



**ISLAMIC UNIVERSITY OF SCIENCE & TECHNOLOGY  
AWANTIPORA, KASHMIR**

**TENDER NOTICE FOR  
PLC based Electro Pneumatic Kit**

For and on behalf of Vice Chancellor Islamic University of Science and Technology, Awantipora, tenders in **Two Cover System** (Technical & Financial Bid) are hereby invited from original manufacturers/authorized dealers (having specific authorization from their original manufacturer/s to quote against this tender as per the format provided in Annexure – B of the tender for supply and installation of **PLC based Electro Pneumatic Kit** as detailed in the tender document/BOQ.

Tenders shall be submitted in the office of Dean, Health Sciences by or before **26-02-2024**. The detailed tender document can be had from the office of Procurement and Stores, IUST or can be downloaded on the University website [www.iust.ac.in](http://www.iust.ac.in).

**Sd/-**

**Assistant Registrar Procurement & Stores**

No: IUST/Reg PS/PLC\_ME/2024/1723

Dated: 16-02-2024

## TENDER FOR SUPPLY OF PLC BASED ELECTRO PNEUMATIC KIT

This bid aims for purchase of **PLC based Electro Pneumatic Kit**. Therefore, Islamic University of Sciences and Technology (IUST) invite the tenders from eligible bidders for the supply and installation **PLC based Electro Pneumatic Kit**. Bidders are requested to quote their best possible prices with special discount, as the set-up is a non- commercial public service educational initiative supported by University Grants Commission (UGC) and Ministry of Human Resource Development (MHRD), Government of India (GOI).

The address and contact numbers for sending bids or seeking clarifications regarding this tender are given below:

- a) Bids/queries to be addressed to: **Assistant Registrar Procurement and Stores Islamic University of Science and Technology, Awantipora-192122**
- b) E-mail ID's of contact personnel : [procurement.stores@islamicuniversity.edu.in](mailto:procurement.stores@islamicuniversity.edu.in)

### SCHEDULE OF VARIOUS ACTIVITIES

S. No	Activity	Date
1.	<b>Date of issuance of tender notice</b>	<b>16-02-2024</b>
2.	<b>Date of downloading the bid documents</b>	<b>16-02-2024</b>
4.	<b>Bid Submission close Date</b>	<b>26-02-2024</b>

This TENDER is divided into four Parts as follows:

**Part I. contains general information and instructions for the Bidders about the Tender**

**Part II. Contains essential details of the items required such as delivery period, mode of delivery and consignee details**

**Part III. Contains Terms and conditions of the contract with the supplier**

**Part IV. Evaluation criteria and format for Price**

### **Part I. General Information**

1. The tender should be submitted by the due date and time. The responsibility to ensure this lies with the bidder.
  2. **Manner of Depositing the Bids:** The Technical Bid and the Financial Bid of the Tender should be sealed in separate envelopes scribing the wordings – **“Technical Bid and Financial Bid respectively and both the envelopes (Technical Bid and Financial Bid containing envelopes) shall be sealed in one Envelope scribing “Tender for PLC based Electro Pneumatic Kit.**
  3. The University reserves the right to amend the Bid document, tentative schedule and critical dates. The tender/bid document is available at the Office of the Dean, Health Sciences or can be downloaded from the University website [www.iust.ac.in](http://www.iust.ac.in)
  4. **The commercial bid should be filled as per the BOQ.** The prices quoted in the bid against the item should be inclusive of all charges FOR destination Islamic University of Science & Technology (IUST) Campus, Awantipora Kashmir, J&K. Prices are to remain valid for 90 days from the date of opening of the Bid.
  5. **Two Bid System:** Technical Bid would be opened and the tender found eligible will go for opening of Commercial Bid on the same day or the day as decided by the Competent Authority and commercial bids of ineligible tender will not be opened.
  6. **Clarification Regarding Contents of the Tender:** A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify in writing about the clarifications sought. Clarification if any shall be notified on the website in the form of Corrigendum and no separate paper publication shall be made.
- 7. Eligibility Criteria: -**
- a) Firm/Bidders blacklisted at any state by any State/Central Universities, NITs/IITS, Central/State Government body/PSUs etc need not to apply.
  - b) The bidder should have the experience of similar work with reputed organization. The documentary proof in the form of purchase orders/supply orders must be submitted along with the bid.
  - c) The Bidder/Tenderer must provide the following mandatory information/documents in the Technical Bid
    - I. GST Registration
    - II. PAN Card
    - III. Authorization Certificate from the Manufacturer/OEM
    - IV. Experience proof documents in shape of supply orders of similar nature of work.
    - V. Turnover for last three financial years from the Chartered Accountant.
    - VI. Compliance Sheet from the Bidder (wherein the bidder shall have to give the compliance of the specification of the equipment mentioned in the tender)

