# राष्ट्रीय प्रौद्योगिकी संस्थान कर्नाटक, सुरत्कल 💿 🕞 🕞 🖓 🕞 🕞 🕞 🕞 💷

विभाग / DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING POST SRINIVASNAGAR, MANGALORE – 575 025 (D. K) पोस्ट- श्रीनिवासनगर, मंगलूरु - 575025 (डी. के)

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## उद्धरण आमंत्रण सूचना/NOTICE INVITING QUOTATION

अधिसूचना संख्या/ Notification No.: NITK/CSE/SS/FSG/IoT/706A/2025/04 दिनांक/Dated: 02-06-2025 सामग्री का नाम/ Name of Goods IoT Devices and Accessories अनुमानित राशि / Estimated Amount Rs. 50,000.00 (Including GST) ई.एम.डी राशि (अनुमानित राशि का 2%) (2.5 लाख से ऊपर के अनुमानित राशि लिए लाग्) / EMD Amount (2% of estimated NA amount) (Applicable for estimate above 2.5 lakhs) क्रय आदेश जारी होने के बाद वस्तु की आपूर्ति का समय 21 Days / Time for Supply of item after release of Purchase order दस्तावेज डाउनलोड/बिक्री आरंभ तिथि। 03-06-2025 Document Download / Sale Start Date स्पष्टीकरण आरंभ तिथि / Clarification Start Date 03-06-2025 स्पष्टीकरण समाप्ति तिथि / Clarification End Date 10-06-2025 बोली जमा करने की आरंभ तिथि / 03-06-2025 **Bid Submission Start Date** बोली जमा करने की अंतिम तिथि। 24-06-2025 before 3.00 PM Last Date for submission of bids बोली खोलने की तिथि/ Bid Opening Date 25-06-2025, 11:00 AM Dr. Shridhar Sanshi Assistant Professor. Dept. of Computer Science & Engineering NITK -बोली जमा करने का पता/Address for Submission of bids Surathkal, PO Srinivasnagar, Mangalore - 575025 Dakshina Kannada District, Karnataka Contact No.: 0824-2473416 E-mail: shridhar.sanshi@nitk.edu.in

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#### राष्ट्रीय प्रौद्योगिकी संस्थान कर्नाटक, सुरत्कल NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL विभाग / DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

POST SRINIVASNAGAR, MANGALORE - 575 025

पोस्ट- श्रीनिवासनगर, मंगलूरु - 575025 (डी. के)

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अधिसूचना संख्या/ Notification No.: NITK/CSE/SS/FSG/IoT/706A/2025/04

दिनांक/Dated: 02-06-2025

#### NOTICE INVITING QUOTATION (NIQ)

The National Institute of Technology Karnataka, Surathkal (in short – NITK, Surathkal) is an Institute Of National Importance Under Ministry of Education Govt of India, imparting Technical Education and engaged in Research Activities. It is proposed to procure the items for the departmental academic/research activities.

Sealed Quotations as per the Price Schedule given in this NIQ are invited for the following items subject to the terms and conditions, from the reputed manufacturers or its authorised dealers so as to reach on or before scheduled date and time. The quotations in the firm's Business letter head should be address to the "Director, NITK, Surathkal". The envelope shall be superscribed with the Quotation Notification Number and the Name of the Goods for which quotation is submitted.

सामग्री का नाम / Name of Goods	IoT Devices and Accessories
अनुमानित राशि / Estimated Amount	Rs. 50,000.00(Including GST)
ई.एम.डी राशि (अनुमानित राशि का 2%) (2.5 लाख से ऊपर के	
अनुमानित राशि लिए लागू)/ EMD Amount (2% of estimated	NA
amount) (Applicable for estimate above 2.5 lakhs)	
क्रय आदेश जारी होने के बाद वस्तु की आपूर्ति का समय	21 Dave
/ Time for Supply of item after release of Purchase order	21 Days
दस्तावेज़ डाउनलोड/बिक्री आरंभ तिथि।	03-06-2025
Document Download / Sale Start Date	00 00 2020
स्पष्टीकरण आरंभ तिथि / Clarification Start Date	03-06-2025
स्पष्टीकरण समाप्ति तिथि / Clarification End Date	10-06-2025
बोली जमा करने की आरंभ तिथि / Bid Submission Start Date	03-06-2025
बोली जमा करने की अंतिम तिथि।	24-06-2025 before 3.00 PM
Last Date for submission of bids	
बोली खोलने की तिथि / Bid Opening Date	25-06-2025, 11:00 AM

Sd/-

[Signature of HOD with Seal] [मोहर के साथ एचओडी के हस्ताक्षर]

Note: Institute shall not be responsible for any postal delay about non-receipt /non-delivery of the bids or due to wrong addressee.

