



**Government of Nepal
Ministry of Forests and Environment
Forest Research and Training Centre
Babarmahal, Kathmandu, Nepal**

BID ADDENDUM NOTICE

NCB ID/Contract Id: NP-REDD-506110-GO-RFB

(Date of publication: 13 February 2026)

This is to notify all the concerned bidders that addendum has been issued for NCB ID/Contract Id: **NP-REDD-506110-GO-RFB**: Procurement of Drone with Multispectral Sensor and Accessories published on 27 January 2026 through www.bolpatra.gov.np/egp. The addendum can be downloaded from PPMO's e-GP system www.bolpatra.gov.np/egp.

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BID ADDENDUM

For

The Procurement of Drone with multispectral sensor and accessories

National Competitive Bidding (NCB)

Forest Research and Training Centre

Project: Forests for Prosperity Project

Contract title: Procurement of Drone with multispectral sensor and Accessories

Country: Nepal

IFB Number: NP-REDD-506110-GO-RFB

Issued on: 27 January 2026



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Section V. Schedule of Requirements

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List of Goods and Related Services

Delivery and Completion Schedule

Delivery shall take place in compliance with the dates, duration, and locations indicated below:

(II) in case of Delivery schedule is determined as evaluation criteria]

SN	Description of Goods	Qty	Physical unit	Final Destination as specified in BDS	Delivery Date		
					Earliest Delivery Date	Final Delivery Date	Bidder's offered Delivery date [to be provided by the bidder]
1.	2	3	4	5	6	7	8
1	Drone with Multispectral Lens	1	Number	FRTC, Babarmahal, Kathmandu	Any date before the final delivery date	45 days from signing of the agreement	
2	GNSS Mobile Station	1	Number				
3	Image processing software	1	Number				
4	Training for Drone Handling and Processing	1	Number				



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Specification

1. Drone with multispectral sensor and accessories

A, Drone with multispectral Lens

Unmanned aerial vehicle (UAV), commonly known as a **drone**, is an aircraft without any human pilot, crew, or passengers on board. UAVs are a component of an unmanned aircraft system (UAS), which includes adding a ground-based controller and a system of communications with the UAV. The flight of UAVs may operate under remote control by a human operator, as remotely-piloted aircraft (RPA), or with various degrees of autonomy, such as autopilot assistance, up to fully autonomous aircraft that have no provision for human intervention.



There is an increasing number of studies on the applications of UAV remote sensing, and these studies span a broad array of topics including UAV platform classification and, UAV applications in agriculture, resource management, environmental studies and biodiversity monitoring.

Forest Research and Training Centre (FRTC) is going to purchase Drone with multispectral Lens and accessories to monitoring forest health, vegetation growth, permanent sample plots for long-term monitoring of ecosystem and forest types mapping.

Specification: -

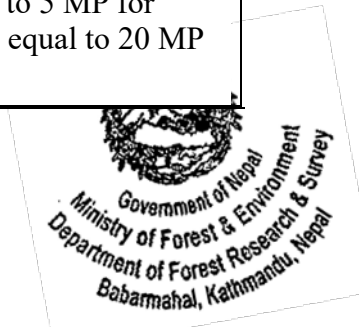
S. N	Particulars	Requirements
1	Aircraft	
	Dimensions	<ul style="list-style-type: none">Folded (without propellers): not exceeding 250 * 100* 150 mm (L*W*H)Unfolded (without propellers): not exceeding 350 * 300* 150 mm (L*W*H)
	Diagonal Length	<ul style="list-style-type: none">Not more than 400 mm



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	(i) Takeoff Weight	<ul style="list-style-type: none"> Less than 2000 gram
	(ii) Maximum Hover Times	<ul style="list-style-type: none"> Minimum 35 minutes
	Maximum Take-off Altitude	<ul style="list-style-type: none"> More than 5000 m Above Sea Level
	Maximum Ascend Speed	<ul style="list-style-type: none"> At least 6 m per second
	Maximum Descend Speed	<ul style="list-style-type: none"> At least 6 m per second
	Maximum Flight Speed	<ul style="list-style-type: none"> At least 15 m per second
	Flight time	<ul style="list-style-type: none"> At least 40 minutes
	Maximum Wind Speed resistance	<ul style="list-style-type: none"> At least 10 m/s or better
	Operating Temperature	<ul style="list-style-type: none"> -10 to 40 °C
	Hover Accuracy Range	<ul style="list-style-type: none"> With RTK enabled: Vertical: not more than ± 0.1 m; Horizontal: not more than ± 0.1 m With vision system enabled: Vertical: not more than ± 0.1 m ; Horizontal: not more than ± 0.3 m With GNSS: Vertical : not more than ± 0.5 m; Horizontal: not more than ± 0.5 m
	GNSS	<ul style="list-style-type: none"> GPS + GLONASS + Galileo + BeiDou
2	Camera	
	Camera	<ul style="list-style-type: none"> Sensor: CMOS or Better (One RGB and 4 Multispectral) Effective Pixels: More than equal to 5 MP for Multispectral band and more than equal to 20 MP for RGB



