COMSATS University Islamabad, Lahore Campus
Defence Road, Off Raiwind Road, Lahore

Tender No. CUI-LHR-TN-13-19-1210
Case # 2065

Single Stage Two Envelop Procedure

Title of Tender: **Multirotor for Dr. Mirza Tariq Hamayun, Department of Electrical and Computer Engineering, CUI-Lahore**

TERMS AND CONDITIONS

1. ***All pages of bidding documents are mandatory to be signed / stamped, meaning thereby bidder agrees to our terms & conditions mentioned herein, failing which the bid may be rejected.***

2. ***Any addition, deletion or modification of any clause of the procurement terms &conditions/BoQs of CUI,LC by any vendor will not be acceptable and may lead to rejection of the bid.***

3. ***Only registered Suppliers, who are on Active Taxpayers List (ATL) of FBR, are eligible to participate in tender.***

4. The contract will be executed and handed over in satisfactory conditions up to the entire satisfaction of COMSATS University Islamabad, Lahore Campus.

5. Documents along with Pay Order / Demand Draft amounting to **Rs. 500/-** as a tender documents fee (Non-Refundable) shall be submitted in favor of COMSATS University Islamabad, Lahore Campus to the address given below. No bid will be accepted without tender documents' fee.

6. Part / Advance payments is not allowed.

7. **The exact completion/delivery time from the date of the purchase / work order will be 30 days. The handing over / completion time for this contract is of critical importance.**

8. Your bid proposal should be inclusive of freight and all other taxes delivered at COMSATS University Islamabad, Lahore Campus's premises.

9. After opening of bids, COMSATS University Islamabad, Lahore Campus will examine the bids for completeness as per tender document.

10. Purchase order (s) will be awarded to the lowest or technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs.

11. The bid should be submitted in a sealed envelope up to **January 16, 2019** on or before **1400hrs** and will be opened on the same date **at 1430hrs** in the presence of available bidders.

12. COMSATS University Islamabad, Lahore Campus, will follow the PPRA rule of **single stage two envelope procedure;**

    i. The bid shall comprise a single package containing **two separate envelopes.** Each envelope shall contain separately the **financial proposal** and the **technical proposal;**

Signature & Stamp of Bidder

ii. The envelopes shall be marked as **"FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL"** in bold and legible letters to avoid confusion**;**

iii. Initially, only the envelope marked **"TECHNICAL PROPOSAL"** shall be opened**;**

iv. The envelope marked as **"FINANCIAL PROPOSAL"** shall be retained in the custody of the procuring agency without being opened;

v. The procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;

vi. During the technical evaluation no **amendments** in the technical proposal shall be permitted;

vii. The financial proposals of bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;

viii. After the evaluation and approval of the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically nonresponsive shall be returned un-opened to the respective bidders;

ix. and

x. The bid found to be the lowest evaluated bid shall be accepted.

13. The envelope should be marked as under;

Secretary, Purchase Committee
COMSATS University Islamabad, Lahore Campus
Defence Road, Off Raiwind Road, Lahore.
Tel: 042-111-001-007, Ext: 875

The envelope shall also bear the word **"CONFIDENTIAL"** and following identification quotation of **"Multirotor for Dr. Mirza Tariq Hamayun, Department of Electrical and Computer Engineering, CUI-Lahore ".**

14. The bid form (BoQs) must be duly filled in, stamped and signed by the authorized representative of the bidder.

15. If the vendor fails to deliver the goods / services to COMSATS University Islamabad, Lahore Campus in time then the penalty will be charged as under:-

a. 1% per day of the invoice price for 5 working days.
b. 2% per day of the invoice price for further 5 working days.
c. If the vendor fails to deliver the goods / services during the extended period then the purchase / work order may be cancelled, earnest money and payment may be forfeited.

16. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The vendor would be required to supply as per requirements mentioned in our BoQs, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money.

17. Deduction of Income Tax and any other tax will be deducted at source according to Government prevailing rules.

Signature & Stamp of Bidder

18. Payment will be made on submission of Invoice in the name of "COMSATS University Islamabad, Lahore Campus" with a copy of delivery challan (s) after the complete order has been supplied, inspected and accepted which includes delivery / installation, and COMSATS acceptance / inspection thereof.

19. All prices should be quoted on F.O.R (Pak Rupees) inclusive of all applicable taxes.

20. All prices should be valid for at least **90 days.** Withdrawal or any modification of the original offer within the validity period shall entitle CUI, LC to forfeit the earnest money in favor of the CUI, LC and / or put a ban on such vendor participation in tenders / works.

21. It is the sole responsibility of the agent / supplier / manufacturer to comply with the applicable laws, be national or international.

