

L 10



SI NO	PARAMETERS	SPECIFICATIONS
1	AERIAL VEHICLE (AV) CHARACTERISTICS	
a	UAV Weight with battery and standard payloads	<50 Kg MTOW
b	UAV size with Propeller	1735 x 1735 x 700 mm ³
c	Endurance/Flight time (at MSL)	30 mins (with 90% battery consumption)
	Payload Capacity	Up to 10 kg
	Flight Range (One way)	5 Km
	Range for live transmission (Radius)	1 Km
d		5 Km (2.4 Ghz)
e	Nominal Cruise Speed	9 m/s
f	Propulsion	Electric Propulsion
g	Maximum Operating Altitude (AGL)	150 m
h	Maximum Launch Altitude (AMSL)	2000 m
i	Functional Temperature Range	.-5°C to 50°C
J	Humidity	90% RH at 40° C
k	Dust and Drizzle Resistance	Ingress IP52 Protection
l	Aural Signature	<30 dB @ 200 m AGL
m	Wind Resistance	13 m/s
n	Technical Life of AV	Up to 600 Landings
o	Launch and Recovery	Semi-autonomous vertical take-off to landing (VTOL)
p	Maximum Space Required for Recovery	5 m x 5 m in open area
q	GPS	GNSS/GPS/GLONASS/Beidou/QZSS
r	Operating Crew	Two Person Deployment
s	Deployment Time	< 5 min
t	Fail safe Features	1. Return to Home on communication failure. 2. Return to Home/Land on low battery. 3. Return to home on high winds (more than 9m/s)
	Battery capacity	64000 mAh
u	Payload Delivery	Drop off through Parachute or by Landing
2	GROUND CONTROL STATION CHARACTERISTICS - HARDWARE	
a	Hardware specs	1. 5.46 inch, 1080P, 16 million colors, capacitive touch screen 2. Bluetooth / WIFI / GPS / 2.4G map transmission ground 3. Build-in 4950 mAh Lipo Battery 4. Support micro USB port 5v 2A current charging
3	GROUND CONTROL STATION CHARACTERISTICS - SOFTWARE	
a	Flight modes	1. Altitude Hold 2. Hover at a defined waypoint 3. Autonomous Waypoint Navigation (pre-defined as well as dynamically adjustable waypoint during flight) 4. Remotely piloted mode for video-based navigation (RPV Mode)

b	Gui display & maps parameters	1. Real-time video displayed at all times during the flight. 2. Artificial Horizon indicating UAV attitude. 3. Capability of working with Google maps and/or other available open-source maps. Application has the capability to download maps automatically after specifying location GPS co-ordinates. 4. Capability to integrate geo-referenced raster maps provided in at least one of the commonly used digital map formats (gif, tiff etc.) 5. Default Google maps. Can be configured as per the request 6. Geographic map along with UAV location, UAV trajectory, camera view polygon, waypoints and flight plan.
d	User controls	1. One-click Take-off/Land/Hover. 2. Set altitude of the UAV. 3. Waypoint Navigation. 4. Dynamic way point adjustment. 5. Point payload to ground co-ordinate function. 6. Capability of taking image snapshots with on-screen display parameters at any time during flight.
e	Pre-flight checks	1. Capability to perform pre-flight checks of the complete system before every flight for confirming the suitability of flightworthiness.
f	Data-logging	1. Essential telemetry data logging on SD card should be encrypted. 2. Export of flight path in .kml format for reviewing in Google Earth.
g	Communication link characteristics	1. Transmit control commands from GCS to UAV. 2. Transmit telemetry data from UAV GCS. 3. Transmit day and night video from UAV to GCS 4. Secure communication link between UAV and GCS with minimum 128-bit AES or better encryption. 5. Digital and encrypted. 6. 2.4 GHz up-link and down-link.
4	Carrying case	1. Soft case with shoulder strap arrangement man portable. 2. IP 65 (Self Certification)
5	Accessories	1. Dual battery charger 2. Field tool kit 3. Extra set propellers 4. Operational and maintenance manual
4	PAYLOAD CHARACTERISTICS	
a	Lens	Fixed Focal Length
		6X Digital Zoom
b	Equivalent Focal Length	21 mm
c	Image Sensor	Sony 1/1.7-inch, 8 MP effective resolution
d	Aperture	F2.8
e	FOV	Diagonal: 93°, Horizontal: 81°
f	Gimbal freedom	3-axis
g	Angular Vibration Range	± 0.01°

h	Controllable Pitch Angle	-135° ~ +45°
i	Controllable Yaw Angle	-160° ~ +160°
j	Roll Angle	-30° ~ +30°
k	Video Recording Resolution	4K (4096 × 2160) @ 25 fps 2K (2560 × 1440) @ 30 fps 1080p (1920 × 1080) @ 30 fps 720p (1280 × 720) @ 30 fps
l	Video Storage Bitrate (H265 Codec)	4K / 2K: 20 Mbps 1080p / 720p: 15 Mbps
m	File Storage Format	FAT32 ExFAT
n	Image Format	JPG
o	Video Format	MP4
p	Supported MicroSD Cards	MicroSD Class10, max 512 GB
q	Still Photography Mode	Single
r	White Balance	Auto

Payload Image



EO 1.0

We look forward to serving you!

For more details,
Please contact us.

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