





**MA** THOR Intel UAS



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# MULTI-MISSION DIVERSE-PAYLOAD VEHICLE

The MA THOR is a versatile vehicle used in missions as diverse as city reconstruction mapping, remote sensing and mapping, land and maritime border patrol, sea and land search and rescue, long endurance military intelligence, reconnaissance, targeting, surveillance of oil and gas installations, inspection of natural disasters, precision agriculture, and fire fighting.

The vehicle accommodates a variety of payloads: Electro optical and infrared cameras, gyro stabilized daylight and low light cameras, laser designator, range finder, miniature aperture radar, radar altimeter, automatic video tracker, nuclear biochemical sensors, meteorological appliances, laser detector tracker pod, ejectable items (chaff, leaflets, flares, communication jammers).

# ADVANCED AERODYNAMICS

The MA THOR UAV utilizes enhanced aerodynamics and flight stability for missions in the most demanding flight conditions.

#### **COST-EFFECTIVENESS**

The MA THOR Intel UAS is an ideal cost-effective solution for any type of persistent ISR, area dominance, ground support, and maritime patrol mission. Designed for minimal maintenance, the MA THOR Intel UAS is a highly mission effective system and a system with low life cycle costs.



# **SPECIFICATIONS**

#### CONFIGURATION

· Cruise speed: 90 km/h
Max. climb rate: 200 m/min
Ceiling: 4500 m
Operation radius: 150 km,
500 km using relays.
Endurance: 7 hrs gasoline/oil

:ndurance: 7 nrs gasoline/oil Flight range: 900 km

**Takeoff distance:** 150 m on asphalt;

10 m launched.

**Dimensions:** 4.63 m long, 0.94 m high, 2.57 m fuselage,

6.50 m wingspan.

Empty weight: 70 kg

Max. total takeoff weight: 90 kg Max. payload weight: 25 kg

Robust datalink; Comms link

#### **AIRFRAME**

The MA THOR is a high-wing twin-tail-boom aircraft. The airframe is reinforced graphite, Kevlar and epoxy resin and it is sealed for long life in hot and humid environments. The airframe can be fitted with a rail or pod under each wing for carriage of external stores.

#### **ENGINE**

A 4-stroke twin-opposed cylinder engine mounted at the rear fuselage drives a two-blade fixed-pitch propeller and provides high vehicle endurance.

#### **PAYLOAD CAPABILITY**

Additional payloads can be installed in the UAV: Mine detection payloads, electronic warfare systems, SIGINT, scientific sensors. Sophisticated pay-loads for maritime surveillance and search and rescue missions for day and night.

#### **AERODYNAMICS**

Enhanced aerodynamics and flight stability. The wings use a high-lift airfoil, have an aspect ratio of 10, and are fitted with wing fences, Hoerner tip, Fowler flaps (max. deflection 30°), Gurney flaps, and vortex generators. The wings feature 5° dihedral, 5° geometric washout, 5° taper, and sweepback.

### **INVESTORS & SALES**

MARQUES AVIATION LTD welcomes international investors for the MA THOR UAS program.

Contact our representatives to discuss your UAS requirements.



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