

Global Tender for the Supply, Installation, Commissioning and Training of “Wind Shaper 3 \* 3 modules – Qty 01” for Robotics Applications

This is a RFQ (Request for Quotation) from the Indian Institute of Science (IISc), Bangalore, for the “Supply, Installation, Commissioning and Training of Wind Shaper 3 \* 3 modules – Qty 01” at the Department of Cyber Physical Systems, Indian Institute of Science, Bangalore.

IISc is India’s best research institute and Department of Cyber Physical Systems is an multidisciplinary research department with the best academic facilities in the world.

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Section 1 - Bid Schedule

1	Tender No	<b>IISc/Purchase/CPS/2025-26-03</b>
2	Tender Date	28-01-2026
3	Item Description	Supply, Installation, Commissioning and Training of “Wind Shaper 3 * 3 modules – Qty 01”
4	Tender Type	Two bid system (i) Technical Bid (Part A) (ii) Commercial Bid (Part B)
5	Place of tender submission	The Chairperson Kind Attn: Prof. Suresh Sundaram Department of Cyber Physical Systems (CPS), Indian Institute of Science, Bangalore – 560012
6	Last Date & Time for submission of tender	23/02/2026
7	For further clarification	<a href="mailto:office.cps@iisc.ac.in">office.cps@iisc.ac.in</a>

## Section 2 – Eligibility Criteria

### Prequalification criteria:

1. The Bidder's firm should have existence for a minimum of three years. (Enclose Company Registration Certificate)
2. Preference to local bidders is not mandatory.
3. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.
4. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect has to be given as per Annexure 3.
5. Only the Original Equipment Manufacturer or their authorized representatives across the globe shall participate in the bid
6. The order will be placed only on the bidder who participated in the bid

## Section 3 – Terms and Conditions

### A) Submission of Tender:

1. All documentations in the tender should be in English.
2. Tender should be submitted in two envelopes (two bid system).
  - a. Technical Bid (Part-A) – Technical bid consisting of all technical details and check list for conformance to technical specifications. The proposal should contain a compliance table with 4 columns in addition to the ones in the technical requirements table that has been included with this RFQ below. The compliance table should include all the items in the same order and format. **The first column should describe your compliance in a “Yes” or “No” response. If “No” the second column should state the extent of deviation. The “third” column should state the reasons for the deviation if any.** The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirements table below (suppliers who include any indication of prices in the technical bid will be automatically disqualified).
  - b. Commercial Bid (Part-B) – Indicating item wise price for the items mentioned in the technical bid, **as per the format of quotation provided in tender**, and other commercial terms and conditions. **The commercial bid should be broken up to the maximum extent possible into separate items with a cost against each (in particular the optional items) to enable better comparison of price for various configurations across the bidders.** As an option, **please provide itemized cost for any *suggested* accessories/add-ons that may enhance the usability, capability, accuracy or reliability of the tool.** Vendors are encouraged to quote for as many add-ons as their tool portfolio permits.
3. The technical bid and price bid should each be placed in separate sealed covers, superscripting on both the envelopes the tender no. and the due date. Both these sealed covers are to be placed in a bigger cover which should also be sealed and duly superscripted with the Tender No, Tender Description & Due Date.
4. The SEALED COVER superscripting tender number / due date should reach Chairperson’s Office, Centre for Cyber Physical Systems, Ground Floor, TCS SMART X Hub, Landmark: behind CeNSE and near D gate, Indian Institute of Science Bengaluru – 560 012 , India on or before due date mentioned in the tender notice. In case the due date happens to be a holiday, the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.
5. All queries are to be addressed to the person identified in “Section 1 – Bid Schedule” of the tender notice.

6. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document (Indian Bidders only).
7. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.
8. The Institute reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to the award of contract, without there by incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.
9. The technical proposal must include references of at least 3 previous installations done in India within last 5 years of similar equipment from the equipment manufacturer. Please provide the names and contact addresses of the three independent referees so that the committee can contact them independently to get a reference.
10. Incomplete bids will be summarily rejected.

#### B) Cancellation of Tender:

Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

- a. To accept OR reject lowest tender or any other tender or all the tenders.
- b. To accept any tender in full or in part.
- c. To reject the tender, offer not confirming to the tender terms.

#### C) Validity of the Offer:

The offer shall be valid 90 Days from the date of opening of the commercial bid.

#### D) Evaluation of Offer:

1. The technical bid (Part A) will be opened first and evaluated.
2. Bidders meeting the required eligibility criteria as stated in Section 2 of this document shall only be considered for Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
3. Pre- qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision in regard to acceptance and / or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and decision in this regard shall be binding on the bidders.

4. The award of the contract will be subject to acceptance of the terms and conditions stated in this tender.
5. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
  - a. Non-submission of complete offers.
  - b. Receipt of bids after due date and time and or by email / fax (unless specified otherwise).
  - c. Receipt of bids in open conditions.
6. In case any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bangalore shall construe that the BIDDER had accepted the clauses as of the tender and no further claim will be entertained.
7. No revision of the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
8. Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, preprocessing and post processing, optional items, recommended spares, warranty, annual maintenance contract.

