



MAPPING

THE MAPPING SPECIALIST

About

Q6 Mapping UAV is ideaForge's Small category Drone with unmatched flexibility & ease of operation, even when compared to Hybrids. Its Quadcopter design & high area coverage ensures you can stay on field longer and finish your large scale mapping projects quicker. Its included BlueFire Ground Control Station makes flight planning quick and simple, and helps you focus on your survey grade outputs while minimizing piloting workload.

Made from High Strength Carbon Fiber



Powerful Smart Battery for Maximum Endurance

Carbon fibre propellers for maximum thrust-to-weight ratio

>20 MP Sony CMOS sensor

5 cm or Better Ground Sampling Distance (GSD)

Up to
5 km
Operational Range

Up to
50 min
Flight Time

Less than
6 kg
Take-off Weight

Up to
1.75 Sq km
Area Cover Per Flight at 120 m AGL

<10 cm
Absolute X, Y Accuracy
at 120 m AGL in Real-world conditions

<20 cm
Absolute Z Accuracy
at 120 m AGL in Real-world conditions

10 m/s
Typical Cruise Speed

0°C to +50°C
Functional Temperature Range

Built for all terrain Surveillance

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.



Imaging Camera

20 MP HD



Survey-grade

PPK Module



Ground Sampling Distance (GSD)

5 cm or better



Absolute X, Y Accuracy

<10 cm at 120 AGL in real-world conditions



Ground Control Station

ideaForge's state-of-the-art GCS enables fully autonomous flight and provides a host of safety features and utmost privacy

- Pre-flight Checks
- Predefined Flight Paths
- Waypoint based navigation
- Take-off & Landing Assist
- Drone Health Monitoring



Tech Specs

We have an illustrious history of working with India's defence and homeland security forces and meeting their most demanding requirements. Q6 Mapping UAV is a product of this experience and our bleeding-edge technology

Aerial Vehicle (AV) Characteristics	
UAV Weight with battery and max. payload	<6 kg
Range of live transmission (LOS)	5 km (un-obstructed & interference free)
Typical Cruise Speed	10 m/s
Functional Temperature Range	0°C to +50°C (OEM Certification)
Dust & Drizzle Resistance	IP53 rating (OEM Certification)
Deployment Time	<10 minutes
Packaging and Storage	Waterproof Backpacks to carry all mission critical components
Regulatory Compliance	NPNT Ready - applicable for Indian airspace
Base Station Characteristics	
GNSS Grade	High accuracy L1 & L2 Frequency Band Enable PPK
Mapping Performance at 120m AGL	
Ground Sampling Distance (GSD)	5 cm or Better
Absolute X, Y accuracy	<10 cm at 120 m AGL (with 95% confidence interval)
Absolute Z accuracy	<20 cm at 120 m AGL (with 95% confidence interval)
Ground Control Station (GCS) Software Features	
Terrain Avoidance	Detects and avoids natural terrain by using elevation data (where available)
Geo Tagging	
Communication link Characteristics	
Autonomous Flight Termination System or Return Home (RH) option	Return and avoids natural terrain by using elevation data (where available)
Failsafe Features	
Multiple GPS on-board	For Redundancy
Auto-Return to Home and Land	On Communication Failure
Auto-Return to Home and Land	On Low Battery
Auto-Return to Home and Land	On exceeding Wind limit of the system
Auto-Return to Home and Land	On Battery Imbalance
Auto-Return to Home and Land	On exceeding Temperature limit of the system

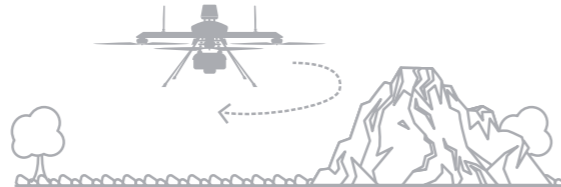
Warranty - 12 months or 500 flights whichever is earlier.

