



THE BLACK BEETLE

About

“VEDANSH” UAV is our first Micro category class Quadcopter Drone. Vedansh has been made exclusively for Surveying & Mapping purpose. It uses a dual battery pack technology for greater endurance during the flight. Vedansh is completely built of Carbon composite material keeping its weight factor in consideration. Overall, Vedansh has a highly reliable system integrated in it

PPK Module for
High Survey Grade accuracy

Made from high strength
carbon fibre

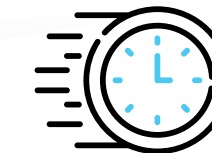
Carbon fibre propellers for
maximum thrust-to-weight ratio

>20 MP Sony CMOS sensor

0.6 Sq Km
Area Coverage
at 60 m AGL

≤5 cm
Absolute X, Y Accuracy
at 60 m AGL

<15
Absolute Z Accuracy
at 60 m AGL



Up to
80%
Reduction in Surveying
& Mapping Time



Up to
60%
Reduction in Surveying
& Mapping cost

Features



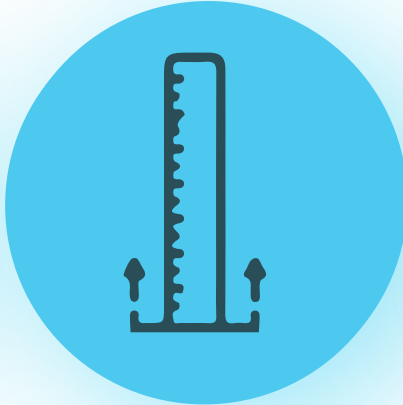
OPERATIONAL RANGE :
UPTO 4 KM.



FLIGHT TIME :
UP TO 40 MIN.



PAYLOAD :
24 MP ELECTRO-OPTIC CAMERA.



OPERATIONAL ALTITUDE
300 METERS.



NPNT COMPLIANT



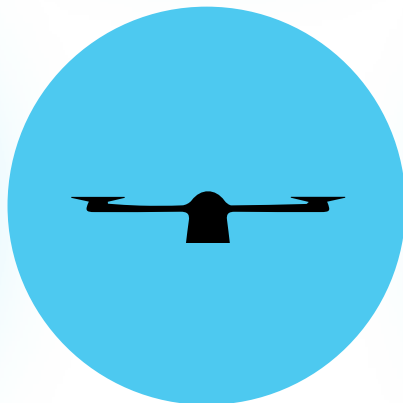
EASILY DEPLOYABLE AND
MAN PORTABLE



TAKEOFF WEIGHT
UPTO 2 KG



MAPPING ACCURACY
+ OR - 5CM IN X AND Y AXIS.



ULTRALIGHT CARBON
COMPOSITE



PPK EQUIPPED



WAYPOINT BASED
NAVIGATION



<100 Watt hrs

COMPLAINT WITH AIR TRAVEL

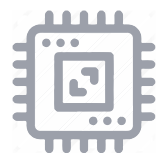
Tech Specifications

Physical Characteristics	
UAS Type	Multi-Rotor
Maximum Take-off weight (with battery & payload)	<2 Kg
Feature	Surveying & Mapping/Professional Grade
UAV Performance Characteristics	
Endurance	Up to 40min
Communication Range	4km (Visual Line of Sight)
GNSS Grade Compatible	PPK Enabled with GNSS Base Station (GNSS Station of L1 and L2 frequency)
Maximum Operating Altitude	Maximum 200m AGL (Above Ground Level)
Operating Temperature Range	0 °C to 50 °C
Operational Wind Speed	Operational wing speed up to 15 km/h for safer and accurate mapping
Area Coverage with 80% Forward Overlap and 60% side Overlap	At 60 m altitude, area coverage is 0.6 Sq. Km with 1.5 cm GSD

Operational Characteristics	
Launch & Recovery	Autonomous Vertical Take – Off & Landing (VTOL)
Flight Modes	Fully Autonomous from Take-off to Landing without using any R/C Controller. Altitude Hold and Position Hold Hover at a defined waypoint.
Failsafe Features	Return to Home on Communication failure. Return to Home/Land on low battery. Multiple sensors onboard for redundancy
Payload Characteristics	
Payload	High Resolution RGB Sensor – 24 MP
Communication Link Characteristics	
Communication Link	Transmit Control Commands from GCS to UAV. Transmit Telemetry Data from UAV to GCS.
Frequency Band	2.4 GHz

Payload

The combination of mapping payload with PPK module is a powerhouse in itself. It delivers accuracy that has never been seen before in this class