8. The payment will be processed after the delivery of items, successful verification/ inspection of item as per the University norms and on submission of bills in triplicate.
9. In case of any dispute, the jurisdiction shall be restricted to Srinagar courts.

## **Part II. Essential Details of Items required**

1. **Delivery period:** Delivery period for supply of the items shall be 20 days from the effective date of placing the supply order. The Supply order can be cancelled by the University in case items are not received within the stipulated time. Extension of delivery period will be at sole discretion of the University.
2. The supply, transportation etc of the items shall be sole responsibility and at the risk of the firm till the acceptance by the University.
3. The total prices given are F O R destination Islamic University of Science & Technology (IUST) Campus Stores at Awantipora Kashmir, J&K. The prices shall be inclusive of all charges including freight, packing, forwarding and commissioning and GST.
4. Consignee Details. Assistant Registrar, Procurement and Stores, Islamic University of Science and Technology, Awantipora-192122

## **Part III. Terms and Conditions of the contract with the supplier**

1. The supply, transportation, installation etc. of the items shall be sole responsibility and at the risk of the firm till the acceptance by the University.
2. The supplied items made under this tender will be inspected by a Committee specially constituted for the purpose and in case the Committee is of the opinion that the supplies are not of the required specifications, the supplies shall be rejected and responsibility of lifting back the supplies will devolve on the supplier and the extra cost incurred in arranging the supply from the alternative sources shall also be recovered from the defaulting supplier apart from initiating the proceedings for blacklisting.
3. The University reserves the right that it may or may not issue the supply order for any item/s mentioned in the tender.
4. The University reserves the right to reject or accept any Proposal without assigning any reason or cancel or withdraw the tender. The University reserves the right to relax any condition enumerated or arising out of this tender, without assigning any reason/s thereof. If the supply of the required items are not affected before the specified period, the University shall have the authority to cancel the order or to take any action deemed fit in the circumstances.
5. In case of any dispute the jurisdiction will be courts at Srinagar only.
6. The University may, for any reason, whether suo-moto or in response to a clarification requested by a prospective bidder, modify the bidding documents by an amendment, any time prior to the last date for submission of bids.
7. During evaluation of bids, the University may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted.
8. All the item(s) supplied through this Tender shall be covered by a warranty that a bidder mentions in the tender document. During the period of warranty, no charges will be paid by the University on any kind of service or repairs carried out by the supplier.
9. The warranty period takes effect from the date of acceptance of the items by the University.
10. Failure of the successful bidder to comply with the requirements of the University shall constitute sufficient ground for the annulment of the award and forfeiture of the bid security, in which event the University may make the award to the next lowest bidder or call for new bids.

## **Part IV. Evaluation criteria and format for Price :**

- Only those Bids will be evaluated which are found to be fulfilling all the eligibility and qualifying requirements of the tender Enquiry.
- Prices quoted by the FIRM should be precise and unambiguous. Rate per unit is to be quoted individually as per format for submission of Financial Bid bid at Annexure "B". Clarifications, if any, may be obtained from this office prior to submission of tender.

**CHECK LIST (ON THE LETTER HEAD OF THE BIDDER)**

<b>S. No</b>	<b>Documents</b>	<b>YES/No</b>	<b>Proof of Document</b>
1.	Authorization from the Manufacturer		Copy of Registration
2.	Documents in proof of Similar work experience		(Copy of Purchase Order, etc.)
3.	Affidavit to the effect that the bidder is not Black Listed by any State/Central Universities NIT/IIT/IIIT		Furnish details as per <b>Annexure-A</b>
4.	Financial strength to undertake the work		Turnover for last three financial years from Chartered Accountant
5	Compliance Sheet		The bidder shall have to give the compliance to the specification of the equipment mentioned in the tender

