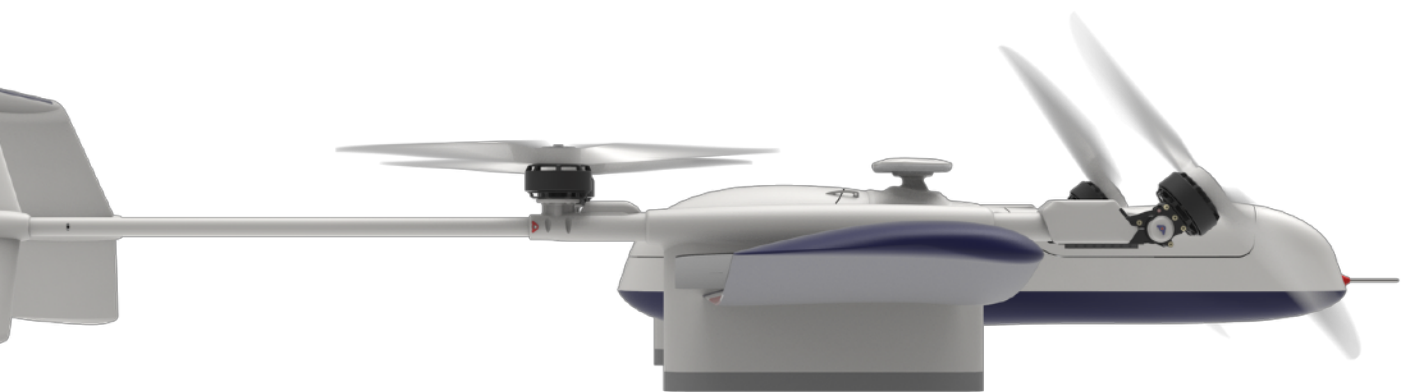


UGLY-DUCKLING 2.0

Tilt-rotor Unmanned Aerial Vehicle with Vertical
Take-off and Landing Capability

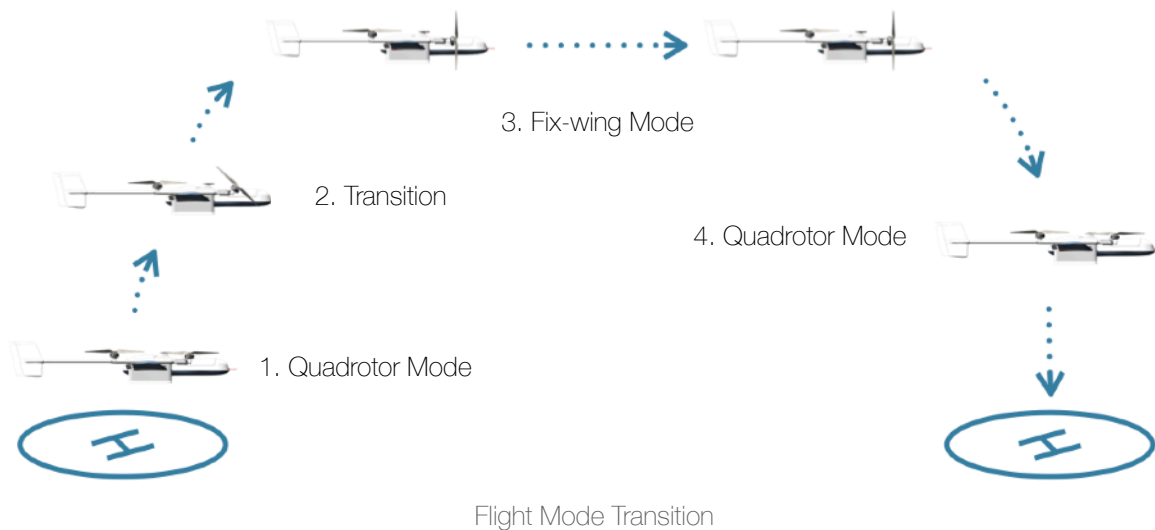
Configuration and Specification



Characteristic

Ugly-duckling 2.0 equipped with tilt-able rotor, supports automative vertical take-off and landing capability. The product was comprehensively optimized in the research and development stage, considering safety, energy saving, user habit, etc., enabling Ugly-duckling 2.0 a remarkable flying quality and an easy maintenance characteristic.

