



सरदार वल्लभभाई राष्ट्रीय प्रौद्योगिकी संस्थान
सूरत-३९५००७.
SARDAR VALLABHBHAI NATIONAL INSTITUTE OF
TECHNOLOGY SURAT-395007.

Office: 2223371 to 2223374
Fax: 0261-2228394
Grams : SVNIT

No. EED/ 1441 /2024-25

Date: 28/10/2024

To,

Sub: Enquiry for Supply and installation of the following items

- 1) DC-DC Converters
- 2) Voltage Source Converters

You are requested to quote your prices for supply of the stores listed overleaf. The quotations may be sent to the undersigned in a sealed envelope and subscribed as: "Quotation with reference to Enquiry No: EED/1441/2024-25. Dated: 28/10/2024 for the Department of Electrical Engineering" Your quotation should reach the undersigned on or before **Date: 20/11/2024 at 5:00 PM.**

The quotations should be furnished with the following information.

1. The Make or Brand/Model of each item should be specifically stated and wherever necessary, complete set of specifications and dimensions should be given.
2. If asked, samples should accompany the quotations.
3. GST, Sales tax, Insurance charges, Packing and Transportation charges, General tax, Central Sales tax, Custom duty, Installation & commissioning Charges & any additional charges should be **clearly specified in Annexure II.**
4. The period of validity of the quotation should be at least 90 Days. Offers subject to prior sale may please be avoided.
5. The delivery period is to be clearly mentioned in the quotation.
6. The mode of delivery of the stores may be mentioned. The delivery should be F.O.R. Surat and at specified laboratory of the Electrical Engg. Department of SVNIT, Surat.
7. All concessions available to an educational institution should be specified and also taken into account while quoting.
8. This Institute is located within the limits of S.M.C. & exempted from the paying of Octroi duty on incoming goods from outside limits of S.M.C.
9. Payment is normally made by cheque drawn on the S.V.N.I.T Branch Office of State Bank of India, Surat-395007 after satisfactory installation, successful testing of stores and official procedure from account section of the institute.
10. Your Specification & terms-conditions should be as per the format attached **Annexure-I & II** must be on your company letterhead & signed by an authorized person.

K.V. Prasad Kumar

11. Offered quotation may be rejected if any ambiguity is found in offered specification, terms & conditions supplied by the party specified in the tabular format.
12. Preference may be given to the supplier having status of authorized dealer of manufacturer, with a view to ensure reliable **after sales service** for the item.
13. The Director reserves the right to accept stores, which are not strictly in conforming with the specifications but otherwise, found suitable. If stores do not comply with specifications or found in non-working condition, the same is to be taken from the institute, at the cost and responsibility of the supplier.

K.V. Praveen Kumar

Dr. K. V. Praveenkumar, Dr. Rajasekhara reddy Ch., and Dr. Suresh L.,
Assistant Professor (s), Investigators
DoEE, SVNIT, Surat



Yours faithfully

Pranav B. Darji

Prof. (Dr.) Pranav B. Darji
Head, DoEE

28-10-2024

विभागाध्यक्ष / Head

इलेक्ट्रिकल इंजीनियरिंग विभाग

Department of Electrical Engineering

स.व.रा.पौ.सं., सूरत-७ / S.V.N.I.T., Surat-7

DETAILED SPECIFICATIONS

(This must be typed on supplier's letterhead & submitted along with the offer & separate sheet for items)

Sr. No.	Description	Quantity
1.	<p style="text-align: center;"><u>DC-DC Converters</u></p> <ul style="list-style-type: none"> ✓ Power Rating: 01 kW ✓ Bidirectional DC-DC converter for interfacing renewable sources and batteries. ✓ Switches: IGBT / MOSFET as power switches and should designed with suitable protection ✓ Output Power: 1 kW Maximum ✓ Input Voltage: 100-200 V, ✓ Output Voltage: 300 V (+/- 10 %), ✓ Current: 5-10A ✓ Suitability: upto 600V / 1200V, >20 A IGBTs ✓ Switching Frequency: 50 kHz, ✓ Voltage Ripple 5 %, ✓ Current Ripple 5% ✓ Driver circuit: Inbuilt isolated gate driving circuits and terminal to connect gate pulse generated by controller. ✓ Recommended switching frequency of the inverter: 20 kHz ✓ Port for connections: 02 gate pulses to drive IGBTs of the inverter circuit ✓ All cards are mounted in Acrylic box and power terminals and control terminals are terminated on front panel. 	02
2.	<p style="text-align: center;"><u>Voltage Source Converters</u></p> <ul style="list-style-type: none"> ✓ Number of Inverter Legs: Three (Three phase inverter module with 1200 V, 75 A Semikron make IGBTs mounted on appropriate heat sink and with snubber circuit) ✓ Rectifier: Diode Bridge should operate with AC input of 415 V and 35 A ✓ DC Link Capacitors: ✓ Switching frequency = upto 20 kHz ✓ Cooling: Forced (with suitable arrangement) ✓ DC Link capacitors: 02 capable to carry 400 V and charged by three phase rectifier ✓ Rectifier output voltage and inverter input DC has to be connected manually. ✓ Internally the Capacitors and Input DC of inverter legs should not be shorted, Banana pins should be provided to connect Rectifier output and inverter input. ✓ There should be provision to measure the two capacitor voltages. ✓ Ports should be arranged to connect gate pulses ✓ Driver circuit: Suitable driver which do not require any external booster circuit or auxiliary circuits. ✓ It should have inbuilt auxiliary power supplies for level shifting, fault detection etc. ✓ Signal conditioning circuits should be inbuilt. ✓ Encapsulated inverter module should consists of Bridge rectifier, IGBT modules, Heat sink, Fan, IGBT snubbers, IGBT Drivers, thermal trip and other suitable protections and fault indications. 	02

Sign of Party/Firm

K.V. Praveendran

(With full Address & stamped)

QUOTATION SUMMARY SHEET

(This must be typed on supplier's letterhead & submitted along with the offer & separate sheet for items)

	ITEM NAME	UNIT PRICE	TOTAL PRICE
1	Make		
2	Modal		
3	Basic Price of the unit (Including accessories, spares etc)		
4	GST/CST/VAT/Sales Tax etc		
5	Packing & Forwarding charge		
6	Freight/Transportation charge (if any) (based on F.O.R destination at SVNIT, Surat)		
7	Insurance Charge, if Any(on Basic Price)		
8	Custom Duty/Excise Duty vide DSIR Certificate Only (Institute is exempted)		
9	Any additional charge, if any		
10	TOTAL PRICE		
11	Rebate/Concession for Academic Institute		
12	TOTAL NET PRICE (Final)		
	Terms & Conditions		
13	Warranty(if Any)		
14	Validity of Quotation(Minimum 45 days)		
15	Delivery Period		
16	Mode of Delivery		
17	Any other condition (if Any)		

NOTE: Any ambiguity or incomplete filling of SUMMARY SHEET will lead to rejection of offer without any reasons. Write N.A where information demanded is not applicable.

K.V. Praveen Kumar

Sign of Party/Firm

(With full Address & stamped)