Pigeon-V VTOL is a professional FPV plane & UAV EPO aircraft, light weight with wingspan 1800 mm., combined new technology of TOP Engineering Group allows for precision vertical take off and landing (VTOL) in limited landing or take-off area.

- Pigeon-V can take-off and land in limited space such as in the jungle or building deck with an available area of only 5×5 meters or the deck of a ship at sea. This increases the potential of any mission in any area.
- Pigeon-V can fully automatically take off, execute the mission autonomously and land automatically. This will enable un-experienced pilots to operate the UAV.
- Pigeon-V can remains fully controllable up to a range of 20 Km.
- Pigeon-V endurance is up to 60 minutes.
- Pigeon-V has maximum speed at 80 kilometres per hour.
- Pigeon-V has minimum speed at 40 kilometres per hour.
- Pigeon-V has maximum altitude up to 600 meters.

Pigeon-V is suitable to execute the following applications:
- Intelligence, surveillance, and reconnaissance (ISR) within the area 4.5 sq.km.
- Chemical and radiation detection
- Weather mapping and measurement
- Area mapping especially within city limits
- Agricultural, farming & commercial fishing management
- Fire & damage assessment
- Convoy, road & population protection
- Natural resource & wildlife management
- Search & rescue
Pigeon-V Fixed Wing VTOL (Vertical Take Off and Landing) UAV (Unmanned Aerial Vehicle) Aircraft

Ground control station:
TOP Engineering Control Stations (GCS) are designed to fully control the UAV during operations. All GCS have modular design and they can be adapted to every client needs.

Pigeon-V Fixed Wing VTOL Overview and Specifications

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th></th>
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<tbody>
<tr>
<td>Wingspan:</td>
<td>1800 mm</td>
</tr>
<tr>
<td>Body Length:</td>
<td>650 mm</td>
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<tr>
<td>Body width:</td>
<td>160 mm</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Weight &amp; Payload:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Aircraft Empty Weight:</td>
<td>Not less than 1.0 kg</td>
</tr>
<tr>
<td>Aircraft with camera &amp; accessories:</td>
<td>Not less than 4.5 kg</td>
</tr>
<tr>
<td>Maximum Takeoff Weight:</td>
<td>Not less than 5.0 kg</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Flight Characteristics:</th>
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<tbody>
<tr>
<td>Cruise Speed:</td>
<td>50 Km/h</td>
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<tr>
<td>Maximum Speed:</td>
<td>80 Km/h</td>
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<tr>
<td>Stall Speed:</td>
<td>40 Km/h</td>
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<tr>
<td>Take off method:</td>
<td>VTOL or Runway</td>
</tr>
<tr>
<td>Maximum Altitude:</td>
<td>600 Meter</td>
</tr>
<tr>
<td>Maximum Flight Time:</td>
<td>60 min</td>
</tr>
<tr>
<td>Li-Ion version:</td>
<td></td>
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</tbody>
</table>

Camera Options:
- Not less than 30 Mega Pixel Digital still Camera with 1080p HD Video and Remote Controller
- 1080p HD (High Definition) Video Camera

RF Communications and range:
- 433 MHz Data Link, Ground to Aircraft (One-Way, Flight Controls), 20 Km
- 900 MHz Data Link, Ground to Aircraft & Aircraft to Ground (Two-Way, Autopilot & Telemetry), 60 Km 1.2 GHz Video Link, Aircraft to Ground (One-Way), 50 Km

Important: The UAV aircraft range is not limited to the above mentioned ranges. Beyond those ranges, the autopilot will fly the UAV autonomously, following the pre-programmed instructions and/or waypoints.

Standard equipment:
- High performance, 32 Bit ARM Cortex autopilot system
- High performance GPS modules
- Airspeed sensor
- Compass
- OSD and video Transmitter
- Data transmission system
- Remote control receiver
- Li-Ion battery system for onboard electronics supply
- Multiple voltage regulator systems for redundancy

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