Consistent & Reliable Performance

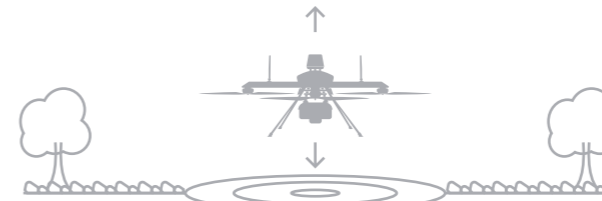
Features



SOI Qualified Small Drone
Passed technical qualifications for Survey of India (SOI) for Swamitva Yojna



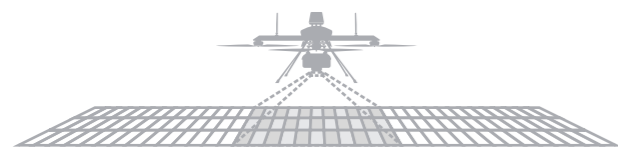
Terrain Avoidance & Fail-safe Coverage
Safely conduct surveying operations in tough weather and terrain conditions



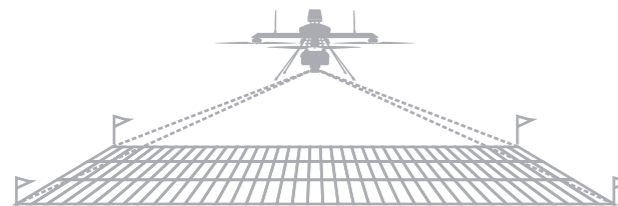
Quadcopter Configuration with VTOL
Conduct mapping operations with greater flexibility



Manual Mode
Take control when needed



Superior Accuracy
<5 cm in X & Y - axis and <20 cm in Z - axis with survey grade PPK Module



Robust Build Quality
Map up to 3500 sq. km with a single Q6 UAV



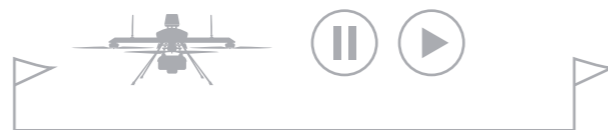
Less than 10 minutes Deployment Time
User-friendly assembly to conduct mapping operations faster



Minimal Training Requirements
No UAOP, Security Clearance or DGCA Training required*
**applicable in India only*



Best-in-Class Area Coverage
Fly **longer** and **farther** for higher ROI per flight



Pause & Restart
Conduct mapping operations with greater flexibility



Take-off in Higher Winds
Over 40% Better Takeoff Stability as compared to Hybrids, minimising your days wasted

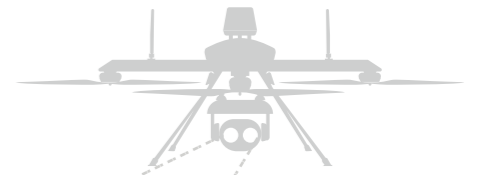


NPNT Ready
Ready for India's Drone regulations

Every Single Time

Applications

With its industry-leading hardware and micro category weight, Q6 Mapping UAV delivers unbeatable area coverage with centimeter level accuracy, no matter your experience



