



MODEL: CAPTOR FV39E

AR-AETHERIX



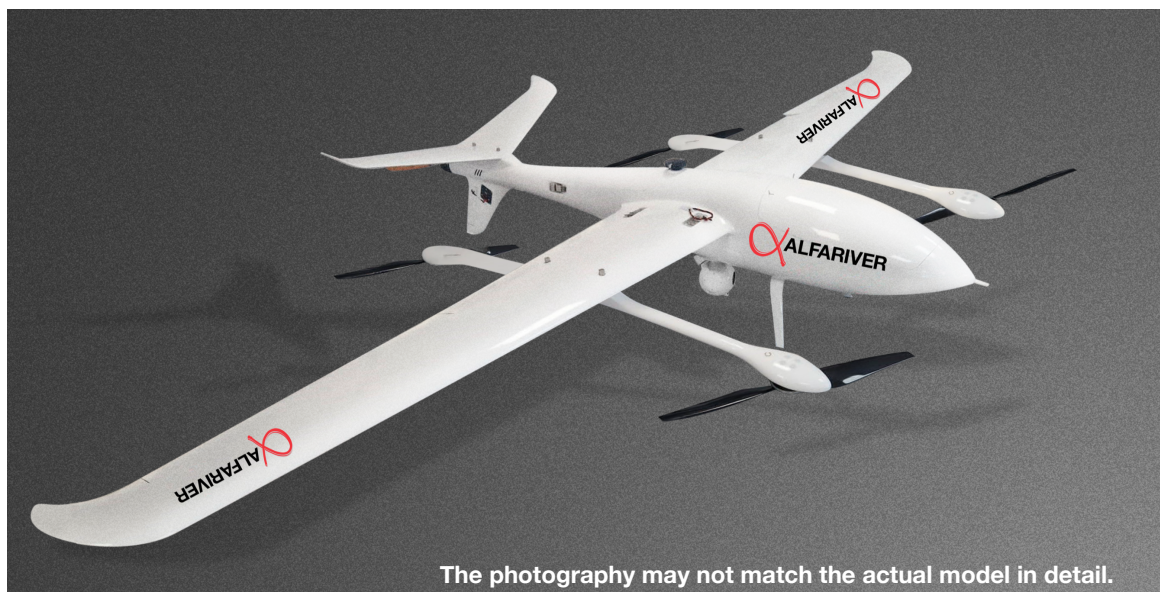
Description:

UAV designed for NATO Class-I SMALL classification with vertical take-off and landing system (VTOL) that allows its deployment in confined spaces.

With reduced weight and extended autonomy, it has the possibility of integrating Plug&Play payloads with a high-resolution video system and long-range laser range finder. Its high-precision automatic navigation system and its advanced, long-range Ground Control System ALL-IN-ONE ground station make this UAV the ideal tool for ISTAR (Intelligence, Surveillance, Target Acquisition and Reconnaissance) missions, support to Special Units, Maritime Surveillance or Civil and Maritime Rescue Services.



The equipment complies with MIL-STD standards ensuring reliability in demanding military environments.



The photography may not match the actual model in detail.

Characteristics:

Advanced Navigation System

- Mission-oriented interface.
- Online map updates.
- Live flight reconfiguration with multi-route planning.
- Compatible with all digital map formats.

Improved autonomous navigation

- Configurable periodic operations.
- Autopilot with capacity for up to 400 Waypoints.
- Editing of points of interest
- Geofences and Fly/No Fly zones configurable..

Advanced functions

- Operations Multi-UAV
- Multi-GSC
- Sea Skimming
- Compatible with most datalinks, advanced telemetry.

ENVIRONMENTAL CONDITIONS

Working Temperature
Storage Temperature

-20°C; + 60°C
-40°C; + 75°C



Characteristics:

AEROPLANE

Flying range	≤ 4 hours
Cruising speed	75 - 100 km / h
Maximum speed	120 km / h
Anti-wind capacity	43,2 km /h
Maximum operating altitude	4.500 m ASL
MTOW	≤ 35 kg.
Net weight without batteries and payload	17 kg.
Wing span	3.900 mm.
Length	2.000 mm.
Height	680 mm.



REGULATIONS:

AVIONICS/ NAVIGATION
APPLICABLE REGULATIONS

Enclosure Material	[Aluminium grade 6082]
Environmental Rating	[MIL-STD-810]
EMC/EMI Certification	[MIL-STD-461]
Temperature Range	[FROM -40°C TO +85°C]
IP Rating	[IP66]
Max. non-condensing humidity	[UP TO 90% RH]
Shock Survival	[500G 8MS 1/2 SINE]
ESD Compliance	[IEC 61.000-4-2-level 4]



NAVEGATION

FLIGHT CONTROL

Range Altimeter [De -2.000 ft a +36.000 ft AMSL]

Multi-constellation GNSS capability

- 72-channel receiver
- Constellations: GPS, SBAS, QZSS, GLONASS, BeiDou, Galileo

Waypoint navigation [Autopilot up to 400 Waypoints]

IMU Dual

Visual Odometry [< 10 m/min]

Drift-free Pattern Recognition

Multi-UAV Operations.

Multi-GCS operations.

Sea Skimming Operations.

Referenced Navigation.

Predictive Routing.

Sense and Avoid (ACAS I)W

Waypoints: Up to 400. Dynamic POI editing

Compatible with a wide variety of data links and radio links thanks to its optimised telemetry. Full DEM support

Geofences and configurable Fly / No Fly zones

Support and calibration for most digital map formats.



Applications

CASE STUDIES

ISTAR (Intelligence, Surveillance, Target Acquisition and Reconnaissance) applications.

Support to special units.

Support to civil units.

Maritime surveillance.

Air Search and Rescue Service (S.A.R.).



Payload

CAMERA SYSTEMS

Data-Link and Long Range Video-Link [up to 150 km]

Onboard Camera

- 30x Optical Zoom
- IR @1280x1024p
- Starlight Night Vision
- Automatic Object Tracking

Detection / Recognition / Identification

- Human (1.8 x 0.5m) [D:1850m/R:460m/l:230m]
- Vehicle (2.3 x 2.3m) [D:4470m/R:1120m/l:560m]

