

सरदार वल्लभभाईराष्ट्रीय प्रौधोगिकी संस्थान, सूरत SARDAR VALLABHBHAI NATIONAL INSTITUTE OF TECHNOLOGY, SURAT विधुत इंजीनियरिंगविभाग ELECTRICAL ENGINEERING DEPARTMENT

Date: 14-07-2025

No. DOEE/ APG / 466 / 2025-26

To,

Sub: Enquiry for Supply of "Steeper Motor Control system with PLC"

Dear Sir,

You are requested to quote your prices for supply of stores listed overleaf. The quotations may be sent to the undersigned in a sealed envelope and subscribed as: "Quotation with reference to Enquiry No. DoEE/APG /466/2025-26, dated: 14-07-2025" Your quotation should reach the undersigned on or before **01-08-2025 at 5:00 PM**.

The quotations should be furnished with the following information.

- 1. The <u>brand or make of each item should be specifically</u> stated and wherever Necessary, Complete set of specifications and dimensions should be given.
- 2. If asked, samples are accompanying the quotations or provide demonstration in the Department at any stage of purchase without claiming any financial benefits.
- Sales tax, General tax, Central Sales tax, Custom duty, Insurance charges, Packing and Forwarding charges, if not included in the prices quoted, should be clearly specified.
- The period of validity of the quotation should be at least <u>120 Days or more</u>. Offers subject to prior sale may please be avoided.
- 5. The work completion period maximum 60 Days.
- The mode of delivery of the stores may be mentioned. The delivery should be F.O.R. Surat or at the Institute.
- 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.
- Payment is normally made by Account pay/cheque/PFMS on the S.V.N.I.T. Branch Office of State Bank of India, Surat-395007 after satisfactory installation, successful testing in department and official procedure from account section with Institute terms and conditions. If case of any official delay, any type of claimed extra payment will not be considered.

- 10. Your Specification & terms-conditions should be as per the format attached, must be on your company letterhead & signed by an authorized person.
- 11. Offered quotation may be rejected if any ambiguity is found in offered specification, terms & conditions supplied by party in specified 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. Items will be accepted after satisfactory performance in our laboratory according to our requirement.
- 14. The Director reserves the right to accept stores, which are not strictly in confirming with the specifications but otherwise, found suitable.
- 15. The Head of Department /Director reserves the right to stop the purchase process at any stage.
- 16. An enquiry may send in the following address.

То

The Director,

(kind attention, Head, Department of Electrical Engineering),

Sardar Vallabhbhai National Institute of Technology (SVNIT), Dumas road, Ichchhnath,

Surat-395007 (Gujarat)

Ph 0261-2201572(office, DoEE)

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(Dr. H.G.Patel) सह-प्राध्यापक **/ AbStetery horebonge** इलेक्ट्रोकल इंजीनियरींग विभाग Department of Electrical Engineering स.व.रा.पौ.सं., सूरत-७ / S.V.N.I.T., Surat-7



Yours faithfuliy,

2023

इलेक्ट्रीकल इंजीनियरींग विभाग Department of Electrical Engineering स.च.रा.पौ.सं., सूरत-७ / S.V.N.I.T., Surat-7

PRICE LIST

No	Description	Qty.	Unit cost/1 nos including all charges (in Rs.) without GST	Total cost (in Rs.) without GST
1	Steeper Motor Control system with PLC (as per the Product Description and Specification given on Annexure A)	1		
			Total Rs.	
		G	ST @%	
	Grand Total with GST Rs.			

Note:

- 1. Quote item cost/price including all type of charges and GST.
- 2. Quotation will not be considered for further process without Compliance Report in form of ANNEXURE-B.

Terms & Conditions

1.	Percentage of GST	
2.	Work Completion Period	
3.	Validity of the quotation	
4.	Warranty/Guarantee	
5.	Make and model for each items	
6.	Other Terms & conditions	
7.	Submission of Compliance Report in ANNEXURE-B	Yes/ No

ANNEXURE-B

Compliance Report submitted by Agency

Sr. No.	Item Description for Calibration and servicing	Estimated value according to standard/ attached Documents	Compliance Yes/No
1.	Steeper Motor Control system with PLC (as per the Product Description and Specification given on Annexure A)		

Place:

Date :

Signature and stamp of agency

Annexure A Product Description and Specification

Description:

'Steeper Motor Control system with PLC' for the education purpose and stepper motor should be operated and control by PLC, HMI and SCADA. List of component /equipment and of specification is given below.

1) PLC Specifications:

Sr. No.	Model	Specifications
1	Digital Inputs	Minimum 8 nos.
2	Digital Outputs	Minimum 8 nos.
3	Analog Inputs (with or without expansion module)	Minimum 2 nos.
4	Analog output (with or without expansion module)	Minimum 1
5	Boolen execution speed	0.33 micro sec/ Sequential instruction in average
6	Toggle Switches	8 nos.
7	Visual Indicators	8 nos.
8	Audio Indicator	1 nos.
9	Interfacing	Ethernet, RS485, USB
10	Input Voltage	24 V DC
11	Output Voltage	24 V DC
12	Power Supply	110 V - 260 V AC, 50/60 Hz
13	PLC Brand and specifications (supplier has to provide compatible software and communication cable for the PLC and PC communication with at-least three sample programs	Delta, Mitsubishi
14	PLC need to be provided in panel with DIN mounting with necessary supply through SMPS et and all input and out should be mapped to panel with connectors. So that any external input can be easily given and any output may be taken.	

2) HMI specifications:

Sr. No.	Model	Specifications
1	HMI Brand and specifications (supplier has to provide compatible software and communication cable for the HMI to PLC and HMI to PC communication with at- least three sample programs	Delta, Mitsubishi
2	Size	Minimum 7" HMI
3	Display	Colour touch panel
4	Communication port	Ethernet, Com Port, RS485, USB, RS 232
5	HMI need to be provide on panel with necessary supply from provided SMPS.	

3. Specification of Steeper motor and Lead screw mechanism

Sr. No.	Specifications/Descriptions
1	Industrial grade Hybrid Stepper motor with 1.8-degree resolution should be provided with micro stepping driver and has to be control from PLC and HMI.
1	Stepper motor should operator minimum 300 mm Lead screw mechanism mounted with Guide rods for liner movement
2	Second stepper motor should be used for angle movement study

Also supplier should provide

- MCB for ON/OFF control and over load protection
- LED Monitor (Minimum 21 Inch) with PC having CPU (i5 and above)
- PLC, HMI and SCADA software and communications cables (PC-PLC, PC-HMI, HMI-PLC)
- SCADA should also control the stepper motor through PLC and its should display the system with set input and obtained output as per customisation page design.
- Wiring diagrams, user manual and minimum five demo programme