



GROUP 3 UAS

# Talon DT-300

Fully electric, multi-role UAV system.

Industry Leader In: Payload / Range / Costs / Deployability.

The TALON DT-300 is a fully electric, easily deployable VTOL payload delivery system that can be reloaded and reused time after time. Powered by a fully automated twin rotor, it's unlike anything the industry has seen before - driving down costs while maximizing impact. The DT-300's versatility makes it suitable for a wide range of uses, spanning commercial ventures and humanitarian missions.

[ROTRONAERO.COM](http://ROTRONAERO.COM)

| OVERVIEW

The Talon DT-300 is purpose designed to deliver outstanding payload ‘v’ range performance, outperforming conventional multi-rotors (quadcopters, coax quadrotors etc) by a factor of up to four times.

01: Unique Rotor Head

Rotron’s three-bladed rotorhead delivers cyclic and collective control with fewer parts, driverless swashplate, efficient lift, lower costs, showcasing in-house metallurgy, aerodynamics; outperforming energy-hungry multi-rotors limitations.

02: Raptor Camera

TALON DT-300 integrates Next Vision Raptor EO/IR turret, delivering long-range stabilized imaging, X80 zoom, enhanced IR, enabling superior ISTAR, reconnaissance, surveillance, detection, identification, tracking missions.

03: Flight Control & Navigation

Operates autonomously with adapted flight control systems. Multiple navigation systems (GPS, inertial and optical) enable Talon to operate in contested environments. Electronic stabilization manages roll, pitch and yaw control in turbulent and tough weather conditions.

04: Carbon Fibre Body

Automated cylindrical carbon composite fuselage delivers strong, lightweight structure, simplifies inline manufacturing without autoclaves, enables scalable production, and houses Rotron aero-engine for hybrid extended-range variants.

05: Locking Hinge

DT-300 folding hinge enables three-section folding for compact transport, reducing length for single-box storage, while secure locking ensures stability and prevents movement during operation.

06: Large Rotor Blade

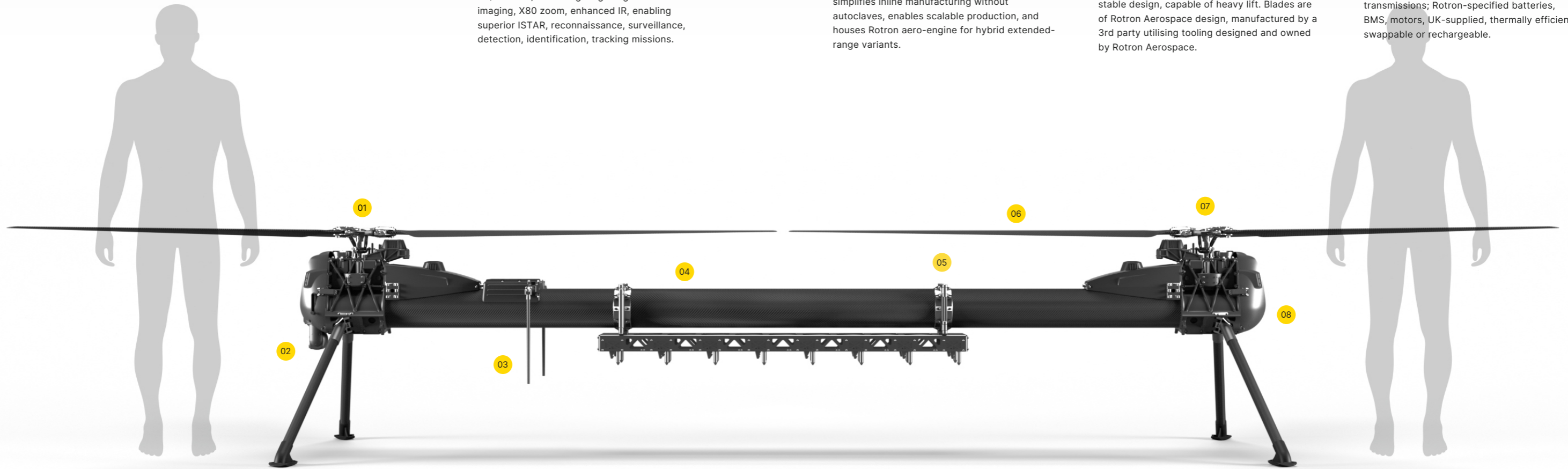
Large, 3.5m rotor diameter, with ultra-high aspect ratio and low disk-loading. A highly stable design, capable of heavy lift. Blades are of Rotron Aerospace design, manufactured by a 3rd party utilising tooling designed and owned by Rotron Aerospace.

