DATASHEET

Sr.No.	Parameters	Specification
1	**Aerial Vehicle (AV) Characteristics**	
a)	UAV Weight with battery and standard payloads	~ 6 kg
b)	UAV Size with Propeller	< 1 m × 1 m
c)	Endurance / Flight time (up to 1000 m AMSL)	> 60 minutes
d)	Range for live transmission (Radius)	5 km (LOS)
e)	Typical Cruise Speed	8 m/s or 28 km/h
f)	Propulsion	Powered by Battery
g)	Maximum operating altitude (AGL)	400 m AGL (Above Ground Level)
h)	Maximum launch altitude (AMSL)	2000 m AMSL (Above Mean Sea Level)
i)	Functional Temperature Range	–10°C to +55°C
n)	Technical Life of AV	Minimum 500 landings
o)	Launch & Recovery	Autonomous Vertical Take-Off & Landing (VTOL)
p)	Autonomy	Fully autonomous from Take-off to Landing without using any R/C controller
r)	Deployment Time	< 10 minutes
s)	Packaging and Storage	IP66 rated backpack that houses all the sub-systems, allowing the complete system to be carried and operated in the field.
2	**Payload Characteristics**	
	Payload Options	
a)	Day Payload	1920 × 1080 FHD resolution with 10× optical & 16× digital zoom 1/3-type CMOS progressive scan image sensor
b)	Night Payload	LWIR with focal length > 35 mm 4× digital zoom
c)	Gimbal Stabilization	3-Axis stabilized with Electronic Image Stabilization (EIS)
3	**Communication Link Characteristics**	
a)	Data Link	Secure communication link between UAV & GCS with 128 / 256-bit encryption
b)	Frequency Band	2402 – 2478 MHz @ 30 dBm / 1 W
c)	Flight Modes	Altitude & Position Hold Autonomous Waypoint Navigation Real-Time target tracking of designated static and moving targets Hover at defined waypoint for payload operation