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DGPL
Innovators for Defense

Q4i

VERSATILE SCOUT

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About

Q4i is ideaForge's lightweight & versatile drone, built for security, surveillance and mapping applications. With Swappable payloads, Q4i delivers success to your missions, either day or night.

Powerful Smart Battery for Maximum Endurance

Made from High Strength Carbon Fiber

Carbon fibre propellers for maximum thrust-to-weight ratio

Swappable HD Optical & Thermal Camera

Up to
4 km
Operational Range

Up to
40 min
Flight Time

Swappable Payloads

- 10x HD Optical Zoom
- 640 x 480 px, 320 x 240 px Thermal Payload
- 15MP Mapping Payload

Up to 3.75X
More Linear Coverage
When compared to boots-on-ground

Over 60X
Faster Surveillance Time
When compared to boots-on-ground

Built for all terrain Surveillance

Payload

Even with its sub-3.5 kg weight, Q4i enjoys maximum versatility with its swappable payloads, ensuring that you can surveill locations in the day or night, and even map out unfamiliar terrain without needing multiple drones.

Daylight payload
1280 x 720 pixels with 10x optical zoom

Thermal payload
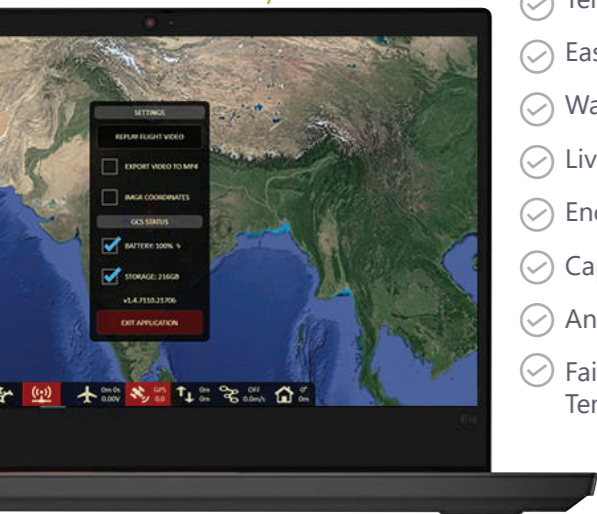640 x 480 px, 320 x 240 px

Mapping Payload
15MP Mapping Payload for mapping operations

Ground Control Station

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

- Terrain Avoidance to keep your Q4i safe
- Easy take-off and landing ensures you concentrate on outcomes
- Waypoint based navigation for ease of flying
- Live Display of Flight Parameters to keep you updated every step of the way
- Encrypted Communication for highest privacy
- Capability to Integrate with User Provided Maps
- Annotation of points of interest
- Fail-safe Features for Communication Loss, Low Battery, High Winds, Temperature Range Violation

Tech Specs

We have an illustrious history of working with India's defence and homeland security forces and meeting their most demanding requirements. Q4i is a product of this experience and our bleeding-edge technology.

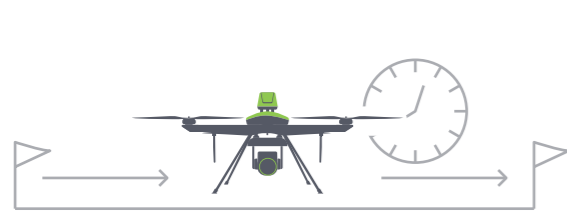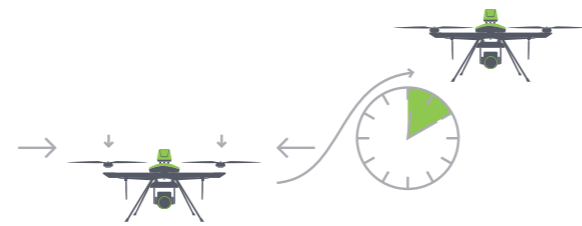| Aerial Vehicle (AV) Characteristics	
UAV Weight with battery and max. payload	<3.5 kg
UAV Size with Propeller	<80 cm X 80 cm
Range of live transmission (LOS)	4 km (un-obstructed & interference free)
Typical Cruise Speed	7 m/s
Functional Temperature Range	0°C to +50°C (OEM Certification)
Dust & Drizzle Resistance	IP53 rating (OEM Certification)
Deployment Time	<10 minutes
Navigation Lights	Switchable (from GCS)
Communication link Characteristics	
Frequency Band	2.4GHz or 5GHz (depending on application)
Payload Characteristics	
Day Surveillance	Daylight HD (1280 X 720) with 10x optical zoom video payload
Night Surveillance	Thermal 640 X 480 px, 320 x 240 px video payload
Payload Replacement Time	<5 minutes
Payload Control (in flight)	Pan: 360° continuous	Tilt: 90°
Target Detection Slant Range (Human Size Target)	Daylight: Minimum 800 m	Thermal: Minimum 400 m
Ground Control Station (GCS) Software Features	
Map	Capability of working with some publicly available open-source maps. Application has the capability to download maps automatically after specifying location GPS co-ordinates
	2D Maps: Capability to import custom maps
	3D Maps: Capability to integrate SRTM and DTED based elevation data
Terrain Avoidance	Detects and avoids natural terrain by using elevation data (where available)
Free Hand Annotation	Capability to annotate a desired location on the map screen.

