



## Department of Electrical Engineering Indian Institute of Technology, Delhi Hauz Khas, New Delhi 110016

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Date: May 1, 2024

Quotations are invited for Design and development of scale model of UAV. The required specifications are given below. Complete technical information should be provided along with the Technical bid. Email bids are also acceptable. Please refer to the last page on Terms and Conditions for details on how and when to submit Technical and Financial bids.

The scope of the work include

1. Design of UAV as per the specifications provided.
2. Capability demonstration with VTOL.

## Required Specifications for Design and development of scale model of UAV

1	Flight endurance	15 minutes
2	Range	500 m
3	Maximum Take off weight	8 Kg
4	VTOL configuration	Tr-configuration
5	Cruise speed	58 km/h
6	Operating ceiling	60 m AGL
7	Maximum ceiling	260 m ASML
8	Propulsion through motors	Brushless DC motors
9	Guidance module	GPS and flight controller sensors
10	Take-off and landing	Auto
11	Flight mode	(a) Loiter flight mode , b) fly to coordinate c) cruise to waypoint
12	GPS accuracy	2 m
13	Modes of operation	Autonomous
14	GCS	14 Inch Ruggedized tablet
15	Digital encrypted and bi-directional datalink	AES 256 encryption
16	Data link range	500 m

The seeker integration with the UAV are to be finalized in discussion with the PI.

## Terms and Conditions

1. The quote should reach the following address on or before **14-05-2024 at 10 AM**  
Dr. M. Sarkar  
Electrical Engineering Department  
Block II, Room 333  
IIT Delhi, Hauz Khas  
New Delhi, 110016  
email : [msarkar@ee.iitd.ac.in](mailto:msarkar@ee.iitd.ac.in)/[uaswal@gmail.com](mailto:uaswal@gmail.com)
2. Please quote prices for FOB New Delhi, inclusive of all taxes and duties.
3. Quote should be in Indian Rupees for agents of Indian manufacturers, or in foreign currency, for agents of foreign manufacturers, and needs to be valid for at least three months.
4. Attach all the technical literature and a list of similar installations done in India.
5. If the quote is being submitted by a representative of the manufacturer, a valid agency-ship or dealership certificate authorizing the agent to quote to IIT Delhi on behalf of the manufacturers should be enclosed. **The principal and the vendor, both, are not allowed to quote for the same product.**
6. Complete set of manuals for the operation of the equipment should be given.
7. Please specify all of your terms and conditions clearly, including delivery period.
8. Mode of payment for purchases in foreign currency are through irrevocable letter of credit, or through wire transfer on delivery. Only bank charges within India are payable by IIT Delhi, all bank charges outside India are the responsibility of the seller. For purchases in INR, payment is on delivery.
9. The Institute reserves the right to accept or reject any or all quotations without assigning any reasons thereof.