Performer



Highway Network Expansion



Disaster Preparedness



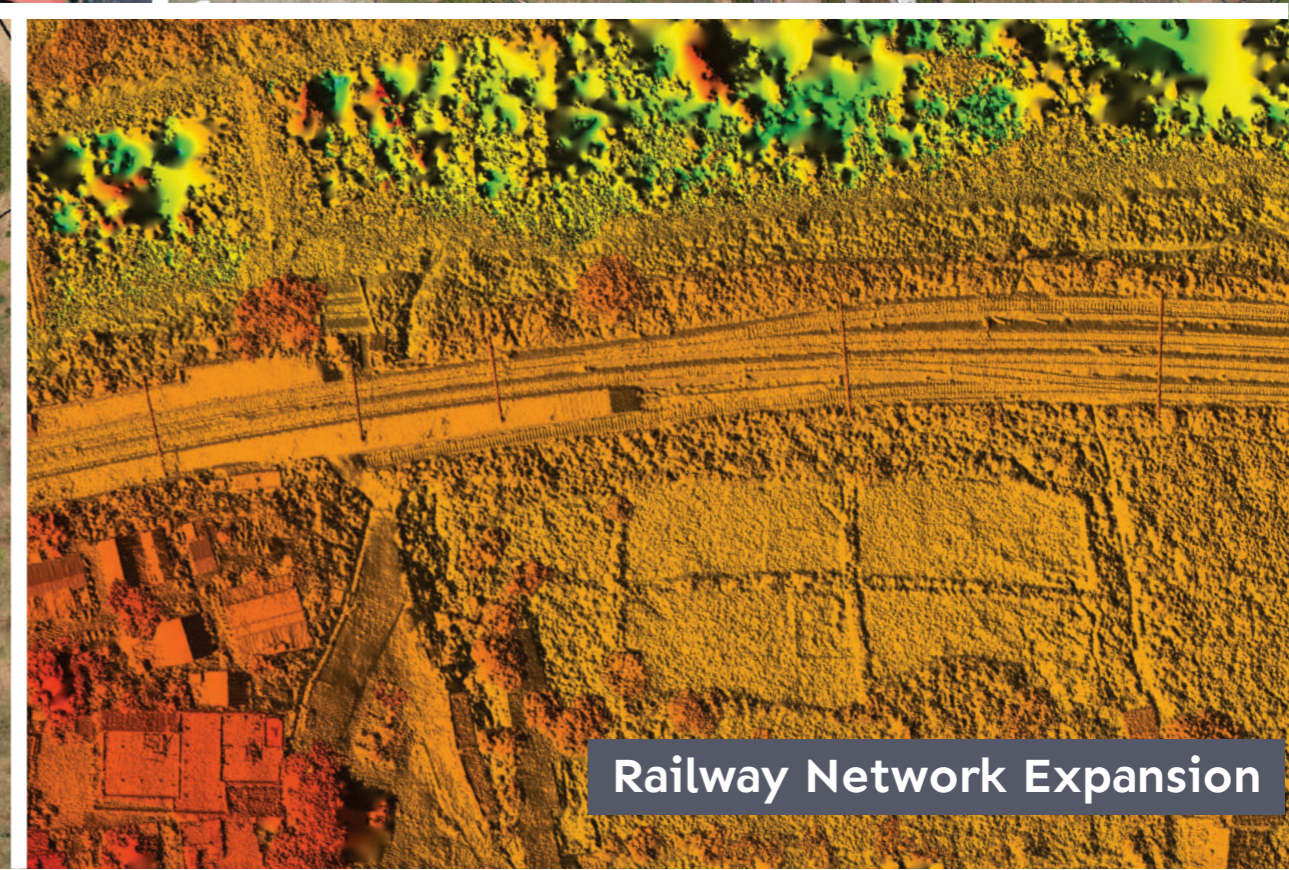
Land Surveying



Mining Site Planning



Urban Planning



Railway Network Expansion

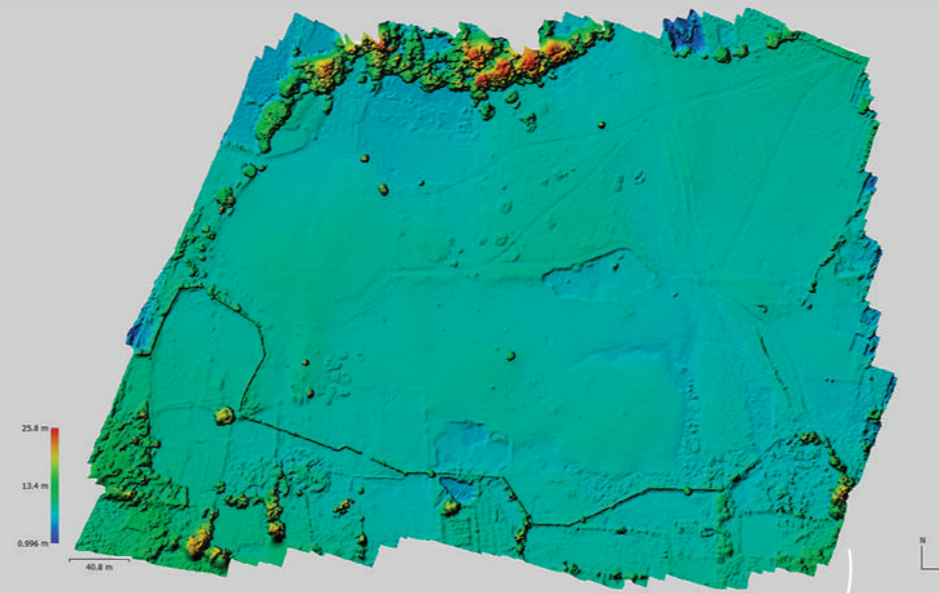
