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NINJA

LIGHTWEIGHT SCOUT

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About

NINJA UAV is ideaForge's lightest Drone, built for security, surveillance and mapping applications. With Swappable payloads, NINJA delivers success to your missions, either day or night

Easy to remove battery

VTOL Capable Quadcopter Design

Carbon Fiber frame for max thrust-weight ratio

Swappable 5X Optical Zoom HD Day Camera, Thermal, and Mapping Payloads

Over
60X Faster
Surveillance time

Over
3.75X More
Linear Coverage
When compared to boots on ground

Up to
2 km
Operational Range

Up to
25 min
Flight Time

Swappable Payloads
- 5x HD Optical Zoom
- Thermal Surveillance Payload
- 15MP Mapping Payload

Built for all terrain Surveillance

Payload

Even with its sub-2kg weight, NINJA UAV 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 5x optical zoom

Thermal payload
320 x 240 pixels

Mapping payload
15MP 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 NINJA UAV 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. NINJA Prime UAV is a product of this experience and our bleeding-edge technology

Aerial Vehicle (AV) Characteristics	
UAV Weight with battery and max. payload	<2 kg
UAV Size with Propeller	<80 cm x 80 cm
Range of live transmission (LOS)	2 km (un-obstructed & interference free)
Typical Cruise Speed	7 m/s
Functional Temperature Range	0°C to +40°C (No Certification)
Endurance (up to 1000 m AMSL Take-off)	20-25 minutes with payload (up to 1000 m AMSL Take-off)
Deployment Time	<10 minutes
Wind Resistance	Upto 10m/s (36kmph or ~20knots)

Communication link Characteristics	
Frequency Band	5GHz

Payload Characteristics	
Day Surveillance	Daylight HD 1280 X 720 px with 5x optical zoom video payload
Night Surveillance	Thermal 320 X 240 px video payload
Mapping Payload	Photogrammetry RX0 payload, fixed mount (Optional)
Payload Replacement Time	<5 minutes
Payload Control (in flight)	Pan: 360° continuous	Tilt: 90° (Only with surveillance payload)
Target Detection Slant Range (Human Size Target)	Daylight: Minimum 400 m	Thermal: Minimum 200 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 areas of interest on the map screen

Warranty - 12 months or 500 flights whichever is earlier.

Consistent & Reliable Performance

Features

Available mission area of over 12 sqkm

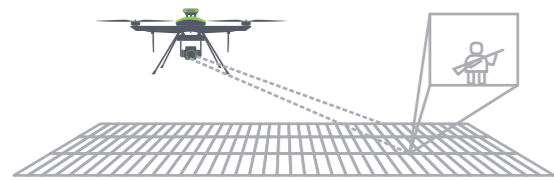**Built with over a decade of experience**

<2 kg

Man-portable & lightweight

Designed to operate between 0°C to 40°C

5x Optical Zoom
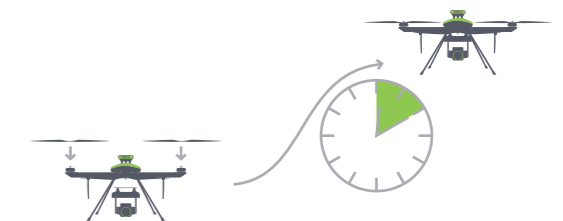Target Detection at over 400 meter slant range with HD 5x Optical Zoom payload

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

NO HAND HOLD

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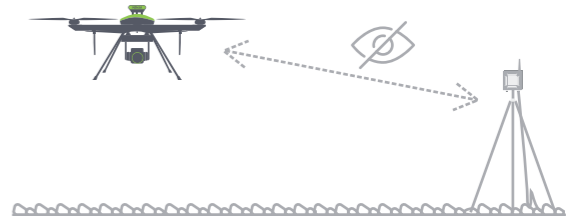Get unmatched terrain independence without the need for traditional runways or launching infrastructure

Encrypted Communication
Secured communication between the GCS and UAV with all videos streamed & stored on the operator's system

Waypoint Based Navigation
Ensures NINJA UAV does the heavy lifting while you focus on outcomes

Manual Mode
Take control whenever needed

Every Single Time

Applications

NINJA UAV delivers mission success across a variety of use cases

Performer

Anti Terror
Detect threats and identify risk-prone areas from a remote location

Disaster Management
Track criminal activity and boost conservation efforts

Mapping
Generate detailed maps of unknown terrain

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

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

Real-world Outputs

NINJA UAV is built to deliver class-leading outputs that help you make informed decisions

Boost Operation

5x Zoom

Thermal

Mapping

Daylight

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