

LOCAL TENDER NOTICE

Supply, Installation, Commissioning and Training of Wind Shaper 3 * 3 modules



Tender No.: IISC/Purchase/CPS/2025-26/02
Date: 11th November 2025

TENDER DOCUMENT

Chairperson
Cyber Physical Systems
Division of Interdisciplinary Sciences
Indian Institute of Science
C. V. Raman Road
Bangalore 560012 (INDIA)

Website: www.iisc.ac.in

GSTIN: 29AAATI1501J2ZV

Email ID for this tender
office.cps@iisc.ac.in

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DEPARTMENT OF CYBER PHYSICAL SYSTEMS
INDIAN INSTITUTE OF SCIENCE (IISc), BENGALURU, INDIA

*The Department of Cyber Physical Systems, Indian Institute of Science Bengaluru, invites tenders for supply of “Wind Shaper 3 * 3 modules – Qty-01”. This Invitation for Bids is open to all domestic (India based) manufacturers, Indian OEM or its authorized Indian distributors only.*

The scope of the supply includes Installation, Commissioning and Training on site.

BID SCHEDULE

1	Tender number	<i>IISc/Purchase/CPS/2025-26-2</i>
2	Tender Date	<i>11.11.2025</i>
3	Item Description	<i>Supply, Installation, Commissioning and Training of “Wind Shaper 3 * 3 modules – Qty-01”</i>
4	Tender Type	Two Bid System: (a) Technical Bid (Part A) (b) 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 oftender	<i>04.12.2025 @ 5.00 P.M</i>

To whom it may concern

This is a Request for quote (RFQ) from Indian Agencies for **supply including Installation, Commissioning, Training at site** for “Wind Shaper 3 * 3 modules – Qty-01” at the “Department of Cyber Physical Systems (CPS), Indian Institute of Science, Bengaluru.

This Invitation for Bids is open to only domestic (India based) manufacturers, Indian OEM or its authorized Indian distributors. All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed below. ***With respect to this tender, the rules laid out by the Government of India in order No. P45021/2/2017-pp-BE-II issued by the Public Procurement Section, Department or Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 4th June 2020 will be followed.***

The deadline for submission of proposals is **04.12.2025 @ 5.00 P.M** Proposals should arrive at the office of

The Chairperson,

Department of Cyber Physical Systems

Kind Attn: Prof.Suresh Sundaram

Indian Institute of Science

Bengaluru - 560012,

Karnataka, India.

*Direct all questions concerning the acquisition to addresses to **Prof. Suresh Sundaram** at:*
vssuresh@iisc.ac.in OR office.cps@iisc.ac.in

Eligibility Criteria

Prequalification criteria:

1. The Bidder's firm should have existed for at least three years. The bidder should enclose company registration certificate.
2. The Bidder should belong to either class 1 or class 2 supplier distinguished by their "local content" as defined by recent edits to GFR (please refer to annexure 1 attached). They should mention clearly which class they belong to in the cover letter.
 - a. Class 1 supplier: Goods and services should have local content of equal to or more than 50%.
 - b. Class 2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
 - c. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
 - d. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to the Class-1 supplier.
 - e. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.
3. 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.
4. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per Annexure 4.
5. The bidder should provide a support certification as per Annexure 6
6. The Bidder should have qualified technical service personnel for the instrument(s) based in India.
7. INR quotes should be on a FOR-IISc Bangalore basis.
8. The order will be placed only on the bidder who participated in the bid.