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		<ul style="list-style-type: none"> Field of View (FOV): At least 70° Multispectral Band: Green(G), Red (R) , RedEdge (RE), Near Infrared(NIR)
	Image	<ul style="list-style-type: none"> Image Format: JPEG/DNG (RAW) for RGB Camera and TIFF for Multispectral camera,
	Video	<ul style="list-style-type: none"> Video Format: MP4, At least FHD
3	Battery and Charging	
	Capacity	<ul style="list-style-type: none"> More than equal to 5000 mAh
	Weight	<ul style="list-style-type: none"> Not more than 350 g per Battery
	No. of battery	<ul style="list-style-type: none"> at least Three batteries
	Charger	<ul style="list-style-type: none"> Input : 240V (AC power)
4	Remote Controller	
	Display	<ul style="list-style-type: none"> At least 5 Inch display
	Microphone	<ul style="list-style-type: none"> Built-in microphone
	Battery	<ul style="list-style-type: none"> Chargeable Battery with at least more than equal to 3 hours battery life.
5	Storage	
	Supported MicroSD Cards	<ul style="list-style-type: none"> Both Aircraft and remote controller should support more than 32 GB microSD cards. It should be included more than equal to 64 GB SD cards in both aircraft and Remote Controller.
6	Warranty	<ul style="list-style-type: none"> Suppliers should give at least more than one year warranty for both aircraft and remote controller.



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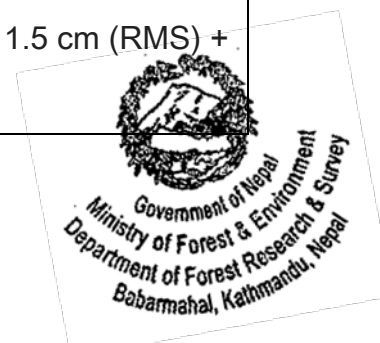
B. GNSS Mobile station

GNSS Mobile station (Base station) is a GNSS Receiver that supports all major global satellite navigation systems, providing real time differential correction that generates centimeter-level positioning data for improved relative accuracy. It is built with high gain antenna that offers better signal reception from more satellite even then the obstructions are present.



Specification: -

S. N	Particulars	Requirements
1	GNSS Frequency	<ul style="list-style-type: none"> Simultaneously tracks GPS/BEIDOU/GLONASS/GALILEO
2	System Accuracy	<p><u>Base Station Mode (Broadcast Mode)</u></p> <ul style="list-style-type: none"> Base Station Accuracy: Single Point Accuracy (Uncalibrated): Horizontal: not more than 1.5 m (RMS) Vertical: not more than 3.0 m (RMS) Satellite-Based Differential Accuracy: Horizontal: not more than 0.3m (RMS) Vertical: not more than 0.4m (RMS) <p><u>Rover Station Mode</u></p> <ul style="list-style-type: none"> RTK Accuracy (Fixed Survey): Horizontal: not more than 0.8 cm (RMS) + 1 ppm Vertical: not more than 1.5 cm (RMS) + 1 ppm



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3	(iii) Dimension	<ul style="list-style-type: none">• Not exceed 170 mm × 100 mm
4	Weight	<ul style="list-style-type: none">• Not more than 1.5 kg
5	Battery Capacity	<ul style="list-style-type: none">• LiPo battery with minimum capacity of 5000 mAh
6	Operating Temperature	<ul style="list-style-type: none">• -20° to 55° C
7	Tripod Stand	<ul style="list-style-type: none">• One handy tripod stand
8	Warranty	<ul style="list-style-type: none">• Suppliers should give at least more than one year's warranty.



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C, Image processing software

Image processing software is used for processing the images collected by the drone. This processing software can process the multispectral imagery collected by the drone. The output could include orthophoto, DTM, DSM, contour maps etc.

Specifications

Category	Specification
Core Functions	Photogrammetric processing: image alignment, dense point cloud, mesh, texture, DEM, orthomosaic
	Camera types: fisheye, spherical, multi-camera systems
	Georeferencing: GCPs, GPS/IMU,
	Measurement: distance, area, volume; supports stereo measurement
Input Data	RGB images, multispectral, thermal, LiDAR (LAS/LAZ), satellite images with RPCs
Output Formats	GeoTIFF, JPG, KML, GeoTIFF, XYZ, LAS, LAZ, PLY
Advanced Features	4D modeling (dynamic scenes),
	Vegetation indices (NDVI, GNDVI)
	Dense point cloud classification (ground, vegetation, building etc.)
Automation	Batch processing, Python & Java API, command-line/headless mode, standalone Python module
	Network (cluster) processing, supports scripting and automation
Licensing	perpetual licensing model
Supported OS	Windows (64-bit)

D, Training for Drone Handling and Processing

Training for 3 days for 5-7 people on use of drone, collect data, processing the data.

Day	Description	Remarks
1	Drone Handling	
2	Drone Data Processing	
3	Data Analysis	

