1411, dated 11.09.2018

Notice Inviting Quotations

Sealed quotations are invited for the supply of :

Item 1. 3KW 48vdc to 380vac 3 phase Off Grid Power frequency inverter for Solar Generator. Item 2. 2kW Three Phase Off Grid Inverter.

As per the following technical specification. The technical specification can be downloaded from the website. The document can be also obtained from the Centre of Excellence for Green Energy & Sensor Systems (**Contact: Prof. H. Saha**) between 10.00 a.m. and 6.00 p.m. on all working days. The invitation is valid for 07 working days from the date of publication of this notice.

Dean (R & C)

(A. Code DRC-T035/18-19)

SECTION I: TERMS & CONDITIONS :-

- 1. The last date of receipt of quotation is valid **for 07 working days** from the date of publication of this notice. Quotations received later will not be entertained under any circumstances.
- 2. Potential supplier are to submit the quotations in Sealed Cover to the Centre of Excellence for Green Energy & Sensor Systems in the following address:

Prof. H. Saha CEGESS IIEST, Shibpur Howrah-711103, India.

- **3.** Item name must be mentioned on cover.
- **4.** The price quoted should be inclusive of all Taxes in INR, duties and levies. Inclusion of Tax/Levy at a latter stage will not be accepted. Freight, Insurance charges should be clearly indicated. GST @ 5% is chargeable..
- 5. Vendor should have proven track record of supply in IIEST, IIT, NIT, IISc.

6. Commercial Papers (Like Trade License, GST & PAN) duly signed & must be attached.

SECTION II: TECHNICAL SPECIFICATIONS :-

Item 1.

3KW 48vdc to 380vac 3 phase Off Grid Power frequency inverter for Solar Generator

► Rated Power :-	3kW	
➢ DC voltage :-	48V DC	
Input voltage :-	$380V \pm 20\%$	
Input frequency :-	45-65Hz	
Output voltage :-	220VAC/380vac(three-phase	
four-wire system)		
Output frequency :-	$50Hz \pm 1\%$	
Switching time :-	Switching from the main supply	
mode to the battery mode: 50ms		
&		
Switching from the battery mode to the mains supply mode: 25ms		
Charge current :-	Maximum 18A	
Inverter output protection :-	Input over voltage/under voltage	
protection, DC under voltage protection,	peak surge protection, overload	
protection 100-120%, 30s, >120%, 100ms		
➢ Noise :-	<45dB	
Ambient temperature for operation :-	0 to 50°C	
Relative humidity for operation/storage :-	0-90% (no condensation)	

Quantity : 01 No.

SECTION II: TECHNICAL SPECIFICATIONS :-

Item 2. <u>2kW Three Phase Off Grid Inverter</u>

≻ Rated Power :-	2kW
DC input voltage:-	48V
➤ Current :-	18-20A
AC output voltage :-	$380V \pm 20\%$ V (Preferably 415 V for ideal three
phase condition)	
Frequency :-	50Hz

Quantity : 01 No.