22. In case of any dispute or grievance, the matter shall be addressed as per PPRA rules.

23. The CUI, LC reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.

24. **05% of the total value of the Invoice will be retained as security by COMSATS University Islamabad, Lahore Campus, and will be released after warranty period i.e. (One Year) which will be counted from the date of delivery / completion of work / supply.**

25. **The bidder is required to furnish in form of Bank deposit/ CDR / Pay order equivalent to 2% of the total Bid price as Earnest Money crossed in favor of "COMSATS University Islamabad, Lahore Campus".**

26. COMSATS University Islamabad, Lahore Campus reserves the rights to reject the bid if;

    i. Received without earnest money
    ii. Received later than the date and time fixed for tender submission
    iii. The tender is unsigned/ unstamped
    iv. The offer is ambiguous
    v. The offer is conditional
    vi. The offer is from a firm, which is black listed by any Govt. Office.
    vii. The offer is received by telephone/telex/fax/telegram.
    viii. Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.

27. The bidder should furnish a certificate as worded below in token of acceptance of all the terms and conditions of the tender otherwise the tender will not be considered under any circumstances.

28. The undersigned affirm that the terms and conditions as contained in this document have been read and accepted and that in the event of selection of my/our rate the agreement in the prescribed form will be entered into:

- **Company / Vendor Name:……..……..……...**
- **Postal Address:…….**
- **Tel. / Mobile:……..……Email:……..……...…**
- **NTN# :…….GST#:……..……**
- **Signature: …….**

Signature & Stamp of Bidder

- **Please also attach the Certificate supporting being Active Taxpayer as per requirement of FBR.**

Technical Portion (Please mention the quoted model/ brand in technical portion with no mention of price otherwise the bid will be rejected)

BoQs of Multirotor for Dr. Mirza Tariq Hamayun, Department of Electrical and Computer Engineering, CUI-Lahore

No change in the BoQs (Specs & Qty.) of CUI-Lahore Campus, as detailed below, is allowed. Any additional information may be mentioned in the blank columns (i.e. model / brand or Price). Any modification in CUI-Lahore Campus BoQ may lead to rejection of bid (fully or partially).				**Please mention the quoted Model / Brand with meeting the all specifications mentioned in BoQs**
Sr. #	**Name**	**Quantity**		
1	**Multirotor Elite 2.0 or equivalent** **Motor:** • **eightbrushless in runner motors** • **8 MIPS AVR CPU per motor controller** • **Self-lubricating bronze bearings** • **Tempered steel propeller shafts and micro ball bearings** • **Low noise Nylatron gears for 8.625 propeller reductor** • **Rare earth magnets** • **Emergency stop controlled by software** • **Fully reprogrammable motor controller** **Onboard Electronics :** • **1 GHz, 32-bit ARM Cortex A8 processor with 800 or equivalent MHz video DSP (TMS320DMC64x)** • **1 Gb DDR2 RAM at 200MHz** • **Wi-Fi with b/g/n support** **Controller Modes:** **Free flight App featuring the following controller modes:** • **Joypad Mode (ON): Smart device touchscreen joystick for control** • **Joypad Mode (OFF): Tilt Smart device for control** • **Absolute Control Mode: to activate absolute reference control mode** **Integrated Flight Camera** • **USB thumb drive (64GB) or Flight Recorder for HD recording** • **Capture 720p video at 30 fps in H.264** • **Capture still photos in JPEG** • **92° diagonal wide-angle lens** • **Low Latency streaming**	**01**	**No.**	

Signature & Stamp of Bidder

	Flight Data Sensors • **3-axis accelerometer with +/- 50mg precision** • **3-axis gyroscope with 2000°/second precision** • **Pressure sensor with +/- 10 Pa precision (2.6' at sea level)** • **60 fps vertical QVGA camera for ground speed measurement** • **3 axis magnetometers with 6° precision** • **Ultrasound sensors for ground altitude measurement(effective up to 19.7' (6 m) above the ground)** • **Dynamic wind estimation sensor** • **3D Compass** **Body Shell and Airframe Construction** • **Foam to isolate the inertial center from the engines' vibrations** • **Expanded Polypropylene (EPP) hulls** • **Carbon fiber tubes: total weight 13.4 oz with outdoor hull, 14.8 oz with indoor hull** • **Features 30% fiber charged nylon plastic parts** • **Liquid repellent nano-coating on ultrasound sensors** **General:** • **Power Requirements: 3 element, 1000 mAh lithium-polymer 2 batteries** • **Wireless range up to 165'** **Dimensions:** • **With Outdoor Hull: 17.76 x 17.76" (451 x 451 mm)** • **With Indoor Hull: 20.35 x 20.35" (517 x 517 mm)** **Weight:** • **With Outdoor Hull: 13.4 oz (380 g)** • **With Indoor Hull: 14.82 oz (420 g)** **Flight Control Machine:** • **Intel Core i7 with Ubuntu Linux 11.10 operating system, 2.9GHz Processor, Installed RAM of 8GB and 500GB Hard Drive** **Flying Performance:** **Hover Time: 12-15 min** **Complete with all aspects including all required accessories** **Warranty: One Year**			