#### E) Pre-requisites:

The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.

#### F) Warranty:

The complete system must be under a warranty period of 1 year including free support for technical issues in installation and operation of the equipment. Visiting costs, and accessories/spares involved in the repair and replacement of defective components within the warranty period shall be borne by the supplier. If the instrument is defective, it must be replaced or rectified at the bidder's cost within 30 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

#### G) Annual Maintenance Contract:

An annual / comprehensive maintenance contract for a period of 2 years post warranty may be provided on completion of the warranty period as an option.

#### H) Purchase Order:

1. The order will be placed on the bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in tender is only indicative. IISc, Bangalore reserves the right to increase /decrease the quantity of the items depending on the requirement.

3. If the quality of the product and service provided is not found satisfactory, IISc, Bangalore reserves the right to cancel or amend the contract.

**I) Delivery, Installation and Training:**

The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore from the date of receipt of purchase order. The system should be delivered, installed and made functional within 180 days from the date of receipt of the purchase order. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore. After successful installation and inspection, the date of taking over of entire system by the IISc, Bangalore shall be taken as the start of the warranty period. No partial shipment is allowed. The bidder should also arrange for technical training for the users.

**J) Payment Terms:**

The payment will be determined after mutual discussions with the successful bidder.

**K) Statutory Variation:**

Any statutory increase in the taxes and duties subsequent to the bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bangalore.

**L) Disputes and Jurisdiction:**

Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

**M) General:**

1. All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension of the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.
2. The bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is, however, advised not to furnish superfluous information.
3. The bidder may visit the installation site before submission of tender, with prior intimation.
4. All imported equipment should be quoted in the currency of the country of origin, and all locally sourced items should be quoted in Indian Rupees.
5. Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.

Section 4 – Technical Specifications

**Technical Specifications towards Supply, Installation, Commissioning and Training of “Wind Shaper 3 \* 3 modules - Qty - 01”**

<b>Specifications of Wind Shaper 3 * 3 modules</b>			
<b>S.No</b>		<b>Units</b>	<b>Values</b>
<b>Fan Modules Specifications</b>			
1	Number of pixels per module	(-)	9
2	Number of fans per wind pixel	(-)	2
3	Total number of fans per module	(-)	18
<b>Fan Array Design Parameters</b>			
4	Number of modules along x-axis	(-)	3
5	Number of modules along y-axis	(-)	3
6	Number of modules	(-)	9
7	Width of the fan array	(m)	0.73
8	Height of the fan array	(m)	0.73
9	Surface of the fan array	(m <sup>2</sup> )	0.53
<b>Flow Specifications</b>			
10	Minimum flow speed (without flow manipulator)	(m/s)	2
11	Maximum flow speed (without flow manipulator)	(m/s)	16
12	Maximum flow rate	(m <sup>3</sup> /s)	8.5
13	Ramp-up flow acceleration (hot wire at 1m from the fans)	(m/s <sup>2</sup> )	4.0
14	Ramp-up flow acceleration (hot wire at 1m from the fans)	(m/s <sup>2</sup> )	3.6
<b>Electrical Specifications</b>			
15	Power consumption at max load and max pressure drop	(kW)	11.2
16	Power consumption at max load and zero pressure drop	(kW)	8.8
17	Power factor (higher than)	(-)	0.9
18	Input voltage (3P + N + GND)	(V)	230/400
19	Line current rating (per phase) $i_{\text{phase}}$	(A)	16.2
20	Recommended wall receptacles:		
	- 1 x CEE32 (3P + N + GND)	For $0A < i_{\text{phase}} < 32A$	
	- 1 x CEE63 (3P + N + GND)	For $32A < i_{\text{phase}} < 63A$	
	- 1 x CEE125 (3P + N + GND)	For $63A < i_{\text{phase}} < 125A$	
	- N x CEE125 (3P + N + GND)	For $125A < i_{\text{phase}}$	
<b>Software Features</b>			
21	Dynamic control of the wind profile $u = f(x, y, t)$	(-)	Yes
22	Smallest allowed time step for dynamic control	(s)	0.1
23	Swirl control for each wind pixel	(-)	Ready
24	Wind Control Version	(-)	2.2

25	Portability (operating system)	(-)	Cross-platform
26	Network communication between user and windshaper	(-)	Ethernet
27	Scientific Interface	(-)	Python 3.x API
28	Graphical User Interface	(-)	Web App

#### A. Training and demonstration

Training in usage of the machine (hardware and software) must be demonstrated by the successful bidder at bidder's cost to the end users at IISc, Bangalore. The vender should be responsible for the complete system installation, functioning maintenance, and training by trained personnel. Bidders should clearly specify the after sales service/application support capabilities without any additional cost.

