Aerostar Tactical UAS
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One of few combat-proven UAS that have been earning top grades for high reliability and performance for more than a decade of operational service (250,000 flight hours), the Aerostar Tactical UAS (TUAS) continues to evolve, supporting armed forces, government agencies and commercial users worldwide.

In-house design and manufacture enable Aeronautics to tailor or modify the system to meet the customer's special requirements, to perform system integration efficiently and precisely, and to deliver the system on time and on budget.

Main Features

- Optimal performance-to-platform size ratio
- Large payload bay, supporting multiple payloads
- Highly reliable fuel-injection engine
- Accurate GPS/INS navigation and targeting
- Navigation in GPS denied zones
- Extended range, supported by fully directional datalink
- Automatic Take-Off and Landing (ATOL) capability
- Range of programmable autonomous flight modes
- User-friendly and intuitive control interface
- LAN based GCS, C4I compatible
- Built in flight & mission Simulator
- Fast turn-around-time between sorties
- Easy maintenance and small logistics footprint

Payloads

The Aerostar is equipped with a large payload bay, and carries several types of payloads, including advanced, stabilized EO/IR sensors, Laser designation, Synthetic Aperture Radars (SAR\GMTI, various electronic intelligence sensors (COMINT, ELINT) and other advanced payloads. This capability is accommodated through the flexible control architecture.

Applications

- ISTAR for land and EEZ/maritime environments
- Electronic warfare
- Relay mission - Air to Air, Air to ground
- Forces protection
- HLS – Border\coastal protection
- Target acquisition
- Photogrammetric capabilities
**Aerostar Features**

**Airframe**

The high-wing and pusher-propeller configuration is ideal for surveillance and flight stability, giving the Aerostar excellent mission flexibility and aerodynamic performance.

**Engine**

The Aerostar is powered by a single Zanzottera 498i internal-combustion fuel injection engine, developing 38 hp for propulsion and electrical power generation. This highly reliable engine uses electronic fuel injection to compensate for altitude and temperature variations, thus enabling the UAV to run at full power for long periods.

**Data Link**

The Aerostar system is controlled via Line Of Sight (LOS) datalink up to a range of 250km. The advanced, multi-channel Commtact data link system operates in C/L/S bands, using directional antennas on the Aerostar as well as on the ground station.

**Flight Control (UMAS™)**

The Aeronautics proprietary state-of-the-art UMAS™ on-board control system integrates the controls of all the aerial platform’s subsystems, including propulsion, avionics, power, payload and communications. UMAS also implements multiple autonomous programmable flight modes meeting specific mission and user requirements.

**Ground Control Station**

Aerostar’s Ground Control Station (GCS) features real-time control hardware and software to enable fail-safe mission operation. It is designed with user-friendly interface for route planning, choice of operational modes, payload control and target localization. The Aerostar navigation system and mission control software are developed in-house by the Aeronautics R&D engineering department.

**Remote Video Terminal**

Aeronautics Remote Video Terminal (RVT) supports field-deployed forces, with independent video reception and optional payload controls by the user. Aeronautics RVTs are available in Level 2 supporting display of video and data, or Level 3, which also allows direct control of the payload.

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**Specifications**

- Datalink: LOS, up to 250 km
- Max. endurance: up to 12 h
- Max. speed: 110 kt

**Technical data**

- Wing span: 8.7 m
- Length: 4.5 m
- Height: 1.2m
- MTOW: 230 kg
- Max. Payload weight: 50 kg
Compact platform, big performances endless possibilities

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