



# IRTC

## Integrated Rural Technology Centre

Grant-in-aid institution of KSCSTE, Government of Kerala



Mundur (PO), Palakkad (Dist.), Kerala



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### Quotation Notice No. IRTC/P/ 02 /2025 – 26 Dated 07 – 10 – 2025

Quotations are invited from the manufactures/authorised distributors for the supply of the following items for the implementing the project under PLAN GRANT 2025 – 26.

Quotation should be sent to the following address :

Registrar, IRTC, Mundur, Palakkad, Kerala – 678592, Phone 2832663, 2832324, 9188183296.

Last Date of Receipt : 18 – 10 – 2025. 5 pm

Sl.No	Name of Item	Specification	Quantity
<b>DRONE ASSEMBLY WITH SUPPORTING PARTS</b>			
1	General Requirements	<ul style="list-style-type: none"><li>• Professional-grade drone platform suitable for field operations and research</li><li>• Capable of autonomous navigation and real-time video/data transmission</li><li>• Rugged construction for reliable outdoor performance</li><li>• Minimum 35–40 minutes endurance with payload</li></ul>	1
2	Airframe & Durability	<ul style="list-style-type: none"><li>• Type: Quadcopter/hexacopter platform with modular payload bay</li><li>• Material: Carbon-fiber or high-strength composite</li><li>• Ingress Protection: IP54 or higher (dust &amp; splash resistant)</li><li>• Operating Temperature Range: –10°C to +45°C</li><li>• Wind Resistance: ≥ 10 m/s</li></ul>	1
3	Propulsion & Power	<ul style="list-style-type: none"><li>• Brushless motors with electronic speed controllers (ESCs)</li><li>• High-capacity LiPo/Li-Ion battery (minimum 6000 mAh, ≥ 22V)</li><li>• Quick-swappable battery system</li><li>• Minimum endurance: 35 minutes</li></ul>	1

4	Navigation & Sensors (Mandatory)	<ul style="list-style-type: none"> <li>• GNSS (GPS + GLONASS) with altitude hold &amp; position hold</li> <li>• Onboard IMU, compass, barometer</li> <li>• Obstacle avoidance sensors (front + downward minimum)</li> <li>• RGB Camera: 4K video, 20 MP stills, 3-axis stabilized gimbal</li> <li>• Thermal Camera: Radiometric, <math>\geq 320 \times 256</math> resolution, 9 Hz minimum, temperature range <math>-20^{\circ}\text{C}</math> to <math>+150^{\circ}\text{C}</math></li> </ul>	1
5	Onboard Computer (for AI/Custom Software)	<ul style="list-style-type: none"> <li>• RAM: <math>\geq 8</math> GB</li> <li>• Storage: <math>\geq 128</math> GB SSD/eMMC</li> <li>• OS: Ubuntu 20.04/22.04 or similar, ROS2 compatibility</li> <li>• Interfaces: USB 3.0, Ethernet, Wi-Fi, optional 4G/5G module</li> </ul>	1



*[Handwritten Signature]*

Registrar  
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Mundur, Palakkad - 678 592  
Kerala