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#### SECTION-1 Terms and Conditions

- 1. The rates should be quoted for preferably FOR destination from supply within India.
- 2. The bidder shall indicate the excise duty exemption for the goods if applicable.
- 3. The rate quoted should be on unit basis. Taxes and other charges should be quoted separately, considering exemptions if any. The rate should be quoted in INR only
- 4. Rate quoted should be inclusive of Testing, commissioning and Installation of equipment and Training.
- 5. Payment: No advance payment will be made. Payment will be made only after the supply of the item in good and satisfactory condition and receipt of performance security by supplier.
- 6. Guarantee/Warrantee period should be specified for the complete period should be specified in section 3 of this tender document.
- 7. Period requirement for the supply and installation of item should be specified in section 3 of this tender document.
- 8. In case of dispute, the matter will be subject to Mangalore Jurisdiction only.
- 9. <u>Delivery Period</u>: The Delivery Period/Time shall be deemed to be the essence of the Contract and delivery must be completed not later than such date(s). If the Supplier does not perform its obligations within the Delivery Period/Date mentioned in the Contract, the same would constitute the breach of the Contract and the Institute shall have the right to cancel or withdraw the Contract for the unsupplied portion after the expiry of the original or extended delivery date or period stipulated in the Contract. Such cancellation of the contract on account of non performance by the Supplier would entitle the Buyer to forfeit the EMD/Performance Security besides other actions such as debarment from the Institute as per GFR 2017.
- Liquidated Damages: Timely delivery is the essence of the contract and hence if the Supplier fails to deliver Goods within the original/extended delivery period(s) specified in the contract, the Institute will be entitled to deduct/recover the Liquidated Damages for the delay, unless covered under Force Majeure conditions aforesaid, @
   1% per week or part of the week of the delayed period as pre-estimated damages not exceeding 5% of the contract value without any controversy/dispute of any sort whatsoever.
- 11. The bidder needs to comply with restrictions under rule No 144 (xi) of GFR (General Financial Rules) 2017 and the clause pertaining to Public Procurement Division Order (Public Procurement no 1,2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 and 24.07.2020 of Dept of Expenditure (DOE), Ministry of Finance). In this Connection Bidder has to submit Self Certification (as per Annexure A or B), depending on the status of the bidder.
- 12. The bidder needs to submit a Self-certification in line with Make in India, Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017, P 45021/2/2017-PP (BE-II) dated 28.05.2018, P-45021/2/2017-PP (BE-II) dated 29.05.2019 and P45021/2/2017- PP (BE – II) dated 16.09.2020 of DPIIT, Ministry of Commerce & Industry.

The Bidder who will not meet this criterion will be rejected in the technical bid. The Self-certification should be provided as per Annexure C.

- 13. EMD must be in the form of Bank Guarantee Annexure-D (Fixed Deposit Receipt/Insurance surety bonds/DD/e-Payment mode (through Credit/Debit cards / Net Banking). It will be valid for 180 days from the date of opening of the tender. In case of EMD payment made through E-Payment, UTR Number with details should be uploaded. The firm registered with MSME/NSIC as per MSME procurement policy order 2012 will be exempted from submission of EMD. Intended parties will have to give proof of registration along with their tender. EMD of the unsuccessful bidders shall be refunded without any interest at the earliest after finalization of the purchase of the concerned item.
  - a. The EMD will be returned to the BIDDERs(s) whose offer is not accepted by NITK within one month from the date of the placing of the purchase order(s) on the selected BIDDER(s). In the case of the BIDDER(s) whose offer is accepted the EMD will be returned on submission of Performance Security in the form of Bank Guarantee (BG). However, if the return of EMD is delayed for any reason, no interest/penalty shall be payable to the Bidders.
  - b. The successful BIDDER, on the award of contract/order, must send the contract/order acceptance in writing, within 15 days of award of contract/order failing which the EMD will be forfeited.
  - c. The EMD shall be forfeited in case a successful BIDDER fails to furnish the Performance Security.
  - d. Bidder should prepare the EMD as per the instructions specified in the tender document. The original EMD should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission as specified in the tender documents. The details of the BG/DD/FD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise, the uploaded bid will be rejected.
- 14. <u>Performance Security</u>: The successful bidder shall deposit performance security of 3% of the quoted price in the form of Bank Guarantee (ANNEXURE-E) of any scheduled bank drawn in favour of The Director, NITK Surathkal, Mangaluru payable at Mangaluru. In case the bidder fails to deposit the said Performance Security within the stipulated period, including the extended period if any, the Earnest Money Deposited by the bidder shall be forfeited automatically without any notice. Please note the following points:
  - a. Successful bidder should submit performance Security as prescribed above to the purchase Section, NITK Surathkal, on or before 30 days from the date of issue of order acknowledgment.
  - b. Performance Security shall be for the due and faithful performance of the contract and shall remain binding, notwithstanding such variations, alterations for extensions of time as may be made, given, conceded, or agreed to between the successful bidder and the purchaser under the terms and conditions of acceptance to tender.

