NOTOXYTECH

INDIGENOUS UAS
MADE IN INDIA

TACTICAL ISR · 18-INCH · TRI-SENSOR

SHIVNETRA SURVEILLANCE

An 18-inch tactical ISR and heavy-lift platform carrying a tri-sensor gimbal — 2K visible, 640 × 512 thermal and 1 km laser ranging in one stabilised payload.



60 min	15 km	640 ×512	1 km
FLIGHT TIME*	RANGE	THERMAL	LASER RANGING

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OVERVIEW

Why Shivnetra 18"?

The Shivnetra 18" Tactical ISR Drone by Notoxytech Technologies Pvt Ltd is a high-performance, India-made surveillance and heavy-lift solution engineered for persistent, long-range reconnaissance. Built for stability and endurance, it suits deployment by the Indian Armed Forces in demanding environments.

Its tri-sensor gimbal pairs a 2K visible camera (30× zoom), a 640 × 512 thermal imager and a 1 km laser rangefinder — day-and-night observation, precise ranging and AI target tracking in one payload.





CORE CAPABILITIES

Built for the mission

Failsafe Navigation
Continues safely in GPS-denied conditions

RF-Denied Return to Home
Automatic RTH on loss of link

Day & Night Tactical ISR
2K visible + 640×512 thermal

Precision Laser Ranging
5 m – 1 km, ±1 m accuracy

Persistent Endurance
Up to 60 min flight time

Heavy-Lift & Delivery
Robust heavy-lift propulsion

High-Speed Intercept
60 km/h cruise, 90 km/h burst

Rapid Boot & Acquisition
AI target locking and tracking

INDIGENOUS ENGINEERING

Designed, built and supported in India.

Configurable navigation modes, failsafes and payloads — tuned to your unit's operational



THE PLATFORM

The Shivnetra 18" Airframe

A stable, heavy-lift 18-inch platform built around a composite carbon-fibre frame, long-endurance Molicel Li-ion power and GPS navigation with layered failsafes.



Airframe & Propulsion

- 18-inch class heavy-lift frame
- Composite lightweight carbon-fibre structure
- Robust heavy-lift propulsion system

Power & Endurance

- 6S 10,000 mAh Molicel Li-ion – 30 min
- 6S 15,000 mAh Molicel Li-ion – 60 min
- Endurance varies with mission profile

Performance

- Cruise speed 60 km/h
- Max burst / dive 90 km/h
- Range up to 15 km (LOS) · 500 m AGL ceiling

Navigation & Failsafe

- GPS navigation with failsafe
- Failsafe navigation in GPS-denied conditions
- RF-denied automatic Return to Home

Flight Modes

- Loiter – GPS-assisted loitering
- Manual / Angle mode
- RTH – configurable to user specs

Datalink & Ground Control

- Digital video transmission
- Live telemetry via laptop
- Mission planning via laptop

TECHNICAL DATA

Specifications

60 min	15 km	640 ×512	1 km
FLIGHT TIME*	RANGE	THERMAL	LASER RANGING

Model	18" Surveillance Drone with Tri-Sensor Gimbal (EO / IR / LRF)
Size	18" class
Flight Time	Up to 60 min (with full payload, depending on mission profile)
Range	**One-way deployment – up to 15 km.** Line of sight, subject to terrain and interference. Maximum altitude restricted to 500 m AGL.
Payload Capacity	Optional
Camera Payload	Tri-sensor 3-axis gimbal – 5 MP visible (30× zoom), 640 × 512 thermal, 905 nm laser rangefinder (1 km)
Speed	Cruise **60 km/h** · Max burst / dive **90 km/h**
Navigation & Control	GPS navigation with failsafe
Airframe & Build	Composite lightweight carbon-fibre structure
Video Transmission (VTX)	Digital
Battery	6S 10,000 mAh Molicel Li-ion (30 min endurance) 6S 15,000 mAh Molicel Li-ion (60 min endurance)
Navigation Modes	Loiter – GPS-assisted loitering Manual / Angle mode RTH – Return to Home **Configurable to user specifications**
Misc. Features	Live telemetry and mission planning via laptop

** Endurance and range depend on payload, mission profile, terrain, weather and RF environment. Specifications may be customised to user requirements.*

PAYLOAD

Tri-Sensor Gimbal

A compact three-light gimbal integrating a 5 MP 2K visible camera, a 640 × 512 thermal imager and a 905 nm laser rangefinder on an industrial-grade 3-axis stabilised mount.



