



NATIONAL INSTITUTE OF SOLAR ENERGY
An autonomous Institute of Ministry of New & Renewable Energy)
GURGAON

**NOTICE INVITING TENDER FOR SUPPLY & INSTALLATION OF DC
POWER SUPPLIES WITH COMPLETE ACCESSORIES**

Sealed Tenders are invited by office of the Director General, National Institute of Solar Energy (NISE) Gurgaon for Supply & Installation of DC Power Supplies with complete accessories. The tender document and detailed technical specifications along with tender terms and conditions may be downloaded from the website of Ministry of New & Renewable Energy or that of the Institute: www.mnre.gov.in or www.nise.res.in.

Sealed tenders should be submitted in two parts i.e. Part-I and Part-2. Part-1 should contain Technical Bid along with Demand Draft for EMD and should be kept in a sealed envelope super scribed as technical bid. Part-II should contain the commercial invoice and should be kept in a separate sealed envelope super scribed as Commercial bid. Both the envelope should be kept in another envelope super scribed as Tender for DC Power Supplies with ratings, addressed to: The Deputy Director General (SPV), National Institute of Solar Energy, Faridabad- Gurgaon Road, Gwal Pahari, Gurgaon, Haryana, India. The bidders may submit their tenders by post or by dropping it in the tender drop box located at the reception counter of NISE Gurgaon by 1.00 P.M. 22nd December, 2015.

Tender DOCUMENT

For

Supply & Installation of DC Power Supplies with complete accessories



NIT NO: 16/6/2015-NISE

Closing Date: 22/12/2015

At

NATIONAL INSTITUTE OF SOLAR ENERGY

19th Milestone, Institutional Area,

Gurgaon-Faridabad Road, Gwalpahari, Gurgaon, Haryana,

INDIA

Telefax No. : +91-124-2579207

File No: 16/6/2015-NISE

National Institute of Solar Energy

**Faridabad-Gurgaon Road
Gwalpahari, Gurgaon-122003 Haryana**

TENDER NOTICE

**Subject: Supply & Installation of *DC Power Supplies with complete accessories*
At National Institute of Solar Energy, Gurgaon.**

On behalf Office of Director General, National Institute of Solar Energy sealed tenders are invited from reputed agencies in two parts (Technical and Commercial separately) for supply, installation of *DC Power Supplies with complete accessories* at National Institute of Solar Energy, Gwal Pahari, Gurgaon, Haryana, India. The important dates and information are given below in the table:

Tender Details

Sl.No.	Description	Details
1	Notice Inviting Bid(NIT) No	<u>16/6/2015-NISE</u>
2	Scope of work	Supply, Installation and warranty for min 1 year, of <i>DC Power Supplies with complete accessories</i> at NISE.
3	DC Power supply	1. 15 KW , 0-1500V DC , 0-10A 2. 15 KW , 0-1000V DC , 0-15A 3. 1.2KW , 0-100V DC , 0-50 A 4. 600W , 0-100V DC , 0-25 A 5. 2 KW , 0-150V DC , 0-40A 6. 2400W , 0-30V DC , 0-80A 7. 7200W , 0-40V DC , 0-180 A 8. 7200 W , 0-120V DC , 0-60A
4	Place of issue & submission of bid document and address for communication # The Envelop should be super scribed as Tender for " <i>DC Power Supplies with ratings</i> "	NATIONAL INSTITUTE OF SOLAR ENERGY Gurgaon-Faridabad Road, Gwal Pahari, Gurgaon,Haryana-122003, India
5	Availability of Tender	The Tender document can be downloaded from

	Document	NISE website: www.nise.res.in
6	Last date & time of submission of bid	22/12/2015 at 12.00PM
7	Earnest Money (Refundable)	Rs. 50000/-
8	Time of supply	Maximum six week, after issue of P.O.
9	Validity of offer	The offer will remain valid for 4 months from the date of tender publication date
10	Validity of earnest money	The earnest money shall be submitted by the bidder in the form of CDR/FDR/BG from any bank operations in India pledged to the Director General NISE. This shall remain valid for 12 months from the date of submission of bids.

DETAILED TENDER NOTICE

Name of Work: Supply and Installation of *DC Power Supplies with complete accessories* at NISE.

