



DOPPOTM

Unmanned Aerial Systems

CAPTURE ACCURATE AND DETAILED AERIAL DATA

www.throttle.aero

SI NO	Parameters	Specifications
1	Aerial Vehicle (AV) Characteristics	
a	UAV Weight with battery and standard payloads	4.7 Kg
b	UAV size with Propeller (unfolded in mm)	1176.0 x 1176.0 x 286.0
c	Endurance/Flight time (up to 1000m AMSL)	49 minutes
d	Range for live transmission (Radius)	1.5 km (Certified), extendable up to 5Km
e	Typical Cruise Speed	9 m/s
f	Propulsion	Electric Propulsion
g	Maximum Operating Altitude (AGL)	120 m
h	Maximum Launch Altitude (AMSL)	3000 m
i	Functional Temperature Range	-5°C to 50°C
j	Dust and Drizzle Resistance	IP52 Slight Drizzle (NABL certified)
k	Aural Signature	<40 dB @ 200 m AGL
l	Wind Resistance	12 m/s
m	Technical Life of UAV	Up to 600 Landings
n	Launch and Recovery	Automatic Vertical Take-Off and Landing (VTOL)
o	Area coverage at 120 m (for mapping application with 24 MP Camera)	1.5 sq km at 120 m AGL. (150 Hectares of area covered in a single flight)
p	Maximum Space Required for Recovery	5 m x 5 m in open area
q	Autonomy	Semi-automatic from Take-Off to landing
r	Operating Crew	Single Person Deployment
s	Deployment Time	< 5 min
t	Packaging and Storage	Soft case
u	Failsafe Features	Return to Home on communication failure
		Return to Home/Land on low battery
		Multiple GPS on-board for GPS failure redundancy
		Return to home on high winds (more than 14 m/s)
		Return to home on battery imbalance
v	Battery	32000 mAh
2	Payload and Characteristics	
a	Payload Type	ADTI - RGB
b	Payload Characteristics	Sensor Type: CMOS Effective Megapixels: 24.3 Sensor Format: APS-C Sensor size: 366.6mm ² (23.50mm x 15.60mm) Aspect Ratio: 3:2
c	Gimble	Single axis gimble
d	Ground Control Station (GCS) Software Features	Intuitive and Seamless integration

3	Flight Modes	Position Hold
		Hover at a defined waypoint
		Automatic Waypoint Navigation (pre-defined as well as dynamically adjustable waypoint during flight)
4	GUI Display Parameters	Geographic map along with UAV location, UAV trajectory, camera view polygon, waypoints, and flight plan
		Real-time video from the UAV with on-screen display of important parameters like UAV co-ordinates, and range from UAV, true North indication, Distance from Home.
		Real-time video always displayed during the flight
		Artificial Horizon indicating UAV attitude
5	Maps	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
6	User Controls	One-click Take-off/Land/Hover
		Set altitude of the UAV
		Waypoint Navigation
		Dynamic way point adjustment
7	GCS Button Controls	Flight Mode changes, RTL & Automatic flight mode
8	Images	Images recorded are commonly in portable format.
9	Pre-flight Checks	Capability to perform pre-flight checks of the complete system before every flight for confirming the suitability of flightworthiness
10	Others	Essential telemetry data logging on SD card
		Export of flight path in .kml format for reviewing in Google Earth
11	GCS Hardware Characteristics	
a	GCS Hardware	Semi rugged tab with pre-installed software
		Port for data/video transfer to external storage devices
		Antiglare, sunlight readable and touch screen- based RV
12	Communication Link Characteristics	
a	Communication Link Capabilities	Transmit control commands from GCS to UAV
		Transmit telemetry data from UAV GCS
b	Data Link	Secure communication link between UAV and GCS with minimum 128-bit encryption
c	Video Link	Digital and encrypted
d	Frequency Band	2.4 GHz up-link and down-link (WPC Certified)
13	Carrying Case	Soft case with trolley arrangement
14	PPK (aerial unit)	
a	GNSS	Signals GPS/QZSS L1C/A, L2C, GLONASS L1OF, L2OF,

		BeiDou B1I, B2I, Galileo E1-B/C, E5b
		Update Rate: 20 Hz GPS / 5 Hz GNSS
		Tracking Channels: 184
b	Connectivity	Interfaces: USB, UART, Event Wi-Fi: 802.11 b/g/n Bluetooth: 4.0/2.1 EDR
c	Data	Position output: NMEA, LLH/XYZ (RMC, GGA, GSA, GSV) Correction input: RTCM2, RTCM3 Internal storage: 16 GB Logs RINEX 2.X, RINEX 3.X
d	Positioning	Kinematic H: 7 mm + 1 ppm, V: 14 mm + 1 ppm

We look forward to serving you!

For more details,
Please contact us.

Throttle Aerospace Systems Pvt Ltd

Corporate Office:

#659, 1st Floor, MVS Arcade, 5th Main Road, OMBR Layout,
B Channasandra, Bangalore-560043, India

sales@throttle.aero

+91-80-35694899

Manufacturing Unit:

Plot No. 102(A), Sy No. 136(P), Narasapura Industrial Area,
Karnataka - 563101, India

+91-80-41203422