>20 Megapixel Camera



APS-C CMOS Sony Senso



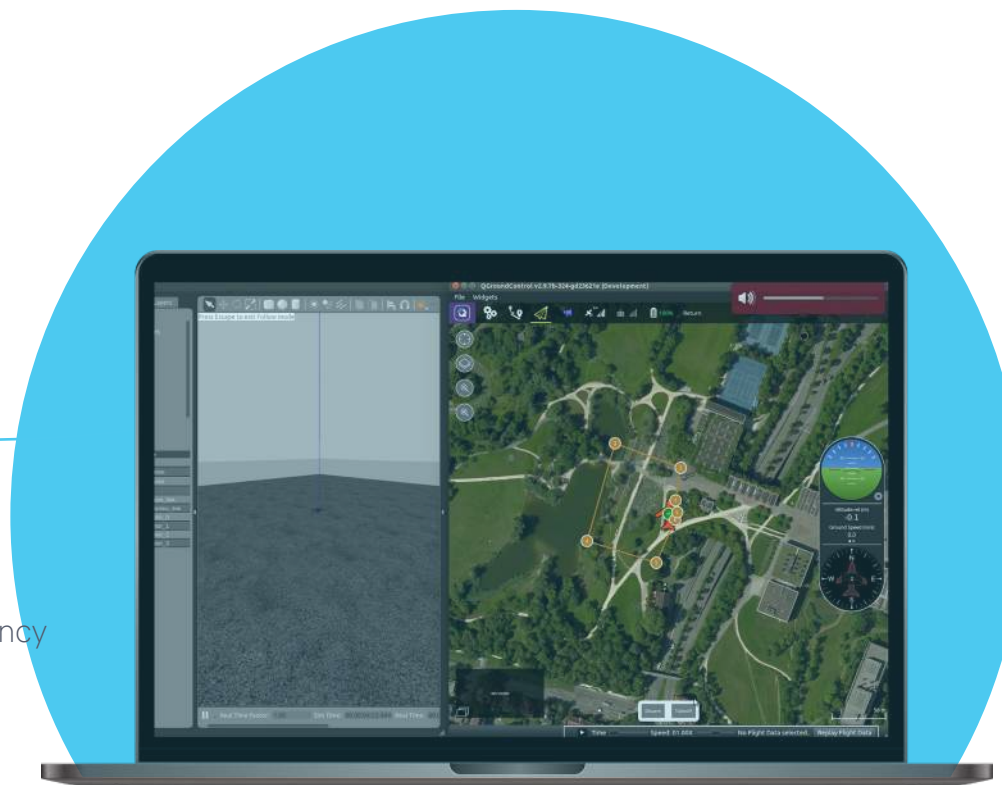
Storage (Expandable upto 128GB)



Ground Control Station

Our state-of-the-art GCS enables fully autonomous flight and provides a host of safety and security features.

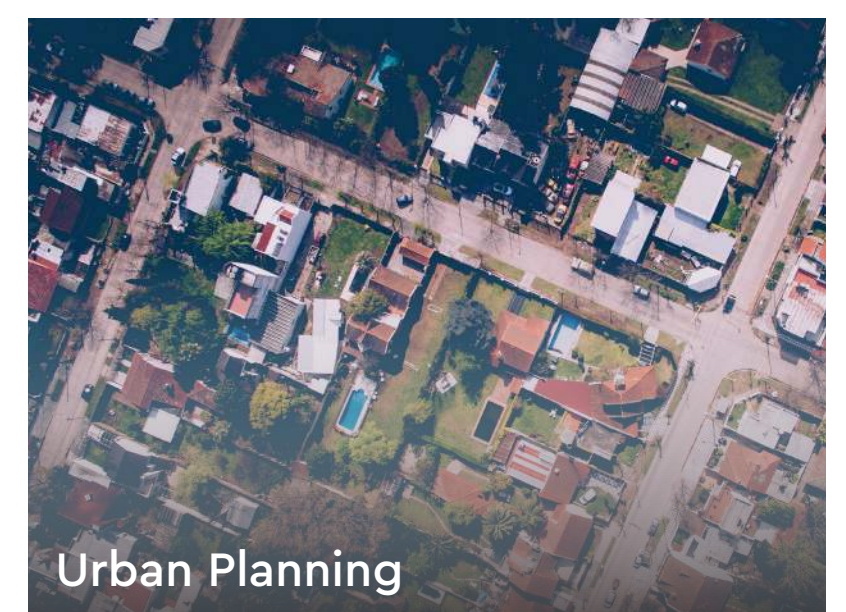
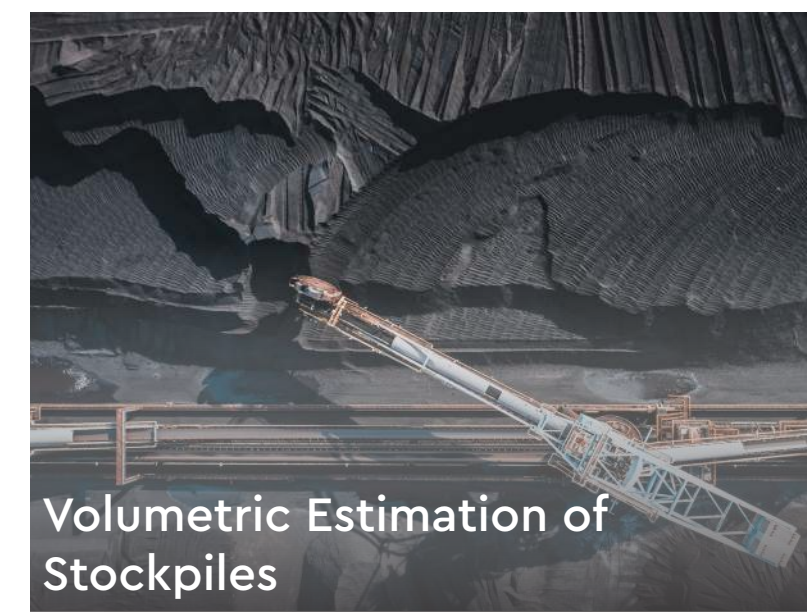
- ✓ Terrain Following - which keeps a fixed distance between ground and UAV during operations over difficult terrain so as to improve mapping accuracy
- ✓ Flight parameters are updated at ground control station in real-time or with minimum latency
- ✓ Encrypted communication between UAV flight and GCS for security.
- ✓ Return to home feature in case of communication loss, low battery and geo-fence breach
- ✓ Geotagging software for post processing



