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AIRCRAFT

SkyLance

SkyLance is a next-generation, long range, cost-effective One Way Effector (OWE), offering precision payload delivery.

Powered by Rotron's proprietary propulsion technology, SkyLance delivers configurable payloads of up to 300 kg (660 lbs) while achieving significantly greater fuel efficiency than alternative propulsion systems, enabling operational ranges from 1200 km - 2700 km.

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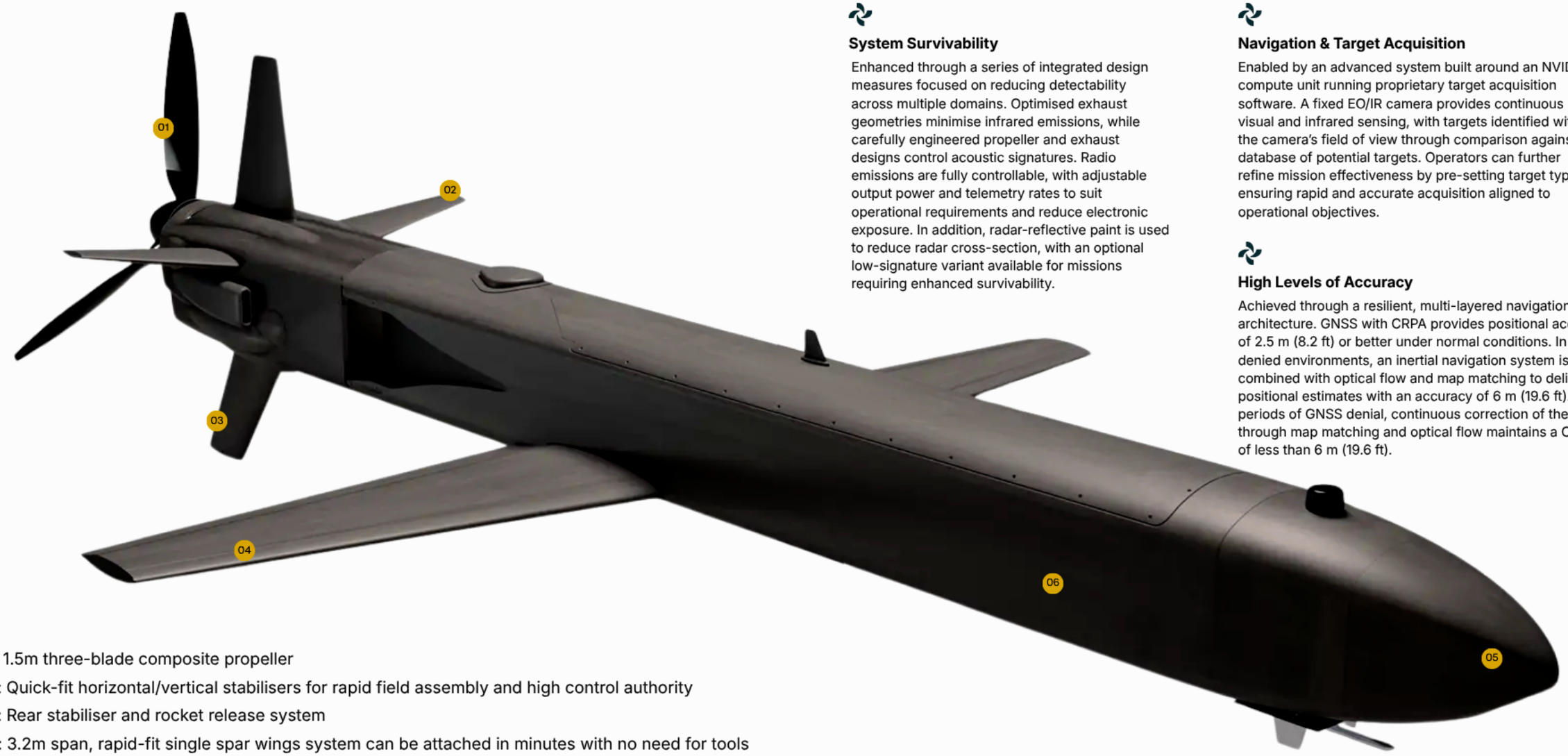
| OVERVIEW

SkyLance is a next-generation, long-range, cost-effective One Way Effector (OWE) designed to deliver precision payloads at extended operational ranges.



01: 1.5m three-blade composite propeller
02: Quick-fit horizontal/vertical stabilisers for rapid field assembly and high control authority
03: Rear stabiliser and rocket release system
04: 3.2m span, rapid-fit single spar wings system can be attached in minutes with no need for tools
05: Interchangeable adavanced guidance system
06: Low cross-section carbon composite fuselage minimises drag while enabling rapid, press-moulded production at scale.

| TECHNOLOGY

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System Survivability

Enhanced through a series of integrated design measures focused on reducing detectability across multiple domains. Optimised exhaust geometries minimise infrared emissions, while carefully engineered propeller and exhaust designs control acoustic signatures. Radio emissions are fully controllable, with adjustable output power and telemetry rates to suit operational requirements and reduce electronic exposure. In addition, radar-reflective paint is used to reduce radar cross-section, with an optional low-signature variant available for missions requiring enhanced survivability.

Navigation & Target Acquisition

Enabled by an advanced system built around an NVIDIA compute unit running proprietary target acquisition software. A fixed EO/IR camera provides continuous visual and infrared sensing, with targets identified within the camera's field of view through comparison against a database of potential targets. Operators can further refine mission effectiveness by pre-setting target types, ensuring rapid and accurate acquisition aligned to operational objectives.

High Levels of Accuracy

Achieved through a resilient, multi-layered navigation architecture. GNSS with CRPA provides positional accuracy of 2.5 m (8.2 ft) or better under normal conditions. In GNSS-denied environments, an inertial navigation system is combined with optical flow and map matching to deliver positional estimates with an accuracy of 6 m (19.6 ft). During periods of GNSS denial, continuous correction of the INS through map matching and optical flow maintains a CEP50 of less than 6 m (19.6 ft).

| KEY FEATURES

Next-generation long-range One-Way Effector for precision payload delivery options.

Range	Cruise Speed	MTOW	Configurable Payload	Range (150kg payload)	Max Speed	Operational Altitude	Launch System
Up to 1200 km 745 mi	600 km/h 370 mph	655 kg 1440 lbs	Up to 300 kg 660 lbs	> 2700 km 1677 mi	650 km/h 400 mph	100 m - 4,000 m ASL 300 ft - 12,000 ft	Rocket Assist 16kN Thrust 3500 lbs

SPECIFICATIONS

| AIRCRAFT

SPECIFICATION	DETAILS
Maximum Payload	300 kg (660lbs)
Payload Dimensions	1900 mm x 380 mm (74” x 14”)
Wingspan	3.2 m (10.5 ft)
Length	5.38 m (17.7 ft)
Launch System	Rocket-Assisted Takeoff (RATO)
Navigation System	GPS, INS, VA, Terminal Guidance

About Rotron Aerospace

Rotron exists to create a safer world by transforming defence with relentless innovation. We are an advanced defence technology company that believes aerospace innovation can always Go Further. From propulsion to advanced autonomous systems, Rotron combines engineering expertise with creative problem-solving.

Founded in the UK in 2008, Rotron is now trusted by the world’s leading defence and aerospace organisations to safeguard missions, reshape aerospace platforms, invent the impossible and create a safer world.

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