Real-world Outputs

Q6 Mapping UAV is the force multiplier that saves lives

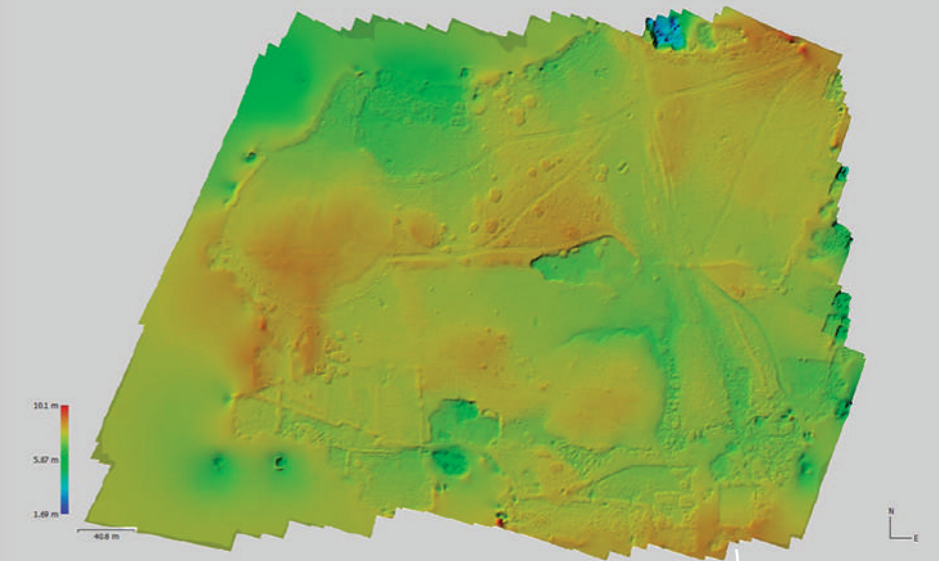
Boost Operation



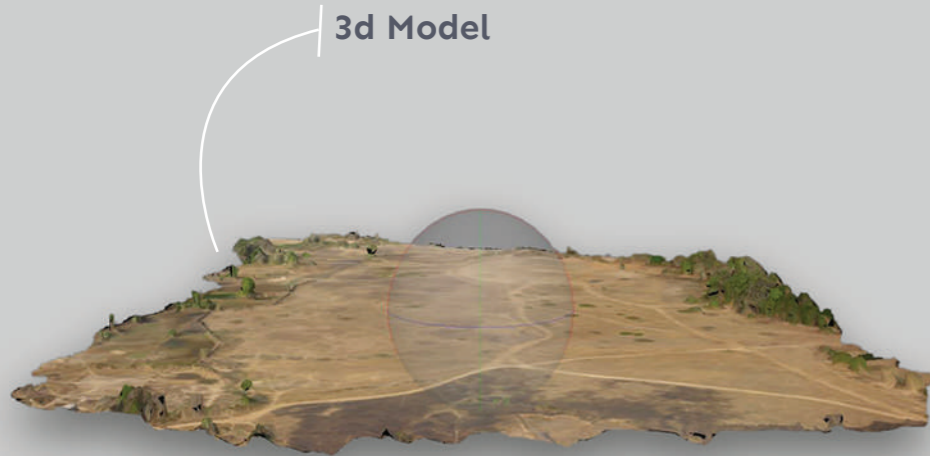
Orthomosaic Map



