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

Project Code: DRC/DST/CEGESS/HS/043/10-11

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

Notice Inviting Quotations

Saled quotations are invited for the supply of

Item 1. Regulated DC Power Supply, Item 2. Graphite Plate (6 mm * 300 mm * 300 mm), Item 3. Float Zone silicon wafers.

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 10.30 a.m. and 3.00 p.m. on all working days. The invitation is valid for 7 working days from the date of publication of this notice .

Dean (R & D)

(A. Code DRC-T019/17-18)

SECTION I: TERMS & CONDITIONS

- 1. The last date of receipt of quotation is valid **for 7 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. Hiranmay Saha Chair Professor & Project Investigator 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.
- 5. Vendor should have proven track record of supply in IIEST, IIT, NIT.

6. Photo copy of Sales Tax & Commercial Papers duly signed & must be attached.

SECTION II: TECHNICAL SPECIFICATIONS

Item 1.

Regulated DC Power Supply (with output 0 to 128VDC, 15Amps)

<u>Technical Specification of Regulated DC Power Supply</u> :				
Input Voltage	-	230V AC, ±10%, 50Hz, 1phase		
Output Voltage	-	0 to 128V		
Output Current	-	0 to 15A		
Line Regulation CV *	-	±0.01% ±5mV		
Load Regulation CV !	-	±0.01% ±5mV		
Line Regulation CC *	-	±0.1% ±10mA		
Load Regulation CC !!	-	±0.1% ±10mA		
Output Ripple CV (max)	-	1mV rms		
Output Ripple CC (max)	-	100mA rms		
Remote Sensing	-	Provided		
Operating Temp.	-	0 to 50°C		
Protection	-	OL/SC (constant current type)		
Indications (LED)	-	CV & CC		
3 Digit DPM	-	V & I		
Meter Accuracy	-	±3 counts		
Input on/off	-	М.С.В.		
Multi Turn Pot	-	V Set & I Set		
Weight apprx. (kg)	-	Light Weight		
Quantity	-	01 No.		

Item 2.

<u>Technical Specification of Graphite Plate (6 mm * 300 mm * 300 mm)</u>:

Apparent Density	-	1.80 g/cm ³
Ash content.	-	200 ppm
Hardness	-	62
Breaking Strength Flexural	-	80 MPa
Tensile strength	-	56.0 MPa
Thermal Conductivity	-	110.1 W/mk
Comprehensive Strength	-	140.2 MPa
Resistivity	-	1300 µΩcm
Modules of elasticity	-	12.1 GPa
Thermal expansion	-	5.0 x 10 ⁻⁶ /C
Porosity	-	14%

Item 3.

Technical Specification of Float Zone silicon wafers:

Double side polished Wafers Diameter 100 mm (4") Type N Dopant Phosphorus Orientation {100} Resistance range 1.00-5.00 Ohm-cm Thickness 280 micron Edges Standrad Quantity- 25 nos.