

BULUT

**OBSERVE,
CAPTURE,
STREAM!**

Gasoline Powered Forward Thruster and Electric VTOL Motor UAV



 **HAVELSAN**

BULUT



BULUT is a fixed-wing **Autonomous Unmanned Aerial Vehicle** that can take off and land vertically.

GENERAL FEATURES

-  MTOW: 58 kg (payload included)
-  Payload Capacity: 5 kg
-  Wingspan: 4.5 m
-  Length: 2.9 m
-  Data Link Range: Up to 80 km
-  Cruise Speed: 90-95 km/h (49-51 kts)
-  Operating Temperature: -10/+55 °C
-  Propulsion System: Gasoline Engine
 - Endurance: Up to 6 Hours
 - Ceiling Altitude: 15.000 ft
 - Operating Altitude: 8.000 ft
-  VTOL System: Electric Motor
-  Wind Resistance:
 - Wind Limit: 20 kts (Take-off/Landing)
 - Wind Limit: 25 kts (Cruising)
-  EO/IR/LRF Integrated Camera

KEY FEATURES

- ▶ Fully Autonomous Flight System
- ▶ Runway Independent VTOL Mission Capability
- ▶ Sub-Cloud Mission Capability
- ▶ Transportation, Operation and Maintenance with Three Technicians
- ▶ Intelligence, Surveillance and Reconnaissance with EO/IR/LRF Payload
- ▶ 8 Antennas CRPA GNSS Anti-Jamming Capability
- ▶ Target Coordinate Estimation
- ▶ Return Home, Autonomous Landing in Case of Link Loss
- ▶ Target Detection and Tracking
- ▶ Ultimate Mobile Operation Capability
- ▶ Telemetry Link Redundancy
- ▶ Performing Mission in the Light Rain

OPTIONAL FEATURES

- ▶ GNSS Independent Mission Capability
- ▶ Fundamental Flight Simulator
- ▶ Payloads:
 - EO/IR/LRF Integrated Pro Cameras
 - Multispectral Camera
 - Integration with Various Mission-Oriented Sensors
- ▶ GPS/GNSS Anti-Jam System
- ▶ Moving Object Detection
- ▶ Sense & Avoid System
- ▶ Anti-collision System
- ▶ IFF Mode A/C/S
- ▶ Remote Video Terminal (20km)
- ▶ GCS Handover Capability
- ▶ Telemetry & Video Link Redundancy

APPLICATION AREAS

- ▶ Border and Coastal Patrol
- ▶ Anti-Smuggling and Anti-Terrorism
- ▶ Public Security
- ▶ Narcotic Plant Detection
- ▶ Settlement Thermal Measurement
- ▶ Forest Fire Prevention
- ▶ Post-Disaster Assessment
- ▶ Environmental Pollution Detection
- ▶ Agricultural Applications
- ▶ Oil-Gas Pipelines Observation
- ▶ Power Lines Inspection
- ▶ Search and Rescue Operations
- ▶ Artillery Target Acquisition
- ▶ Cartography