

# Cruiser VTOL TACTICAL UAS











# **Power Plant**

4 stroke, 2 cylinder aluminium block. CDI, ECU, and computerized EFI with altitude compensation. Starter/Generator 380W, Safety Start System.

Custom dampers are fine tuned to reduce vibrations. Engines include all accessories and the complete pack can be swapped in less than 2 minutes to allow for constant operations and maximum throughput of the payload/platform system on stage.

MTBOs are 300+ hours. Magline delivers complete engine packages for quick substitution to avoid any downtime due to maintenance or overhaul proceses during field deployment.

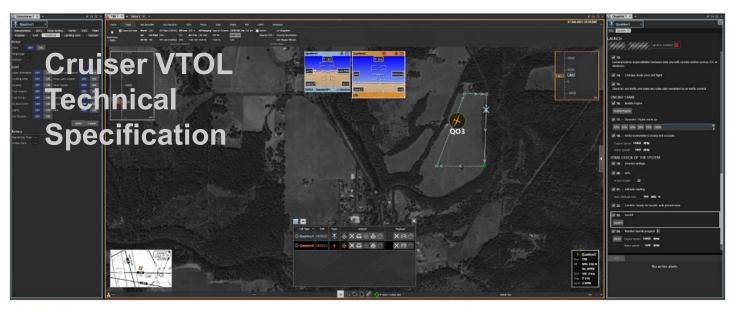
# **Avionics**

Integrated FCU with Quattro FMS, includes Ethernet switch and nodes for flexible architecture that enables all kinds of equipment to be integrated in minutes.

Quattro Hybrid controller is the autopilot of choice for the largest and most relevant UAV ccompanies in the world. Quattro operates with Vigilant Spirit software for ultimate control by means of embedded checklists & procedures customized for the operator.

Magline training for Pilots in Command is a process that lasts 15 days, and qualify operators for BLOS missions as AVO (vehicle operator) and ESP (emergency safety pilot)





#### **Product Benefits**

High deployment flexibility

Higly operable with low training hours

Low Cost Tactical ISR Capabilities

Modern FMS / Avionics GS / Detection Systems

## General dimensions

Length: 3,5m

Windspan: 5.2m

# Payload area dimensions

Length/Height/Width: 600mm x 350mm x 275 mm

#### Characteristics

#### Structure

Autoclave cured Carbon-Kevlar Composite Structure

Aerospace grade materials & manufacturing processes

High tensile strength fibers, matrix & bonding adhesives

#### **Power Plant**

1x 155cc 4 stroke piston engine with extended MTBO and service.

INS/GPS

200MHz Triple Redundant INS/GPS @ different dynamic ranges

**Autopilot** 

Advanced Quattro Flight Management System

**Launch Options** 

VTOL

Wheeled launch in unpaved runway

**Recovery Options** 

Servo operated Parachute 5m/s descent rate (optional)

Reusable recovery system

Payload

Trillium Technologies H95 Multipurpose Gimbal

Trillium Technologies H80 Multipurpose Gimbal

i2Tech ULS Gimbals 4 Axis

i2Tech AX Gimbals 4 Axis

LIDAR/Mapping Cameras Large Format

#### **Spec Sheet**

#### Range

250 km in direct LOS (@ 2000m)

500 km with Sat link BLOS (@ any altitude) -backup-

up to 250 km for video in LOS (with 10 W amplifier)

#### Max Operational Height

3000m

#### Max Speed

140 kmh

## Operational Speed

105 kmh

## **Payload Capacity**

8 Kg

# Overall Dry Weight

70 Kg

#### Endurance with standard fuel

6Hrs (@ max payload)-8 hrs (min payload)

#### Endurance with extended fuel

8Hrs (@ max payload)-12 hrs (min payload)

#### Cruiser II Product Portfolio

Low Maintenance Tactical UAS

Modern Structure, Avionics, Engine and Payload plant for modular ISR Tactical operations

For additional information

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