

PROPOSED TECHNICAL SPECIFICATIONS OF NIGHT ENABLED DRONE

S No	Nomenclature	Parameters	Remarks
1.	Type of Drone	Quadcopter	
2.	Max take-off Altitude above sea level	18000 Ft	
3.	Max flight time	40 – 45 min	
4.	Max Flight Distance	20 Km	
5.	Control and Video Transmission Range	8 km	
6.	Laser Range Finder	2Km	
7.	Overall Dimensions	Maximum 400mm or less	
8.	Maximum all up weight (weight including battery & Payload)	< 5Kg	
9.	Maximum speed	10m/sec	
10.	Max wind speed resistance	5m/sec	
11.	Operating temperature	-10C to 50C	
12.	Take-off and Landing area	2m x 2m	
13.	Aural Signature	Drone loitering at 200m <=40db	
14.	Fail safe features	Return to home on communications failure Return to home /land on low battery	
15.	Map Compatibility	Google, Open Source	
16.	Additional features	Frequency 2.4ghz and 5.8ghz Drone should broadcast video feed from RC to Mobile or Laptop AI Subject Tracking and Foldable design	
GCS Technical Specifications			
17.	Overall Dimensions	280x150x60mm	
18.	Weight	2.5Kg	
19.	System	Android 13	
20.	Display size	7inch 1000NIT	
21.	Battery	10000mah, 74Wh	
22.	Battery Life	6hrs	
23.	Maximum transmission distance	10km	
24.	OFDM	2.4ghz & 5.8ghz	
25.	Operating Temperature	-10C to 50C	
Camera Technical Specifications			
26.	Visible Light Camera		
27.	Resolution	2560x1440	
28.	Lens	F2.0 aperture	
29.	FOV	100 degree	
30.	Video Recording resolution	4K @ 30fps – 30 x Zoom	
31.	Video format	Hev	
32.	Photo format	Jpg	
33.	Thermal Imaging Camera		

S No	Nomenclature	Parameters	Remarks
34.	Resolution	640 x 512 @30fps	
35.	Focal length	7mm	
36.	Gimbal		
37.	Stabilization	2 axis (Pitch, Roll)	
38.	Control Accuracy	0.1 degree	
39.	Weight	150gm	
40.	Dimensions	70mmx70mmx100mm	
41.	Working temperature	-10C to 50C	
42.	Output interface	LAN port	
43.	Warranty period of the equipment	2 years	