TOGAN®

Multi-Rotor UAS for Tactical Surveillance and Reconnaissance

TOGAN® is a multi-rotor UAS designed to carry on tactical surveillance and reconnaissance missions.

TOGAN® incorporates a payload using a 30x zoom lens, enabling imaging of distant targets and threats.

TOGAN® employs advanced image processing capabilities, enabling the detection and classification of threats that are difficult to spot with human eye.

TOGAN® is capable of tracking and following fast moving objects.

TOGAN® is able to estimate the coordinates of visible targets, which can then be forwarded to a nearby KARGU® ground control station for planning a precision strike.

A secondary Togan platform can be commanded to take over the mission being executed by the primary one, enabling uninterrupted surveillance.

The Togan system consists of air platform, mobile ground control station, supportive equipments and documentation.

CAPABILITIES | COMPETENCIES

- Vertical takeoff and landing
- Fast preparation time (less than 1 minute)
- Day & night mission capability
- Low RCS (Radar Cross Section) platform design
- High performance navigation and flight control system
- Operable by single personnel
- Mission planning and autonomous mission execution
- Mission abort and return home capabilities
- 30x optical zoom capability
- Advanced image processing capabilities, including:
    - o Moving Object Detection
    - o Object Classification
    - o Digital Image Stabilization
    - o Object Tracking
- Ability to follow moving targets
- Target coordinate estimation
- Interoperability with KARGU®, aiding recognition of threats & targets and enhancing tactical situational awareness
- Automatic mission take-over capability, enabling uninterrupted surveillance
- Ability to take off from / land on land vehicles

TECHNICAL SPECIFICATIONS 1 - MECHANICAL AND FLIGHT FEATURES

Foldable arms Dimensions (Unfolded, propellers excluded)	711x711×410 mm (L×W×H)
Dimensions (Folded, propellers included)	500×450×410 mm (L×W×H)
Diagonal Wheelbase	929 mm
Geometric Configuration	Quadrotor
Maximum Take Off Weight	Less than 7500 grams
Endurance	45 min
Maximum Flight Altitude	3300 m MSL
Max Cruise Speed	72 km/h
Wind Resistance	10 m/s
Operating Temperature	-20°C to 50°C (-4°F to 122° F)
Battery Charging Time	80 minutes

TECHNICAL SPECIFICATIONS 2 - DATA LINK

Control Distance	10 km (with external antenna) 6.5 km with onboard Ground Control Station antenna
Security	AES-256

TECHNICAL SPECIFICATIONS 3 - IMAGING SYSTEM

Electro-optical camera Image Resolution	Full HD 1080p
Electro-optical camera optical zoom	30x
Thermal camera image resolution	640x480
Gimbal	3 axes stabilization, pitch and yaw axes control

TECHNICAL SPECIFICATIONS 4 - GROUND CONTROL STATION

Tablet	10.1 inch touch screen
Joystick	Yes
Working Time With Battery	2 hours
Communication	Internal and (optional) external antenna

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