Warranty - 12 months or 500 flights whichever is earlier.
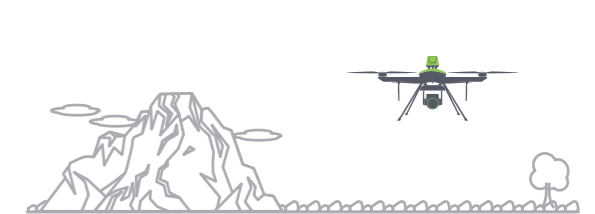
Consistent & Reliable Performance

Features

Available mission area of up to 50 sqkm

Less than 10 minute deployment time
User-friendly assembly to conduct surveillance operations faster

Manual Mode
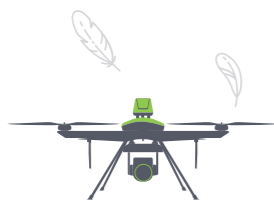Take control when needed

Operate between 0°C to +40°C
Designed to operate between 0°C to 40°C

10x Optical Zoom
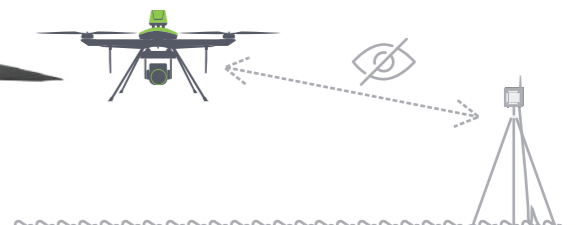Target detection at over 800 meter slant range with HD 10x Optical Zoom payload

VTOL Capable
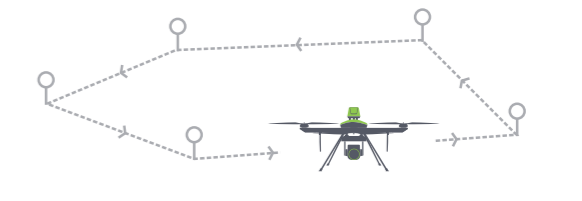Get unmatched terrain independence without the need for traditional runways or launching infrastructure