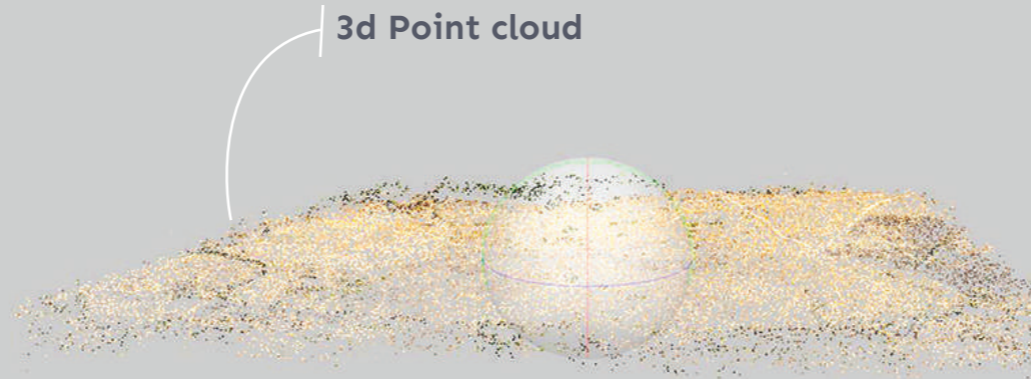
Digital Surface Model



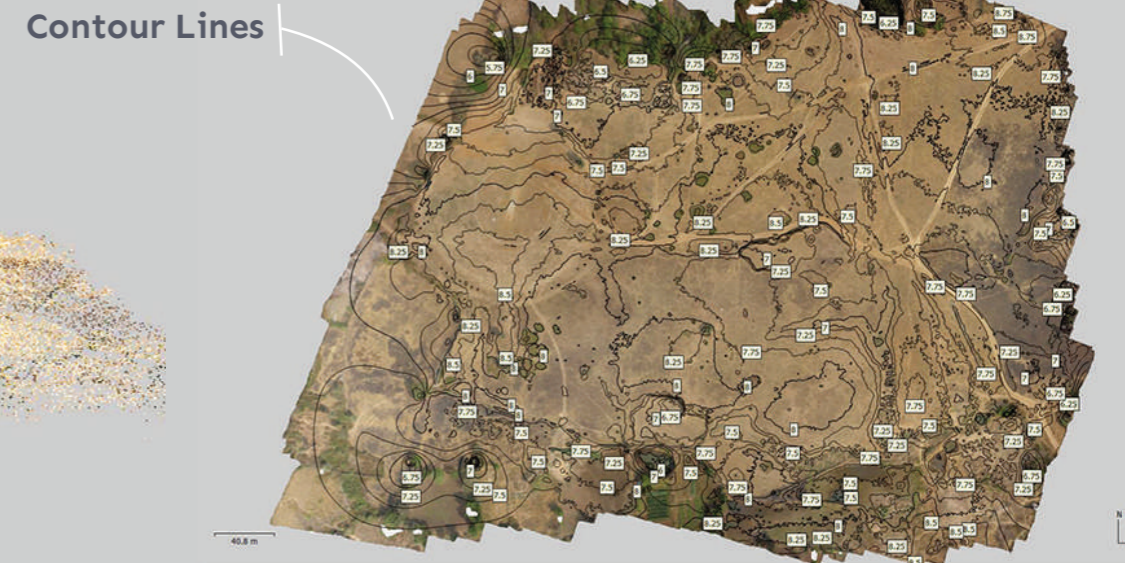
Digital Terrain Model



3d Model



3d Point cloud



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