KEY FEATURES

- Three-light payload: visible + thermal + laser rangefinder
- 2K (2880 × 1620) recording, 5 MP distortion-free lens
- 640 × 512 thermal, white-hot / black-hot + 12 palettes
- 905 nm LRF: 5 m – 1 km, ±1 m precision
- AI guidance with compatible flight control
- Industrial-grade 3-axis stabilisation
- 30× digital / electronic zoom
- Heat-source detection up to 1.1 km
- AI target locking & tracking
- Ethernet / RTSP network output, H.265 streaming

GIMBAL – PHYSICAL & GENERAL

Gimbal type	3-axis stabilised (pitch, yaw, roll)
Dimensions	59 × 61 × 92 mm
Weight	176 g
Operating voltage	7.2 V – 72 V
Operating current	334 mA @ 12 V
Operating temperature	-10 °C to +50 °C
Interfaces	Ethernet / LAN (RTSP output)

VISIBLE-LIGHT CAMERA

Resolution	5 MP, 1/2.7" CMOS
Video recording	2880 × 1620 @ 30 fps (H.265, 8 Mbps)
Real-time stream	1280 × 720 (H.265, 2 Mbps)
Zoom	30× digital / electronic
Focal length / aperture	3.5 mm / F2.2
FOV	83.4°

THERMAL IMAGING SENSOR

Resolution	640 × 512
Response band	8 – 14 µm
Focal length / aperture	9.1 mm / F1.0
FOV	48.7° × 38.6°
Palettes	White-hot / black-hot + 12 pseudo-colours
Detection distance	Up to 1.1 km

LASER RANGEFINDER (LRF)

Wavelength	905 nm
Measurement range	5 m – 1,000 m
Precision	±1 m
Measurement frequency	1 – 5 Hz

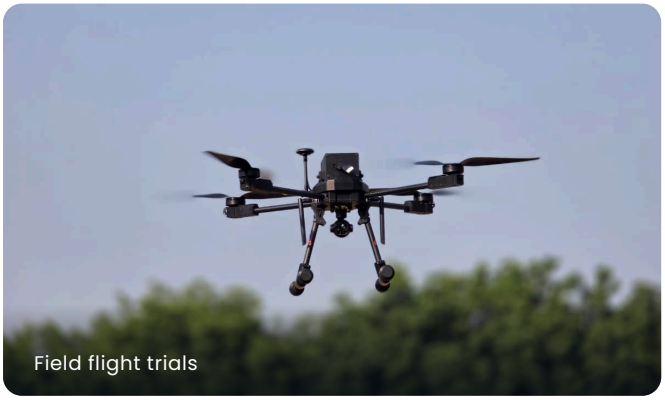
IN THE FIELD

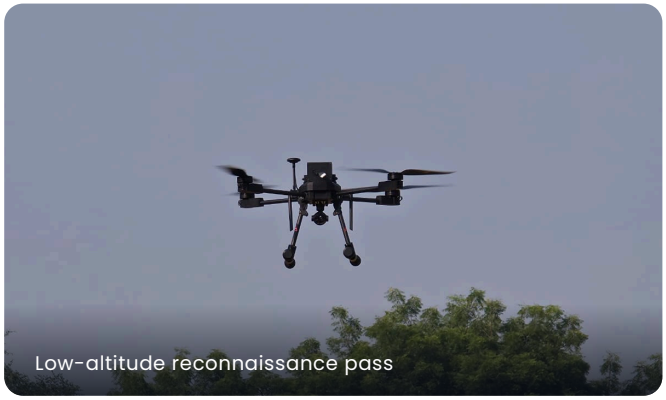
Shivnetra 18" in Action


Stable hover with the tri-sensor gimbal and twin-antenna datalink


Tactical ISR flight over the treeline


Carbon-fibre frame in forward flight


Field flight trials


Low-altitude reconnaissance pass

NOTOXYTECH

Ready when the mission is.

Talk to our team about demonstrations, configurations and field trials for the Shivnetra 18" with Tri-Sensor Camera.

PRODUCT ENQUIRIES

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