Man-portable & lightweight
Carry out operations wherever required

Built with over a decade of experience

Encrypted Communication
Secured communication between the GCS and UAV with all videos streamed & stored on the operator's system
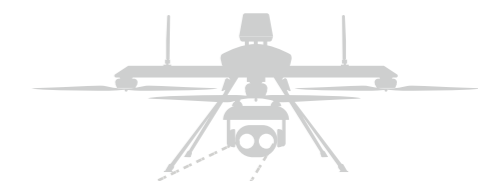
Waypoint Based Navigation
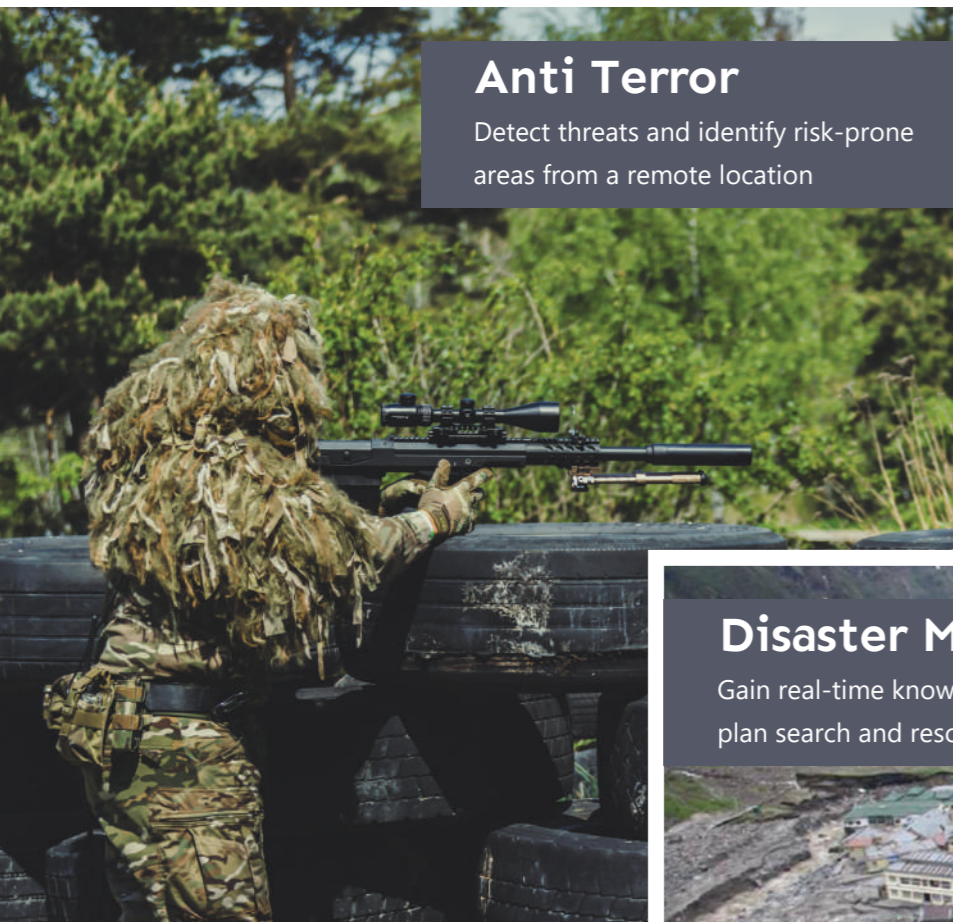Ensures Q4i Prime does the heavy lifting while you focus on outcomes
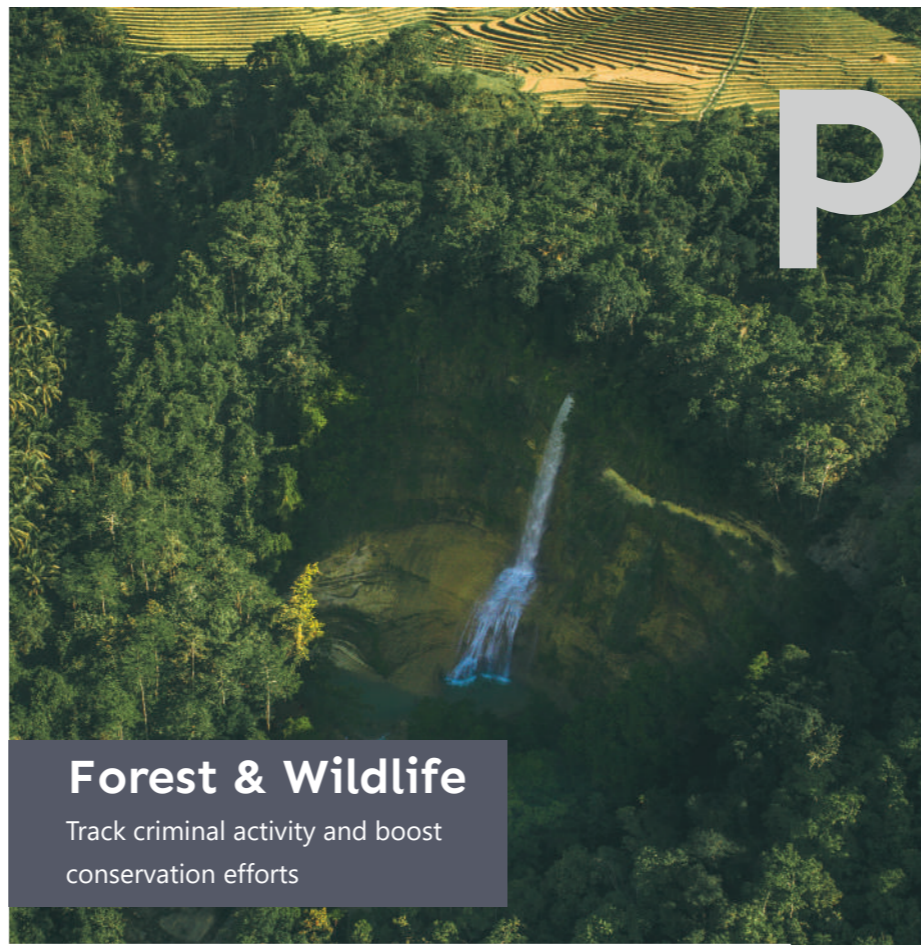
Every Single Time

