Ref No: 1941/DIC/OUTR Date: 13.08.2022

**QUOTATION CALL NOTICE**

Sealed quotations are invited from registered firms/original Manufacturers/Distributers/Traders/ Authorized dealers having valid **GSTIN No./PAN/Registration documents** for supply & installation of following electronics components for Design Innovation Centre, OUTR, Bhubaneswar-751029, as per the specifications given below:

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| Sl. No. | Items | Specification | Quantity |
| 1 | IMU  | * Communication protocol : I2C:0x68
* Accelerometer range : ±2g, ±4g, ±8g, or ±16g
* Accelerometer noise : 100 μg/√Hz
* Gyroscope range : ±250, ±500, ±1000, or ±2000 degrees per second
* Gyroscope sensitivity error : 1%
* Gyroscope noise : ±4 mdps/√Hz
 | 10 |
| 2 | Zigbee | * TX Peak Current: 40 mA.
* RX Current: 40 mA (@3.3 V)
* Power-down Current: < 1 μA.
* Indoor/Urban: up to 133 ft (40 m)
* Outdoor line-of-sight: up to 400 ft (120 m)
* Transmit Power: 2 mW (3 dBm)
* Receiver Sensitivity: -96 dBm.
* Dimensions: 24mm x 28mm x 9mm (0.94in x 1.1in x 0.3in)
 | 4 |
| 3 | LoRa | * LoRaTM Modem 168dB maximum link budget.
* +20dBm - 100mW constant RF output vs. V supply.
* +14dBm high efficiency PA.
* Programmable bit rate up to 300kbps.
* High sensitivity: down to -148dBm.
* Bullet-proof front end: IIP3 = -11dBm.
* Excellent blocking immunity.
* Low RX current of 9.9mA, 200nA register retention.
 | 5 |
| 4 | IR temp sensor | * Operating Voltage : 3-5V
* Temperature Measurement Range:

-70 °C to 380 °C * Accuracy (0-50 °C) : 0.5 °C
* Measurement Resolution : 0.02 °C
* I2C Wiring works with Arduino and Raspberry Pi
 | 5 |
| 5 | Temperature and humidity Sensor | * Power supply : 3.3-6V DC
* Operating range : Humidity 0-100%RH;Temperature -40~80Celsius
* Accuracy : Humidity +-2%RH(Max +-5%RH);Temperature <+-0.5Celsius
* Resolution or sensitivity : Humidity 0.1%RH; Temperature 0.1Celsius
* Sensing period : Average: 2s
 | 5 |
| 6 | Drone remote | * Channels: 6 Models: fixed wing / glider / helicopter / boat
* Wireless frequency: 2.4GHz
* Transmission power: <20 dBm
* Wireless protocol: AFHDS 2A
* Range: 500 ～ 1500m (in the air)
* Channel resolution: 4096
* Battery: 1.5AA \* 4
* Low voltage alarm: ＜ 4.2V
* Antenna type: dual antenna
* Display: STN transflective display, LCD 128x64 dot matrix,
* Data port: PS / 2 (PPM)
* Temperature range: -10°C — + 60°C
* Humidity range: 20% -95%
 | 3 |
| 7 | LIPO battery | 5200mah,11.1V | 5 |
| 8 | LIPO battery | 3300mah,14.8V | 4 |
| 9 | LIPO charger | * AC 100~240v or 12V DC input
* Microprocessor controlled
* Li-ion, LiPo, and LiFe capable
* Battery break-in and cycling feature
* Internal resistance checker to see pack health
 | 4 |
| 10 | BLDC | * KV: 920 KV.
* ESC: 18A.
* Thrust: 860 gm.
* Propeller: 8″-10″
* Diameter: 28 mm.
* Length: 39.5 mm.
* Weight: 53 gm.
 | 10 |
| 11 | ESC |

|  |
| --- |
| * Burst Current (A) : 60
 |
| * Constant Current (A) : 40
 |
| * BEC : Yes (5V/3A)
 |
| * Weight (gm) : 34
 |

 | 10 |
| 12 | Servo  | * Operating Voltage: 4.8V to 6V (Typically 5V)
* Stall Torque: 1.8 kg/cm (4.8V)
* Max Stall Torque: 2.2 kg/cm (6V)
* Operating speed is 0.1s/60° (4.8V)
* Gear Type: Metal
* Rotation : 0°-180°
* Weight of motor : 13.4gm
 | 10 |

**Terms & Conditions:**

1. The rate Quoted should be inclusive of all packing and delivery at Design Innovation Centre, OUTR, Bhubaneswar.
2. The rate Quoted must be firm and the offers made must remain for acceptance.
3. Delivery of materials and installation of the same in Design Innovation Centre, OUTR, Bhubaneswar should be made within period or four weeks from the date of communication acceptance letter.
4. It will be responsibility of firm to provide necessary spares consumable which may be required during the installation at his own cost.
5. The supplied materials shall be covered under two years or more comprehensive on side warranty period from the date of installation.
6. The firm should not be black listed during last three financial years.
7. The Comprehensive warranty period must be specified.
8. A suitable penalty amount will be imposed if the items supplied, fitted and commissioned are not fully completed within the stipulated time.

The last date submission of quotations is 29.08.2022 by 4.00 PM addressing to the **Officer on Special Duty, Odisha University of Technology and Research, Techno Campus, MahalaxmiVihar, Ghatikia, Bhubaneswar-751029** by **speed post/Registered post only** with sealed cover envelope super scribed on the top **“Quotation for Electronics Components to Design Innovation Centre.”. No courier or hand delivery is accepted**. The authority will not be responsible for any postal delay. Quotation received after the scheduled date and time will not be accepted. The firm should submit copies of Firm Registration/Dealership authorization documents, PAN No., Proof of GSTIN No. Tax clearance certificates along with the quotation.

The authority reserves the right to reject/cancel the quotations in whole or in part without assigning any reason thereof. The installation has to be completed within 30 days of receiving the work order. Payment will be made after successful installation.

**Sd/-**

**OSD, OUTR**