## Section 5 – Technical Bid

The technical bid should furnish all requirements of the tender along with all annexures in this section and submitted to

Chairperson's Office  
Centre for Cyber Physical Systems  
Ground Floor, TCS SMART X Hub  
*Landmark: behind CeNSE and near D gate*  
Indian Institute of Science Bengaluru – 560 012

### Annexure-1:

#### Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

#### Details of the Bidder

Sl. No	Items	Details
1.	Name of the Bidder	
2.	Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)	
3.	Registration No/ Trade License, (attach attested copy)	
4.	Registered Office Address	
5.	Address for communication	
6.	Contact person- Name and Designation	
7.	Telephone No	
8.	Email ID	
9.	Website	
10.	PAN No. (attach copy)	
11.	GST No. (attach copy)	

Signature of the Bidder

Name  
Designation, Seal

Date:

Annexure-2:

Declaration regarding experience

To,

Chairperson's Office  
Centre for Cyber Physical Systems  
Ground Floor, TCS SMART X Hub  
*Landmark: behind CeNSE and near D gate*  
Indian Institute of Science Bengaluru – 560 012

Ref: Tender No: XXXXXXXXXX

Dated: XXXXX

Supply, Installation, Commissioning and Training of “Wind Shaper 3 \* 3 modules – Qty-01”

Sir,

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has ---- years of experience in supplying and installing multimode plate readers.

(Signature of the Bidder)

Printed Name

Designation, Seal

Date:

Annexure-3:

Declaration regarding track record

To,  
Chairperson's Office  
Centre for Cyber Physical Systems  
Ground Floor, TCS SMART X Hub  
*Landmark: behind CeNSE and near D gate*  
Indian Institute of Science Bengaluru – 560 012

Ref: Tender No: XXXXXXXX

Dated: XXXXX

Supply, Installation, Commissioning and Training of “Wind Shaper 3 \* 3 modules – Qty-01”

Sir,

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company/ firm is not currently debarred / blacklisted by any Government / Semi Government organizations / institutions in India or abroad. I further certify that I'm competent officer in my company / firm to make this declaration.

Or

I declare the following

Sl.N o.	Country in which the company is Debarred /blacklisted / case is Pending	Blacklisted / debarred by Government / Semi Government/Organizations /Institutions	Reason	Since when and for how long

(NOTE: In case the company / firm was blacklisted previously, please provide the details regarding the period for which the company / firm was blacklisted and the reason/s for the same).

Yours faithfully  
(Signature of the Bidder)

Name  
Designation, Seal

Date:

Annexure – 4:

Declaration for acceptance of terms and conditions

To,  
Chairperson's Office  
Centre for Cyber Physical Systems  
Ground Floor, TCS SMART X Hub  
*Landmark: behind CeNSE and near D gate*  
Indian Institute of Science Bengaluru – 560 012

Ref: Tender No: XXXXXX

Dated: XXXX

Supply, Installation, Commissioning and Training of “Wind Shaper 3 \* 3 modules – Qty-01”

Sir,

I've carefully gone through the Terms & Conditions as mentioned in the above referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I'm an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)

Name

Designation, Seal

Date:

Annexure – 5:

Details of items quoted:

- a. Company Name
- b. Product Name
- c. Part / Catalogue number
- d. Product description / main features
- e. Detailed technical specifications
- f. Remarks

Instructions to bidders:

1. Bidder should provide technical specifications of the quoted product/s in detail.
2. Bidder should attach product brochures along with technical bid.
3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

Section 6 – Commercial Bid

**The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned under:**

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total
1.	Essential items noted in the technical specification				
1.a	... (details of essential items)				
1.b	...				
2.	Optional items noted in the technical specification				
2.a	... (details of essential items)				
2.b	...				
3.	Accessories for operation and installation				
4.	All Consumables, spares and software to be supplied locally				
5.	Warranty (1 years)				
6.	AMC / CMC				
7.	Cost of Insurance and Airfreight				
8.	FOR/CIP/CIF IISc, Bengaluru				

Any additional items

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total

Addressed to Chairperson's Office  
 Centre for Cyber Physical Systems  
 Ground Floor, TCS SMART X Hub  
*Landmark: behind CeNSE and near D gate*  
 Indian Institute of Science Bengaluru – 560 012

## Section 7 – Checklist

**(This should be enclosed with technical bid- Part A)**

**The following items must be checked before the Bid is submitted:**

### 1. Sealed Envelope “A”: Technical Bid

1. **Section 5- Technical Bid** (each page signed by the authorized signatory and sealed) with the below annexures:
  - a. **Annexure 1: Bidders details**
  - b. **Annexure 2: Declaration regarding experience**
  - c. **Annexure 3: Declaration regarding clean track record**
  - d. **Annexure 4: Declaration for acceptance of terms and conditions**
  - e. **Annexure 5: Details of items quoted**
2. **Copy of this tender document duly signed by the authorized signatory on every page and sealed.**

### 2. Sealed Envelope “B”: Commercial Bid

#### **Section 6: Commercial Bid**

**Your quotation must be submitted in two envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) super scribing on both the envelopes with Tender No. and due date and both of these in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No., Tender description & Due Date.**