1. ELIGIBILITY CRITERIA

1.1 The original manufacturers or their authorized suppliers who have past experience of manufacturing, or authorized Indian supplier. A list of clients should be enclosed.

2. Technical Specifications:

A.

Item no.	Description	Range	Quantity
1.	Output voltage:0-1500 VDC Output current: 0-10 A	Up to 15 KW	02 nos.
	Output voltage:0-1000 VDC Output current: 0-15 A	Up to 15 KW	02 nos.

2. Operating temperature : 0 to 50 °C
3. Protection : Over Load, over voltage, over current, over temperature, short circuit
4. Voltage Set Point : Multi turn
5. Current Set Point : Multi turn
6. Maximum Humidity : 95%RH (0-40°C) non- condensing

7. Nominal Humidity Range : 25-75 %RH
 8. Connecting cables : One set of cables to be provided
 9. Calibration report of the equipment has to be provided from an authorised Agency.
 10. Operation Mode: Continuous
 11. Input Power: 1 phase or 3 phase
 12. Data logging and monitoring with the computer / Laptop (Programmable).

B.

Item no.	Description	Range	Quantity
1.	Output voltage:0-100 VDC Output current: 0-50 A	Up to 1. KW	01 nos.
	Output voltage:0-100 VDC Output current: 0-25 A	Up to 600W	01 nos.
	Output voltage:0-150 VDC Output current: 0-40 A	Up to 2 KW	01 nos.
2	Load Regulation		
	Voltage	0.01 %	0.01%
	Current	0.01	0.01 %
			0.05%
			0.1%
3	Line Regulation		
	Voltage	0.01 %	0.01 %
	Current	0.01 %	0.01 %
			0.01%
			0.05%
4	Meter Accuracy		
	Voltage	0.05%	0.05%
	Current	0.01%	0.01%
			0.05%
			0.1%
5	Output Noise		
	Voltage Noise	=<100 mV	=<85 mV
			=<150 mV
6	Output Ripple		
	Voltage	=<15 mv	=<10 mv
	Current	=<20 mv	=<10 mv
			=<15 mV
			=<30mV
7	OVP Adjustment range	0-110 % of Vmax	0-110 % of Vmax
			0-110 % of Vmax
8	Efficiency	=>80 %	=>75 %
			=>85%
9	Programming Response time (Rise time)	=<10 ms	=<10 ms
			=<10 ms
10	Environmental		
	Operating temperature	0-50 ⁰ C	0-50 ⁰ C
			0-50 ⁰ C
	Max. Humidity	90-95 %	90-95 %
			90-95 %

11	Cooling	Air cooling with variable fan speed	Air cooling with variable fan speed	Air cooling with variable fan speed
12	Protection	The system should offer over voltage & over current	The system should offer over voltage & over current	The system should offer over voltage & over current
13	Front panel display	4 digit graphics display	4 digit graphics display	4 digit graphics display
14	Remote Interface	USB & RS 232/485	USB & RS 232/485	USB & RS 232/485
15	Input specification	1 Phase(220-250 VAC),47-63 HZ	1 Phase(220-250 VAC),47-63 HZ	1 Phase(220-250 VAC),47-63 HZ
16	PC Software	PC Software including Data log; Remote Control software; Hardware Driver	PC Software including Data log; Remote Control software; Hardware Driver	PC Software including Data log; Remote Control software; having the feature of solar array simulator; able to perform MPPT Tracking & efficiency test etc.

C.

Item no.	Description	Range	Quantity	
1.	Output voltage:0- 30 VDC Output current: 0-80 A	Up to 2400 W	01 nos.	
	Output voltage:0-40 VDC Output current: 0-180 A	Up to 7200 W	01 nos.	
	Output voltage:0-120 VDC Output current: 0-60 A	Up to 7200 W	01 nos.	
S.N.	Specification	2400W	7200W	7200W
2	Line Regulation in constant voltage	0.1%	0.5%	0.5%
3	Line Regulation in constant voltage	0.1%	0.5%	0.5%
4	Load Regulation in constant current	0.1%	0.5%	0.5%
5	Output ripples Constant Voltage	<10mV	<10mV	<20mV
6	Output ripples Constant current	<20mV	<20mA	<10mA
7	Operating Temperature	0-50°C	0-50°C	0-50°C