07: Tandem Motor

Tandem, counter-rotating rotors, remove the need for a tail rotor – all power is used for generating lift which also significantly reduces noise. Foldable body and blades overcome traditional limitations of tandem rotor designs having a large footprint.

08: Efficient Propulsion System

Proprietary liquid-cooled electric propulsion delivers excellent SWAP-C, eliminating transmissions; Rotron-specified batteries, BMS, motors, UK-supplied, thermally efficient, swappable or rechargeable.



| KEY FEATURES

Longest range electric VTOL payload system in its class

- ✦ Rotor Size  
2 x 3.5m (11.5ft)
- 📦 MTOW 90KG  
(With 45kg payload)
- 📏 Max Altitude  
5,000m (16,400ft)
- 🕒 Endurance  
50mins (30kg payload)
- 🌀 Cruise Speed  
80km/h (50mph)
- 📍 Max Drop Radius  
45km (with 30kg payload)
- 📦 Boxed Dimensions  
155cm x 73cm x 4cm
- 📍 Max Range 140KM  
30kg payload: 70km

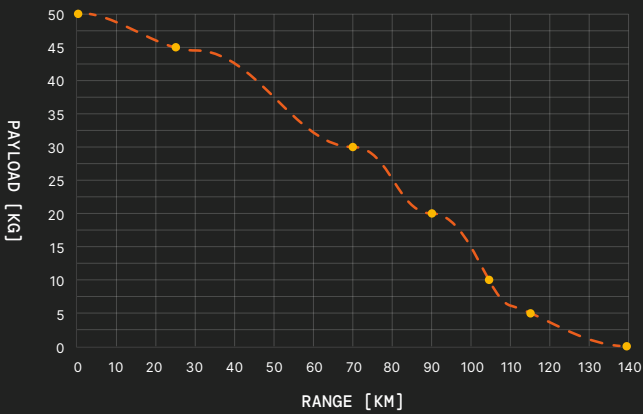
Learn more:



- Adaptable: To any payload Up to 45kg (100 lbs).
- Deployable: The rotor blades and aircraft fuselage fold into a very compact form factor (L:1.3m x W:0.7m x H:0.5m).
- Simple: Electric Operation. Industry Standard User Interface. Operator training in 1 hr.
- Reliable: 1000 hrs TBO (Time Between Overhaul).
- High Availability: Rapid Battery Changing and Charging.
- Stability: Cyclic and collective control of the rotor blades and a high thrust to weight ratio. ensures high stability in cross winds and turbulence. MAX WIND GUSTS 20 KNOTS.
- Efficient: Large twin rotors produce Forward Transitional Lift and with no energy wasted on the tail rotor.
- Home Grown: Built in UK and not reliant on Far Eastern components.
- Cost Effective: Used in place of manned helicopters.
- Environment: IP65 rated.

# Talon DT-300 Performance

## PERFORMANCE DATA



## PAYLOAD V RANGE METRICS

PAYLOAD	MAX RANGE [ONE WAY]	DROP RADIUS [OUT & RETURN]
0kg (0lbs)	115km (87mi)	70km (43.5mi)
5kg (11lbs)	115km (71mi)	58km (36mi)
10kg (22lbs)	105km (65mi)	55km (34.2mi)
20kg (44lbs)	90km (56mi)	50km (31mi)
30kg (66lbs)	70km (43.5mi)	45km (28mi)
45kg (100lbs)	25km (15.5mi)	15km (9.3mi)

\* Fly out with Payload – Drop Payload – Return with zero Payload  
 Zero payload includes Raptor EO/IR camera and DTC long-range digital data link (up to 60km / 37MI LOS)

## FLIGHT READY IN 5 MINUTES



EASILY STORED & TRANSPORTED (SUV)



FOLDED DT-300 REMOVED FROM BOX



CENTRAL SECTION UNFOLDED



LEGS, ANTENNA, CAMERA UNFOLDED, PAYLOAD RACK ASSEMBLED

## 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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