**CERTIFICATE AND DECLARATION:**

- (a) I/We certify that no addition/modification/alteration has been made in the Original Tender Document. If at any stage addition /modification /alteration is noticed in the Original Document. I/We will abide by the terms and conditions contained in the original tender document as well as amendments made by the University, failing which University reserves the right to reject the tender and/or cancel the contract.
- (b) It has been certified that all information provided in tender form is true and correct to the best of my knowledge and belief. We hereby declare that our proposal is made in good faith, without collusion or fraud. No forged /tampered document(s) are produced with tender form for gaining unlawful advantage. We understand that the University is authorized to make enquiry to establish the facts claimed and obtained confidential reports from clients.
- (c) In case it is established that any information provided by us is false / misleading or in the circumstances where it is found that we have made any wrong claims or concealed any information, the University is authorized to blacklist our firm/company/agency and debar us in participating in any tender/bid in future.
- (d) I / We assure the Institute that neither I /We, nor any of my/our workers, will do any act which is improper / illegal during the execution, in case the tender is awarded to us.
- (e) Our Firm / Company / Agency has not been blacklisted or banned by any Govt. Department, PSU, University, Autonomous Institute or any other Govt. Organization.
- (f) I/We certify that, I have understood all the terms & conditions, as indicated in the tender document, and hereby accept the same in entirety failing which shall be liable for action as deemed appropriate by the University.
- (g) I/We hereby declare that the information furnished in this tender document by us is true and correct and also we have gone through the terms and conditions stipulated in the Tender Document and confirm to abide by the same. In case the provided information is found incorrect at any stage, the University may take appropriate action as warranted.

Name and sign of the authorized person of the firm along with seal

Place:

Date:

**AFFIDAVIT REGARDING BLACKLISTING/ NON- BLACKLISTING FROM TAKING PART**

**(To be executed on Rs.10/- Stamp paper & attested by Public Notary/Executive Magistrate by the bidder)**

I / We Proprietor/ Partner(s)/ Director(s) of M/S.-----  
hereby declare that the firm/company namely M/s.-----  
-----

----- has not been blacklisted or debarred in the past by Islamic University of Science and Technology, Awantipora or any other Government organization from taking part in Government tenders.

Or

I / We Proprietor/ Partner(s)/ Director(s) of M/S.----- hereby  
declare that the firm/company namely M/S.-----  
-----was blacklisted or debarred by Islamic University of Science and Technology,  
Awantipora, or any other Government Department from taking part in Government tenders  
for a period of ----- years w. e.f. -----.  
The period is over on-----and now the firm/company is entitled to take part in tenders.  
In case the above information found false I/We are fully aware that the tender/  
contract will be rejected/cancelled by Islamic University of Science and Technology, Awantipora  
and EMD/SD shall be forfeited.

**Signature..... Name.....**

**Capacity in which assigned: ..... Name &**

**address of the firm: ..... Date:**

**Signature of Bidder with seal.**





**Financial Bid**  
**PLC based Electro Pneumatic Kit**

Specifications of the Item	To be filled by the Bidder		
	Make/Model No.	Warranty offered by the bidder	Rate inclusive of GST
<p><b><u>Detailed Specifications:</u></b></p> <p>The kit must be a standalone tabletop training kit which should cover Electro pneumatic systems and PLC.</p> <p><b><u>Special conditions:</u></b></p> <p>Each pneumatic component should have quick fix arrangement for easy, quick &amp; safe mounting. The components should be fixed manually on the profile plate without tools. Each pneumatic component should have pneumatic connectors with size of 1/8"/5mm port size for 4 mm tubing. Each electro pneumatic component should have 4 mm banana connectors with safety protection. The kit should be modular and upgradable so that future investments to higher levels of training are reduced.</p> <p><b><u>The kit should have following items:</u></b></p> <ol style="list-style-type: none"> <li><b>1. Air filter with pressure controller and manometer: 1 no.</b>            Pressure range: 1 - 12 bar            Flow rate: 750 l/min            Filter grade: 40 µm            With on/off valve with silencer</li> <li><b>2. Distributor with 6 outputs: 1 no.</b>            Pressure range: 1 - 16 bar            6 Outputs via non return valve            Pneumatic connection for plastic tubing 4 mm            quick fix secure click on system for mounting on profile plate</li> <li><b>3. Double acting cylinder: 2 nos.</b>            Piston dia: 20 mm            Stroke length: Maximum 100 mm            Operating pressure: Maximum 1000 kPa (10 bar)            Pneumatic connection for plastic tubing 4 mm            quick fix secure click on swiveling system for mounting on profile plate to enable individual adjustment with M6 T bolt.</li> <li><b>4. Single acting cylinder: 1 no.</b>            Piston dia: 20 mm            Stroke length: Maximum 50 mm            Operating pressure: Maximum 1000 kPa (10 bar)            Pneumatic connection for plastic tubing 4 mm</li> </ol>			