8	Protection: <ul style="list-style-type: none"> • Over Load • Over current • Over voltage • Over temperature • Short Circuit 	required	required	required
9	Indication (LED): Constant Voltage & Constant Current	required	required	required
10	4 Digit DPM: Voltage and Current	required	required	required
11	Meter Accuracy	0.2% ±3 counts	0.2% ±3 counts	0.2% ±3 counts
12	Maximum Humidity	90-95%RH (Non-Condensing)	90-95%RH (Non-Condensing)	90-95%RH (Non-Condensing)
13	Connecting Cables: One set of cables to be provided	1 spare	1 spare	1 spare
14	Power Input	1 Phase	1 Phase/3 phase(1-Phase preferable)	1 Phase/3Phase (1-Phase preferable)
15	Calibration report of the equipment has to be provided from a certified laboratory as per relevant international standard	required	required	required
16	Time delay from power on until output stable	<10 sec	<10 sec	<10 sec
17	Data Logging and monitoring with the computer/laptop (Programmable)	required	required	required

3. EARNEST MONEY DEPOSIT (EMD)

A sum of Rs.50000/- should be submitted as Earnest Money Deposit (EMD) **along with the technical bid** in the form of **bank demand draft/Bank Guarantee** drawn in favor of “National Institute of Solar Energy” and payable at Gurgaon, Haryana”. The EMD of the accepted tender will be retained as Security Deposit and the EMD of other unsuccessful bidders would be returned.

4. RATES:

The rates should be quoted specifically on the following lines:

- a. Firm and final cost of the ***DC Power Supplies with complete accessories*** as per the above specifications and features along with costs of the installation charges as per the above specifications and features, should be provided.
- b. Taxes and freight etc. if any applicable should be indicated separately and clearly.

5. **DELIVERY PERIOD:** ***DC Power Supplies with complete accessories***

should be delivered in a single consignment at the site/consignee within 6 to 8 weeks from the date of issue of confirmed supply order.

6. **INSPECTION:** The supplier should satisfy himself/herself that ***DC Power Supplies with complete accessories*** at NISE is as per the above specifications and features along with options, accessories, conform to the specifications by carrying out complete pre-inspection of each component before dispatch.

7. **CONSIGNEE:** Director (SPV)/ Store Keeper, National Institute of Solar Energy, Ministry of New and Renewable Energy, Gwal Pahari, Gurgaon, 122003 Haryana, India.

8. **GUARANTEE/WARRANTY:** Measuring instruments supplied should be covered by standard terms of warranty for a period of min12 months from the date of installation.

9. **PENALTY:**

- i. The supplier shall supply the stores in accordance with the particulars as expressly specified at the time/times and at the place/places only.
- ii. The time for and the date of the stores stipulated shall be deemed to be the essence of the supply/work order.
- iii. If for any reasons the contractor is unable to adhere to the contract delivery dates, he may seek extension in delivery/completion dates well in time by sending a request in writing in this regard to the office issuing the contract/supply order. The purchaser reserves the right to allow the extension of delivery period subject to such conditions as he may think fit. However, the decision of the purchaser shall be final and binding.

10. **DISPUTES:** In case of any dispute the decision of the Director General, National Institute of Solar Energy will be final and binding on both parties. Further dispute, if any will be settled in the Court of Law at New Delhi jurisdiction only.

11. **VALIDITY:** The Tenders should be valid for 180 days from the date of opening.

12. REJECTION: Incomplete, conditional, fax, late tenders and tenders without EMD will be rejected summarily. Director General, National Institute of Solar Energy reserves the right to reject any or all the tenders at his discretion without assigning any reason thereafter.

13. SUBMISSION OF TENDERS : Sealed tenders are to be submitted in two parts i.e. **Part-I containing Technical competence/literature along with Demand Draft for EMD, and Part-II containing only commercial invoice in a separate sealed envelope, super scribed as commercial bid.** Both the technical and commercial envelopes should be kept in large size sealed envelope super-scribed ***DC Power Supplies with ratings*** at NISE due for opening on 22/12/ 2015 and addressed to: Director (SPV), National Institute of Solar Energy, Gurgaon – Faridabad Road, Gwal Pahari, Gurgaon 122003, Haryana, India.

- **Note: Suppliers / Manufacturers can submit bids for part / full supply of DC power supply.**