General Terms and Conditions

1. The bid should be submitted in the two-cover system, i.e., technical bid and commercial bid separately in sealed covers. The technical bid should contain all commercial terms and conditions, except the price.
2. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table that should describe your compliance in a "yes" or "no" response against each of the items in the table listed in this RFQ. If "no" the second column should state, the extent of deviation. The third column should state the reason 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 requirement table below.
3. In the commercial bid, the price should be inclusive of all discounts.
4. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore). The Bidder should belong to either Class-1 or Class-2 suppliers distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter. a) Class-1 supplier: Goods and services should have local content of equal to or more than 50%. b) Class-2 supplier: Goods and services should have local content of equal to or more than 20% and less than 50%.
5. The covering letter should clearly state that whether the vendor is a Class-I or Class-II local supplier. Failing this the bid will be automatically rejected.
6. Any "Non-local supplier" i.e. "a supplier or service provider, whose goods, services or works offered for procurement, has local content less than 20%" is ineligible to participate in this tender.
7. The vendor to state the percentage of the local content and provide self-certification that the item offered meets the minimum local content requirement. They should also give details of the location(s) at which the local value addition is made.
8. The lead time for the delivery of the equipment should not be more than 6 months from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.
9. All the quotations must be valid for at least 90 days at the time of submission.
10. List of customers and references: **The Bidder should have supplied similar equipment in Central Universities/govt research labs, preferably in centrally Funded Technical Institutes/Research labs (IITs, IISC, IISER, NIT, HAL, NAL, DRDO Labs). Please provide the details, performance certification from customers and contact information.**
11. 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 should be provided.
12. Items in addition to that listed in the technical table that you would like to bring to the attention of the committee, such as data sheets, technical plots etc. can be listed at the end of the compliance table.

13. Vendors are encouraged to highlight the advantage of their system over their competitors.
14. If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email and a physical visit to the vendor facility and their customer facility will be undertaken.
15. The Institute reserves the right to accept or reject any bid, or to annul the bidding process and reject all bids, at any time prior to the award of contract without thereby incurring any liability of the affected bidder or bidders.
16. Warranty terms and additional warranty options is a must for all the components. Please specify the service plan like whether the local distributor will address the issue or the parent company.
17. Terms and conditions for the annual maintenance contract beyond the warranty period should be mentioned.
18. After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.
19. Please quote the price of each optional line item, separately.

Technical Specifications

Please note that the requirements listed below are only guidelines. It does not disbar bids that do not meet the criteria listed. Vendors are requested to quote for equipment that meet the criteria to the best extent possible and list deviations. Deviations are NOT an automatic reason for disqualification. Any deviations will be discussed by the technical committee prior to making an informed decision.

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

Specifications of Wind Shaper 3 * 3 modules			
S. No		Units	Values
	Fan Modules Specifications		
1	Number of pixels per module	(-)	9
2	Number of fans per wind pixel	(-)	2
3	Total number of fans per module	(-)	18
	Fan Array Design Parameters		
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	(m²)	0.53
	Flow Specifications		
10	Minimum flow speed (without flow manipulator)	(m/s)	2
11	Maximum flow speed (without flow manipulator)	(m/s)	16
12	Maximum flow rate	(m³/s)	8.5
13	Ramp-up flow acceleration (hot wire at 1m from the fans)	(m/s²)	4.0
14	Ramp-up flow acceleration (hot wire at 1m from the fans)	(m/s²)	3.6
	Electrical Specifications		
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_{phase}	(A)	16.2
20	Recommended wall receptacles:		
	- 1 x CEE32 (3P + N + GND)	For $0A < i_{phase} < 32A$	
	- 1 x CEE63 (3P + N + GND)	For $32A < i_{phase} < 63A$	
	- 1 x CEE125 (3P + N + GND)	For $63A < i_{phase} < 125A$	
	- N x CEE125 (3P + N + GND)	For $125A < i_{phase}$	
	Software Features		
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

✚ Should have proven record of successful installations within Indian education/research institutes. Proof of such installation must be enclosed.



✚ The OEM/Supplier should have trained service engineers stationed in India for any on-site service requirement, details to be provided in the offer.

✚ OEM/supplier should have requisite stock of necessary spare parts in India.