<p>quick fix secure click on swiveling system for mounting on profile plate to enable individual adjustment with M6 T bolt.</p> <p><b>5. Power supply unit: 1 no.</b>  Input voltage: 230 ± 10% V AC (50 Hz)  Output voltage: 24 V DC, short-circuit proof  Electrical assembly mounting single /double row rack to hold electronics modules  Electrical connection output via 4 mm socket  Mounting arrangement to fix with electrical mounting frame and should be able to fix with profile plate</p> <p><b>6. Relay unit with three relays, 4 changeover switches: 1 no.</b>  Contact load: max. 5 A  Cut-off load: max. 90 W  Pick-up time: 10 ms  Drop-off time: 8 ms  Electrical connection output via 4 mm socket  Mounting arrangement to fix with electrical mounting frame and should be able to fix with profile plate</p> <p><b>7. Signaling unit with an illuminated pressure switch, three illuminated push button, each with a mini bulb: 1 no.</b>  Contact set: 1 makes, 1 breaks  Contact load: Maximum 2 A  Power consumption (Miniature bulb): 0.48 W  Electrical connection output via 4 mm socket  Mounting arrangement to fix with electrical mounting frame and should be able to fix with profile plate</p> <p><b>8. Limit switch, electrical, actuation via trip cams (from the left): 2 nos.</b>  Contact load: maximum 5 A  Electrical connection via 4 mm socket  quick fix secure click on swiveling system for mounting on profile plate to enable individual adjustment with M6 T bolt.</p> <p><b>9. Limit switch, electrical, actuation via trip cams (from the right): 2 nos.</b>  Contact load: maximum 5 A  Electrical connection via 4 mm socket  quick fix secure click on swiveling system for mounting on profile plate to enable individual adjustment with M6 T bolt.</p> <p><b>10. 5/2-Way single Solenoid Valve: 2 nos.</b>  Pressure range: 3 - 8 bar  Flow rate: 220 l/min  Pneumatic connection for plastic tubing 4 mm  Electrical connection only via integrated 4 mm safety sockets  24 V DC power supply  Pneumatic connection for plastic tubing 4 mm  quick fix secure click on system for mounting on profile plate</p> <p><b>11. 5/2-Way double Solenoid Valve: 1 no.</b>  Pressure range: 2 - 8 bar  Flow rate: 220 l/min  Pneumatic connection for plastic tubing 4 mm  Electrical connection only via integrated 4 mm safety sockets  24 V DC power supply  Pneumatic connection for plastic tubing 4 mm  quick fix secure click on system for mounting on profile plate</p>			
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	--

**12. Flow control valve with check valve: 4 nos.**

Pressure range: 1 - 10 bar

Flow rate: 200 l/min

Pneumatic connection for plastic tubing 4 mm

quick fix secure click on system for mounting on profile plate

**13. 4mm connection cables: Min. 90 cables in diff. length as required and red and blue colour: - 1 set**

Plugs with rigid protective sleeve and axial socket for safety

All the connection cables should be with safety measures in place and no exposed pins

Conductor cross section: 1 mm<sup>2</sup>

1000 V CAT II

Rated current: 16 A

**14. PLC Unit: 1 no.**

Should include advanced PLC modules like Siemens S7 1200, Allen Bradley Logix or Equivalent

Min.10 digital inputs each connected with switch which should act as toggle as well as momentary and with 4 mm sockets.