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Financial Portion (Price and Brand/Model to be mention only in Financial Proposal in a separate sealed envelope)

Vendors are required to provide both unit and total price of each item and calculations must be made carefully to avoid mistakes. However, in case, total price does not match with the unit price and quantity due to calculation error or typo error, any of the following can be opted

1. **The bid may be rejected on the reason of ambiguity (OR)**
2. **Unit price will be considered as final and total price of the respective item will be calculated by multiplying it with the quantity required. Sub-totals and grand total will also be corrected accordingly**

No change in the BoQs (Specs & Qty.) of CUI-Lahore Campus, as detailed below, is allowed. Any additional information may be mentioned in the blank columns (i.e. model / brand or Price). Any modification in CUI-Lahore Campus BoQ may lead to rejection of bid (fully or partially).				**Rate to be quoted Inclusive of all (applicable) Taxes**		
Sr. #	**Name**	**Quantity**		**Quoted Model / Brand / Make**	**Unit Price (Rs.)**	**Total Price (Rs.)**
1	**Multirotor Elite 2.0 or equivalent** **Motor:** • **eightbrushless in runner motors** • **8 MIPS AVR CPU per motor controller** • **Self-lubricating bronze bearings** • **Tempered steel propeller shafts and micro ball bearings** • **Low noise Nylatron gears for 8.625 propeller reductor** • **Rare earth magnets** • **Emergency stop controlled by software** • **Fully reprogrammable motor controller** **Onboard Electronics :** • **1 GHz, 32-bit ARM Cortex A8 processor with 800 or equivalent MHz video DSP (TMS320DMC64x)** • **1 Gb DDR2 RAM at 200MHz** • **Wi-Fi with b/g/n support** **Controller Modes:** **Free flight App featuring the following controller modes:** • **Joypad Mode (ON): Smart device touchscreen joystick for control** • **Joypad Mode (OFF): Tilt Smart device for control** • **Absolute Control Mode: to activate absolute reference control mode** **Integrated Flight Camera**	**1**	**No.**			

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	• **USB thumb drive (64GB) or Flight Recorder for HD recording** • **Capture 720p video at 30 fps in H.264** • **Capture still photos in JPEG** • **92° diagonal wide-angle lens** • **Low Latency streaming** **Flight Data Sensors** • **3-axis accelerometer with +/- 50mg precision** • **3-axis gyroscope with 2000°/second precision** • **Pressure sensor with +/- 10 Pa precision (2.6' at sea level)** • **60 fps vertical QVGA camera for ground speed measurement** • **3 axis magnetometers with 6° precision** • **Ultrasound sensors for ground altitude measurement(effective up to 19.7' (6 m) above the ground)** • **Dynamic wind estimation sensor** • **3D Compass** **Body Shell and Airframe Construction** • **Foam to isolate the inertial center from the engines' vibrations** • **Expanded Polypropylene (EPP) hulls** • **Carbon fiber tubes: total weight 13.4 oz with outdoor hull, 14.8 oz with indoor hull** • **Features 30% fiber charged nylon plastic parts** • **Liquid repellent nano-coating on ultrasound sensors** **General:** • **Power Requirements: 3 element, 1000 mAh lithium-polymer 2 batteries** • **Wireless range up to 165'** **Dimensions:** • **With Outdoor Hull: 17.76 x 17.76" (451 x 451 mm)** • **With Indoor Hull: 20.35 x 20.35" (517 x 517 mm)** **Weight:** • **With Outdoor Hull: 13.4 oz (380 g)** • **With Indoor Hull: 14.82 oz (420 g)** **Flight Control Machine:**					

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Special Terms and conditions;

- **Please submit the technical and financial bid (s) on our prescribed BoQs and clearly mention the quoted model / brands, with complete terms and conditions signed, stamped with both bids, otherwise your bid (s) may be rejected.**
- **In Addition to filling of the attached BoQs, supporting literature of the quoted model must be attached for verification & technical evaluation of the required specification by the technical committee. In case of any clash is found between the quoted model and the literature model. So the item/bid may be rejected.**
- **Purchase / work order (s) will be awarded on Item Wise Basis as mentioned in BoQs.**
- **Kindly attach the Tender fee with Technical Bid and Bid money / CDR with Financial Bid.**
- **Multiple rates of an item may also lead to the rejection of bid / item.**

Signature & Stamp of Bidder