TERMS AND CONDITIONS

1. Warranty period: One years and continued maintenance support with necessary spare parts for four years.
2. Supplier Credibility:
 - a. The Bidder/Vendor Must have supplied minimum three similar orders to reputed Government Organizations in INDIA. Copies of Purchase Orders to be enclosed along with the Technical Bid as proof.
 - b. Please enclose User list in INDIA along with the contact details and performance certificate.
 - c. The bidder/vendor shall have a yearly turnover of at least 3 Cr for the past four years.
 - d. Vendor shall have local service engineers available to attend maintenance/troubleshooting/breakdown etc within 48hrs from the date of complaint registration. Details of local service engineers with their experience shall be shared along with the proposal. Vendor Shall ensure spares and service support for the quoted model for next four years.
 - e. The supplier shall have prior experience in handling turnkey projects involving Wind Shaper. Supplier should have supplied, installed & commissioned at least 2 Wind Shaper having 3 * 3 module or more in India and details to be indicated in technical offer with supporting documents. Contact information of personnel from the organizations of installation to be given.
 - a. IISc team may contact/visit the customers and obtain feedbacks regarding the installed systems.
3. Institute reserves the right for final selection of items.
4. Vendors may quote for any other items/accessories separately as “Optional Items”.

For queries or clarifications, please contact:

*Prof. Suresh Sundaram, Chairman
Department of Cyber Physical Systems
Indian Institute of Science,
Bengaluru, Karnataka 560012
vssuresh@iisc.ac.in*

OR

office.cps@iisc.ac.in

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

Date:

Designation, Seal

Annexure-2:

Declaration regarding experience

To,
The Chairperson,
TCS Smart-X Hub
Department of Cyber Physical Systems,
Indian Institute of Science,
Bangalore – 560012, India.

Ref: Tender No: XXXXXXXXXX

Dated: XXXXX

Dear Sir/Madam

I've carefully reviewed the Terms & Conditions in the above-referred tender. I hereby declare that my company/firm has ----- years of experience in supplying and installing the proposed equipment.

(Signature of the Bidder)

Printed Name

Designation, Seal

Annexure-3:

Declaration regarding track record

To,
The Chairperson,
TCS Smart-X Hub
Department of Cyber Physical Systems,
Indian Institute of Science,
Bangalore – 560012, India.

Ref: Tender No: XXXXXXXX

Dated: XXXXX

Dear Sir/Madam,

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

Or

I declare the following

Sl. No.	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

Annexure – 4:

Declaration for acceptance of terms and conditions

To,
The Chairperson,
TCS Smart-X Hub
Department of Cyber Physical Systems,
Indian Institute of Science,
Bangalore – 560012, India.

Ref: Tender No: XXXXXX

Dated: XXXX

Dear Sir/Madam,

I've carefully reviewed the Terms & Conditions 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 the technical bid.
3. Bidders should clearly indicate compliance or non-compliance with the technical specifications provided in the tender document.

Annexure 6 – Support Certification

Declaration for instrument support

To,
The Chairperson,
TCS Smart-X Hub
Department of Cyber Physical Systems,
Indian Institute of Science,
Bangalore – 560012, India.

Ref: Tender No: XXXXXX

Dated: XXXX

Dear Sir/Madam,

I've carefully reviewed the Terms & Conditions mentioned in the above-referred tender document. I declare that the model quoted has not been discontinued by our organization and the repair parts will be available for at least another four years. 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

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 Optional items)				
2.b	...				
3.	Accessories for operation and installation				
4.	All Consumables, spares and software to be supplied locally				
5.	Warranty (1 year)				
6.	Cost of Insurance and air freight				
7.	CIP/CIF/FOR IISc, Bengaluru				

Any additional items

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

The Chairperson,
TCS Smart-X Hub
Department of Cyber Physical Systems
Indian Institute of Science,
Bangalore – 560012, India

Section 7 – Checklist

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

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

A. 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
 - f. Annexure 6: Support Certification
2. Copy of this tender document duly signed by the authorized signatory on every page and sealed.

B. 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