Applications

Q4i UAV delivers mission success across a variety of use cases
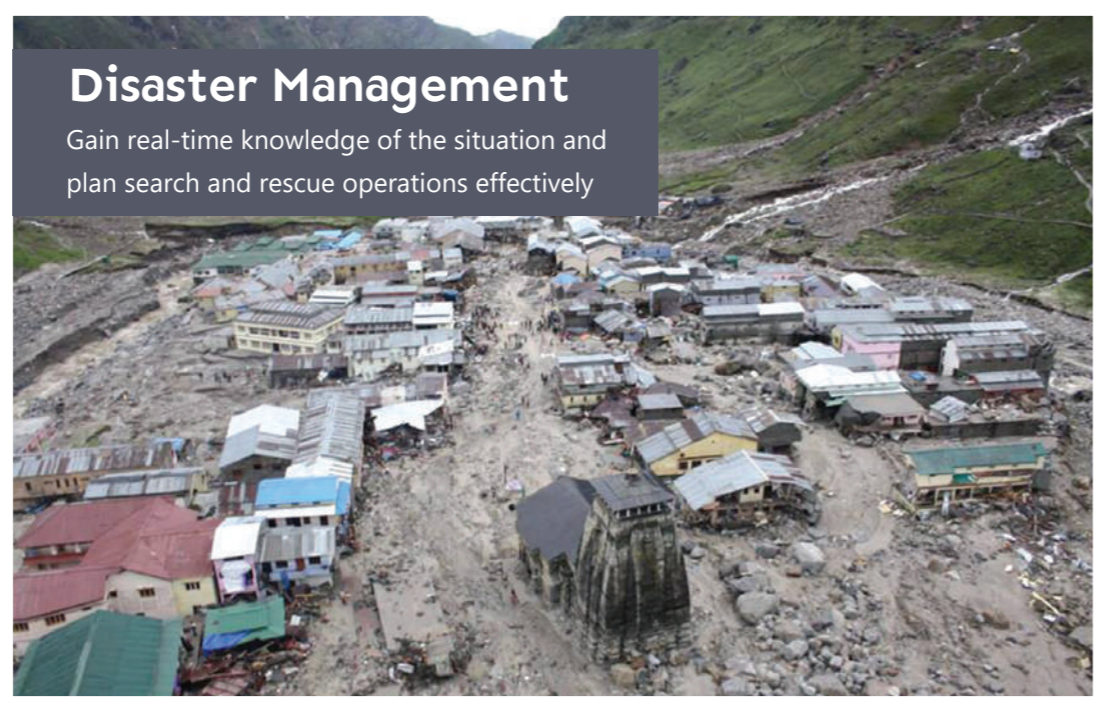
Anti Terror
Detect threats and identify risk-prone areas from a remote location

Forest & Wildlife
Track criminal activity and boost conservation efforts

Crime Control
Enhance law enforcement with remote situation assessment and crime scene analysis

Disaster Management
Gain real-time knowledge of the situation and plan search and rescue operations effectively