Min. 8 digital outputs each connected with 4 mm sockets and LED

Mounting arrangement to fix with electrical mounting frame and should be able to use as a tabletop

**15. PC Unit: 1no.**

Should include a desktop PC with Operating System (Factory Pre-Loaded) Windows 10 Professional to run the PLC software. RAM Size

(GB) 8, SSD Capacity (GB) 256, Backlit Monitor Size: 23.8 inches, Monitor Resolution: 1920x1080 pixels, on site OEM warranty: 5 years,

Processor: Intel Gen 13, Processor Description Intel Core i5

**16. PLC programming software: 1 no.**

Should include 6 users, Perpetual License

**17. Communication cable: 1 no.**

RJ45, CAT5, 2m length

**18. Aluminium profile plate: 1 no.**

Anodized aluminum profile plate with grooves on each side, Size: Min. 1000 x 700 mm, with ergonomic angled work surface should be able to fix on worktables/benches

**19. Mobile workstation with one drawer unit (vertical): 1 no.**

The training kit should be used from both sides with high strength metallic (aluminium) profile legs with four heavy-duty lockable castor wheels, MDF or waterproof wooden work surface, and one pedestal drawer units and each drawer unit having at least four drawer inserts for the storage of components, each with handles and individual locks, on metallic full panel drawer slides, and mounting frames with matching dimensions to be attached to each side of the workstation for firmly holding electrical/electronic modules. Accessories such as storage plate for placing compressor, cable guides for keeping laboratory cables, and brackets/supports for attaching profile plates, component mounting frames, etc.

Dimensions (Approx.): worktable size (approx.) length 1500 mm x width 800 mm x overall height 1700 mm, drawer – overall size of drawer unit (approx.) length 470 mm x height 780 mm x depth 590 mm, mounting frame for electrical components – 1500 mm wide

**20. Silent Compressor: 1 no.**

Compressor, oil-lubricated, extremely silent (<55 dB), power supply: 230V, 50 Hz, AC, Pressure rating: 8 bar, tank capacity: At least 25 litres with pressure regulator, pressure gauge, and water separator, power cable. Note: The compressor must be suited for use in classroom

**21. Inductive proximity sensor: - 1 no.**

Sensing distance of 0 – 4 mm

Power supply 10 – 30 V DC

<p>N/O contact (PNP) starting function  360° rotatable, detenting every 15° without changing of quick fix Position  Connection only via the 4 mm safety connectors integrated in the quick fix quick connector system  protection against polarity reversal, overload and short circuit.  quick fix secure click on system for mounting on profile plate</p> <p><b>22. Capacitive proximity sensor: - 1 no.</b>  Sensing distance of 0 – 4 mm  Power supply 10 – 30 V DC  N/O contact (PNP) starting function  360° rotatable, detenting every 15° without changing of quick fix Position  Connection only via the 4 mm safety connectors integrated in the quick fix quick connector system  protection against polarity reversal, overload and short circuit.  quick fix secure click on system for mounting on profile plate</p> <p><b>23. Optical proximity sensor: - 1 no.</b>  Sensing distance of 70 – 300 mm  Power supply 10 – 30 V DC  N/O contact (PNP) starting function  360° rotatable, detenting every 15° without changing of quick fix Position  Connection only via the 4 mm safety connectors integrated in the quick fix quick connector system  protection against polarity reversal, overload and short circuit.  quick fix secure click on system for mounting on profile plate</p> <p><b>24. Polyurethane plastic tube, 4 mm: 15 M</b>  Pressure range: 1 - 10 bar  Size: 4 mm  Colour: Blue</p> <p><b>25. Polyurethane plastic tube, 8 mm: 5 M</b>  Pressure range: 1 - 10 bar  Size: 8 mm  Colour: Blue</p> <p><b>26. Tee connector for 4 mm tube: 10 nos.</b>  Pressure range: 1 - 14 bar, Size: 4 mm</p> <p><b>27. Blanking plug for 4 mm tube: 10 nos.</b>  Pressure range: 1 - 14 bar, Size: 4 mm</p> <p><b>28. Pneumatics Animation Software: 1 License (Optional)</b>  The software should feature and demonstrate functional animation of products and symbols, circuit designing tutorial, and construction of elements.</p> <p><b>29. Electro Pneumatic &amp; PLC – Hard copy of Textbook &amp; Workbook: - 1 set</b></p> <p><b>30. Certifications: Valid ISO 9001, ISO 14001, TUV, CE Certifications (To be attached with the technical bid)</b></p>			
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	--

Seal and Signature of the Bidder