- c. The successful bidder is entirely responsible for the due performance of the contract in all respects according to the terms and conditions of the tender.
- d. The validity of the Performance Security must cover the warranty period plus two months.
- 15. Abnormally quoted low bid will be liable for rejection as per the OM No.F.12/17/2019-PPD of Department of Expenditure, Ministry of Finance dated 6<sup>th</sup> February 2020.

**\*\*Disclaimer\*\*** Bidders are advised to exercise caution and not respond to any unknown calls, emails, or embedded links requesting payment for participating in the tender or for any other purpose. Please note that NITK Surathkal never asks for any tender fee for participation in tenders or bids.

# SCHEDULE OF REQUIREMENTS, SPECIFICATIONS AND ALLIED DETAILS

[ To be filled up by the Department / Centre of NITK, Surathkal ]

Item(s) Name to be Procured	: IoT Devices and Accessories
Brief Specifications of the Item(s) (Annexure-F)	: As per Annexure - F
Quantity	: As per Specification
Any other details / requirement	: Nil
Warranty Period required	: 03 Years
Delivery Schedule expected after placement of Purchase order (in Weeks)	: 03 weeks
Performance Security to be given by Successful Bidder after release of Purchase Order (in Rupees) ( <b>applicable for estimate Above 2.5 lakhs</b> )	: NA

#### SECTION 3 PRICE SCHEDULE

[ To be used by the bidder for submission of the quotation]

1.	Item Name	:		
2.	Specifications (Conforming to Schedule of requirements Enclose additional sheets if necessary)	:		
3.	Currency and Unit Price	:		
4.	Quantity	:		
5.	Item Cost (SI No. 3 * SI. No. 4)	:		
6.	<ul><li>Taxes and Other Charges</li><li>(i) Specify the type of taxes and duties in percentages and also in figures.</li><li>(ii) Specify Other Charges in figures.</li></ul>	:		
7.	Warranty Period (Conforming to the Schedule of requirements)	:		
8.	Delivery Schedule (Conforming to the Schedule of requirements)	:		
9.	Name and address of the Firm for placing purchase order	:		
10.	Name and address of Indian authorized agent ( in case of imports only)	:		
Signat	ture of the Bidder:			
Name	and Designation:			
Busin	ess Address :			
Place: Date:			Seal of the Bi	dder's Firm

#### **SECTION 4 CONTRACT FORM**

#### [To be provided by the bidder in the business letter head]

- (Name of the Supplier's Firm) hereby abide by the delivery schedule mentioned in this 1. document for supply of the items if the purchase order is awarded.
- 2. The item will be supplied conforming to the specifications stated in this document without any defect and deviations.
- Warranty will be given for the period mentioned in this document and service will be 3. rendered to the satisfaction of NITK, Surathkal during this period.

Signature of the Bidde	er:		
Name	:		
Business Address	:		_
Place :		Seal of the	— Bidder's Firm

Date :

al of the Bidder's Firm

#### Annexure-A

#### (Compliance to be submitted in the bidder's letterhead) (Applicable for estimate above 2.5 lakhs)

Sub: Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017

Item Name:			
Enquiry No.:			

We M/s.\_\_\_\_\_(name of the bidder company) have read the clauses pertaining to the Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1,2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020) regarding restrictions on procurement from a bidder of a country that shares a land border with India.

We hereby certify that we are not from such a country and eligible to be considered for this tender.

(Note: Non-compliance of above said Gol Order and its subsequent amendment, (if any), by any bidder(s) shall lead to commercial rejection of their bids by NITK)

For and behalf of \_\_\_\_\_(Name of the bidder)

(Signature, date & seal of an authorized representative of the bidder)

#### Annexure-B

#### (Compliance to be submitted in the bidder's letterhead) (Applicable for estimate above 2.5 lakhs)

Sub: Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017

Item Name:	
Enquiry No.:	

We M/s. (name of the bidder company) have read the clauses pertaining to the Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1,2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020) regarding restrictions on procurement from a bidder of a country which shares a land border with India.