Vedansh

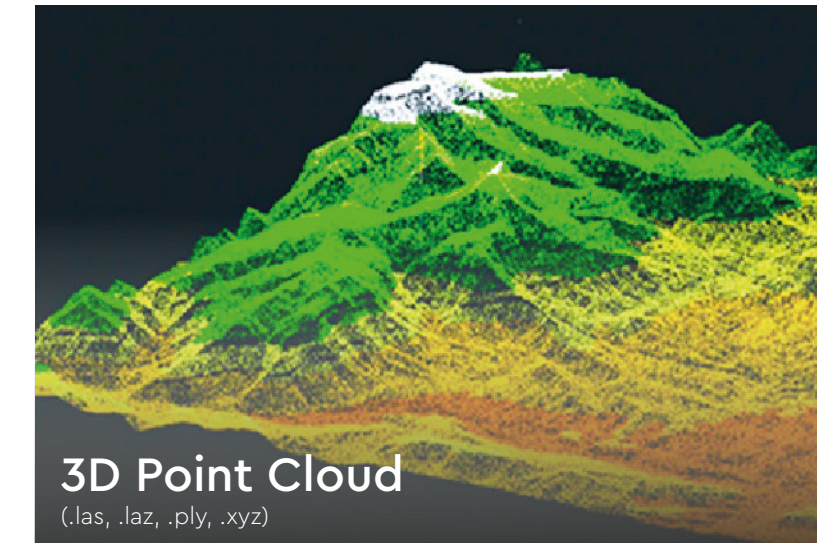
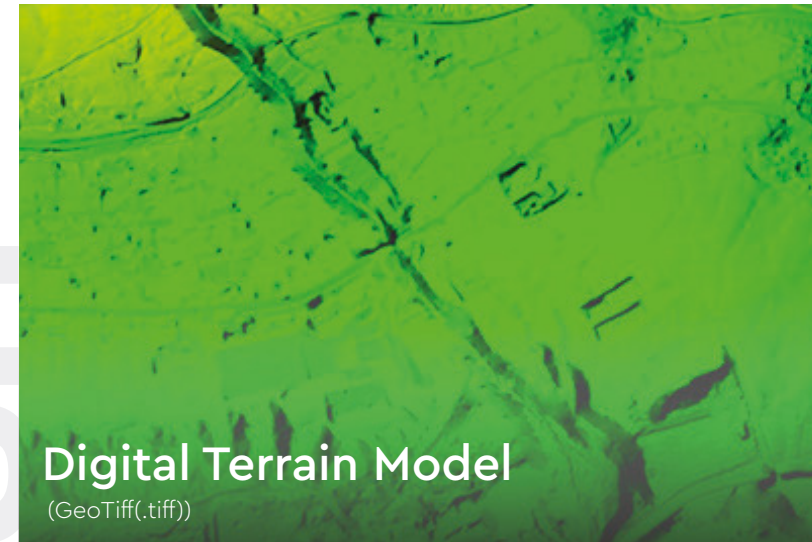
Application

The “VEDANSH” UAV has a very well tuned software and hardware , strong build quality, low weight and easy portability, makes it usable in various application.



Outputs of Drone Surveying

Our highly accurate drone surveying outputs are helping customers across various sectors such as Roadway & Railway expansion (Corridor Mapping), Mining, Oil & Gas, Manufacturing, Industrial, Disaster Management and many more and also helps to build their businesses to a great height.





Capturing Moments from the
New Point

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