ISR Operations
Conduct surveillance and gather actionable intelligence

Border Security
Conduct reconnaissance missions and track illegal activities without risking lives

Mapping
Generate detailed maps of unknown terrain

Real-world Outputs

Q4i is built to deliver class-leading outputs that help you make informed decisions
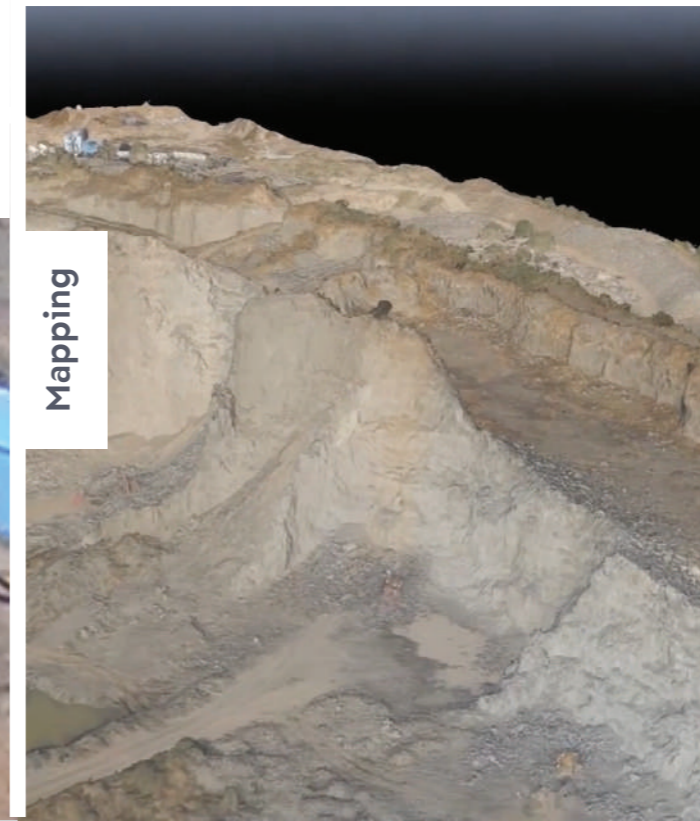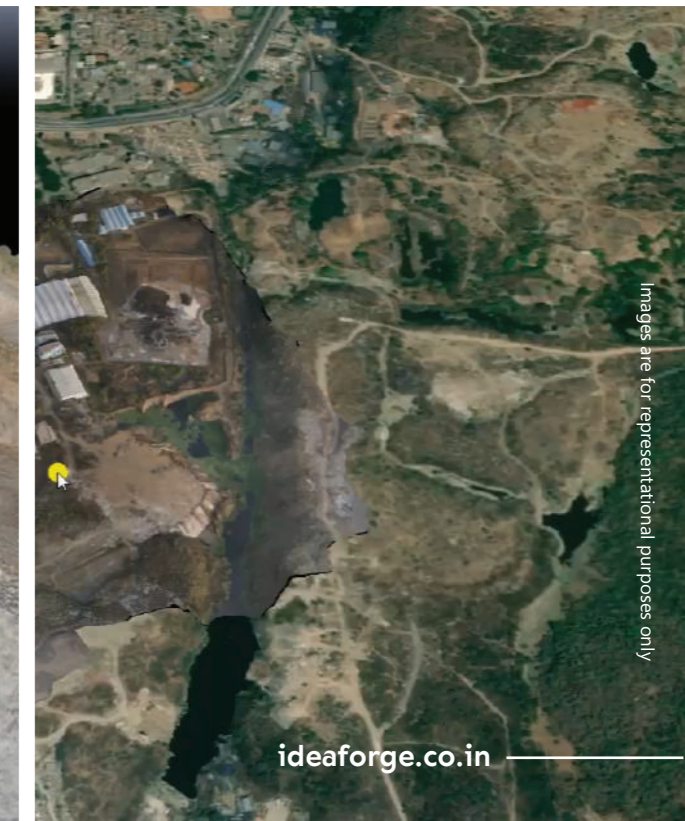
Boost Operation

10x Zoom

Thermal

Daylight

Mapping

60m MSL: 68m
17m MSL: 6m

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