We are from such a country which shares a land border with India & have been registered with the Competent Authority as specified in the above-said order. We hereby certify that we fulfill all requirements in this regard and are eligible to be considered.

#### Evidence of valid registration by the Competent Authority is attached.

(Note: Non-compliance of above said Gol Order and its subsequent amendment, (if any), by any bidder(s) shall lead to commercial rejection of their bids by NITK)

For and behalf of \_\_\_\_\_(Name of the bidder)

(Signature, date & seal of an authorized representative of the bidder)

#### Annexure-C

### Self-Certification on the letterhead of the OEM (Applicable for estimate above 5 lakhs)

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017, P-45021/2/2017-PP (BE-II) dated 28.05.2018, P-45021/2/2017-PP (BE-II) dated 29.05.2019 and

P-45021/2/2017-PP (BE-II) dated 16.09.2020, we hereby certify that

.....

(Supplier name) are local supplier meeting requirement of minimum local content \_\_\_\_\_\_% defined in as above orders for the material against Enquiry / Tender No

.....

.....

Details of the location at which local value addition will be made are as follows:

.....

We also understand false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permitted under law.

Date: Place: Signature: Name and Designation: Mobile no: Office Telephone No: Email ID: Office Seal:

Annexure-D

#### FORMAT FOR EARNEST MONEY DEPOSIT / BID BOND (Applicable for estimate above 2.5 lakhs)

(TO be typed on <u>Non-judicial stamp paper</u> of value Indian Rupees Five Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT MANGALURU OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT MANGALURU OR ANY SCHEDULED BANK (OTHER THAN NATIONALISED BANK) SITUATED AT MANGALURU. BONDS ISSUED BY COOPERATIVE BANKS ARE NOT ACCEPTED)

#### LETTER OF GUARANTEE

To Director, National Institute of Technology Karnataka, Srinivasnagar P.O., Surathkal Mangaluru – 575025

IN ACCORDANCE WITH YOUR TENDER for the supply of ....., M/s..... (hereinafter called the "Bidder") having its Registered Office at ..... wish to participate in the said bid the for supply.....as an irrevocable Bank Guarantee against Earnest Money Deposit for an amount of Rs. (Rupees.....) valid up to (180 days from the date of issue of Bank Guarantee), is required to be submitted by the bidder as a condition precedent for participating in the said bid, which amount is liable to be forfeited by the Purchaser on (1) the withdrawal or revision of the offer by the bidder within the validity period, (2) Non acceptance of the Letter of Intent/Purchase order by the Bidder when issued within the validity period, (3) failure to execute the contract as per contractual terms and condition within the contractual delivery period and (4) on the happening of any contingencies mentioned in the bid documents.

#### During the validity of this Bank Guarantee:

The Guarantee shall be irrevocable and shall remain valid up to.....(180 days from the date of issue of Bank Guarantee) If any further extension is required, the same shall be extended to such required period on receiving instruction from the Bidder, on whose behalf the is Guarantee is issued.

#### Notwithstanding anything contained herein:

This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at ......(Address of local branch).

#### Yours truly,

Signature and seal of the guarantor: Name of Bank: Address: Date:

Instruction to Bank: Bank should note that on expiry of Bond Period, the Original Bond will not be returned to the Bank. The bank is requested to take appropriate necessary action on or after the expiry of the bond period

#### Annexure-E

#### FORMAT FOR PERFORMANCE GUARANTEE BOND (To be typed on Non-judicial stamp paper of the value of Indian Rupees of Five Hundred) (Applicable for estimate above 2.5 lakhs)

To, Director, National Institute of Technology Karnataka, Srinivasnagar P.O., Surathkal Mangaluru – 575025

Whereas...... (name and address of the contractor) (hereinafter called "the contractor") has undertaken, in pursuance of contract no ......... date....... to supply ................. (description of goods and Works/ Services) (hereinafter called "the contract").

And Whereas you have stipulated it in the said contract that the contractor shall furnish you with a bank guarantee by a Commercial bank for the sum specified therein as security for compliance with its obligations as per the contract;

And Whereas we have agreed to give the contractor such a bank guarantee.

We hereby waive the necessity of your demanding the sail debt from the contractor before presenting us with demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed thereunder or of any of the contract documents which may be made between you and the contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition, or modification.

This guarantee shall be valid until the ......day of ......20.....

Our......branch at......\*(Name & Address of the ......\*(branch) is liable to pay the guaranteed amount depending on the filing of a claim and any part thereof under this Bank Guarantee only and only if you serve upon us at our ......\* branch a written claim or demand and received by us at our ......\* branch on or before Dt...... otherwise, the bank shall be discharged of all liabilities under this guarantee after that.

(Signature of the authorized officer of the Bank)

Name and designation of the officer

.....

Seal, name & address of the Bank and address of Branch

\*Preferably at the headquarters of the authority competent to sanction the expenditure for the procurement of goods or at the concerned district headquarters or the state headquarters.

#### <u>Annexure-F</u>

#### **Detailed Technical Specifications for IOT Devices and Accessories**

SI. No.	Name of the Item	Quantity
1	<ul> <li>Waterproof Analog Turbidity Sensor for Arduino <ol> <li>Operating Voltage: 5VDC.</li> <li>Current: 30mA (MAX).</li> <li>Operating temperature: -30 ° C to 80 ° C.</li> <li>Compatible with Arduino, Raspberry Pi, AVR, PIC</li> <li>Measuring Range: 0 ~ 1000 NTU.</li> <li>Water quality measurement in rivers, streams, and wastewater</li> <li>Effluent monitoring</li> </ol> </li> <li>Function: Measures water quality by detecting turbidity (suspended particles in water) Working Principle: <ul> <li>Measures light transmittance and scattering rate (related to Total Suspended Solids, TSS)</li> <li>Higher TSS = Increased turbidity</li> </ul></li></ul>	02 No.s
	Output Modes: Analog and digital signal outputs The adjustable threshold in digital mode based on MCU	
2	<ul> <li>Waterproof Analog Ph Sensor for Arduino <ol> <li>Module Size : 43 x 32mm(1.69×1.26")</li> <li>Measuring Range :0 – 14PH</li> <li>Measuring Temperature: 0 – 60 °C</li> <li>Accuracy: ± 0.1pH (25 °C)</li> <li>Module Power: 5.00V</li> <li>Response Time: ≤ 1 min</li> <li>Interface Type: pH2.0</li> <li>Power Indicator LED</li> <li>Aquaculture and similar environments</li> </ol> </li> </ul>	02 No.s
3	<ul> <li>Waterproof Dissolved Oxygen Sensor for Arduino</li> <li>Product:Lab Grade Analog Dissolved Oxygen Sensor / Meter Kit For Arduino</li> <li>Type: Galvanic Probe</li> <li>Detection Range: 0~20mg/L</li> <li>Response Time: Up to 98% full response, within 90 seconds (25°C)</li> <li>Pressure Range: 0~50PSI</li> </ul>	02 No.s
4	Official 27W Type C Raspberry Pi 5 power supply	01 No.
5	Micro HDMI to HDMI Cable	01 No.
6	Waterproof Temperature Sensor Kit(Compatible for Raspberry Pi 5 and Arduino) Temperature Module : 1. Digital Output should offer digital temperature conversion and output for	02 No.s

	precise readings.
	2. Single-Bus Communication: Uses advanced single-wire data
	communication, reducing the need for additional wiring.
	3. High Accuracy: Provides up to 12-bit resolution with an accuracy of
	$\pm 0.5^{\circ}$ C, ideal for precise applications.
	4. Parasitic Power Mode: Can operate in parasitic mode, eliminating the
	need for an external power supply.
	5. Wide Temperature Range: Detects temperatures from -55°C to +125°C
	$(-67^{\circ}F \text{ to } +257^{\circ}F)$ , suitable for extreme environments.
	6. Built-in EEPROM: Includes EEPROM for storing configuration settings
	and temperature limits for enhanced reliability.
	7. Input Voltage (V): 3.3~5
	8. Interface: Digital
	9. Operating Temperature (°C): -55 to 125
	10. Length (mm): 32
	11. Width (mm): 22
Temper	ature Probe :
1.	
2.	
2.	+125°C.
3	Length: 1 meter
	Probe Dimensions: It features a 6mm diameter probe with a length of 50mm,
т.	which is ideal for compact installations.
5.	
5. 6.	Cable Length: Includes a 1-meter cable for flexible placement.
0.	

#### Warranty: 03 Years

Note: Brand name and model should be mentioned. Hardcopy of the manual needs to be attached.

Sd/-

Dr. Shridhar Sanshi Faculty in-charge of Purchase **Sd/-**Head of the Department Dept. of CSE

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