Outstanding Reliability:	Passed over thousands trials
Easy Operation:	One button for take-off and landing without area limitation
Quick Circulation:	Battery exchange in one minute
Long-lasting Endurance:	Flight time 1.5 hours in 100km
Remarkable Stability:	Stable flying statues, eliminating the vibrate induced by combustion engine



Configuration

Ugly-duckling 2.0 is equipped with full set for flight and customized service can also be provided.

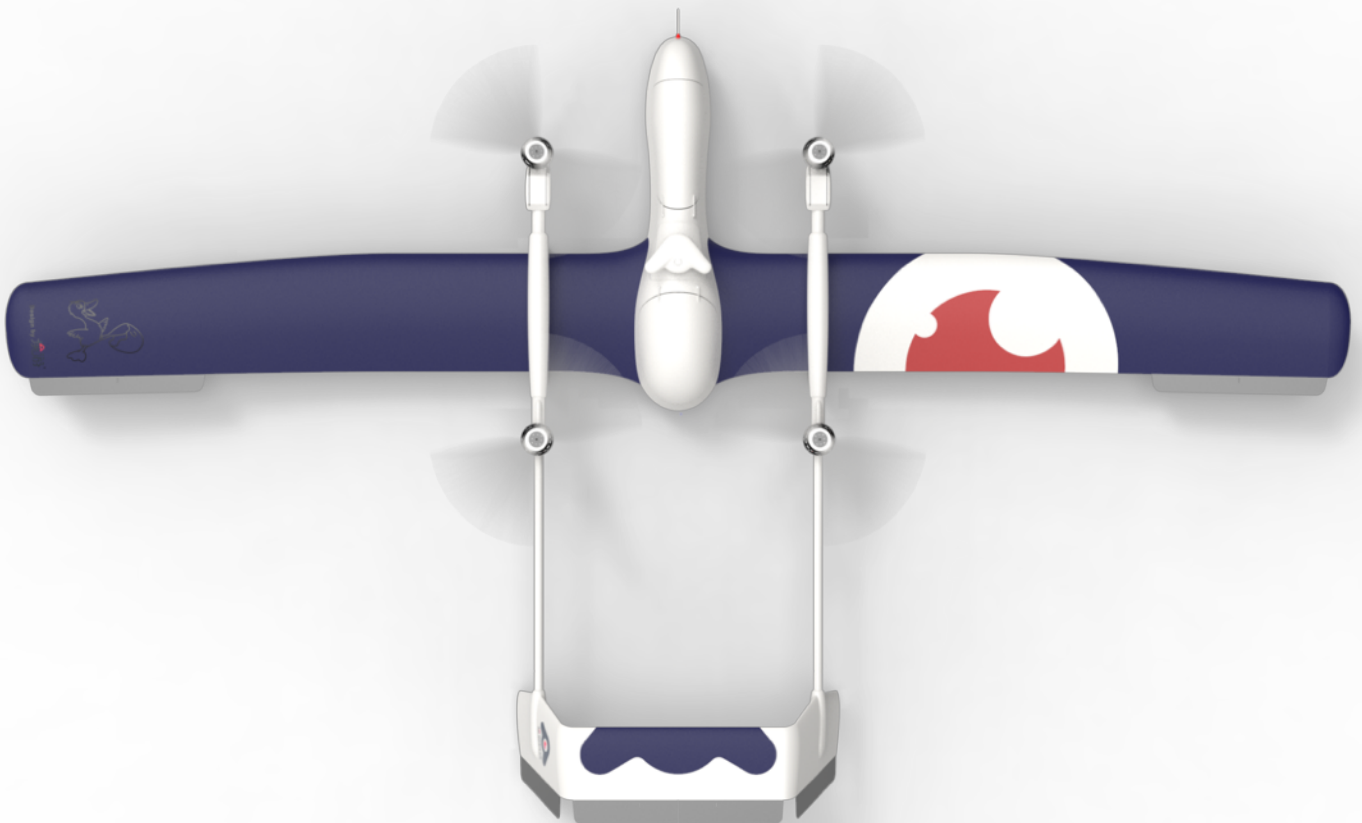
- Ugly-Duckling 2.0
- Data Link
- Payload
- Autopilot
- Power System
- Ground Control Station

Aircraft Specification

Span:	2.96 m
Length:	1.66 m
Maximum Take-off Weight:	12 kg
Drive Mode:	Lithium Polymer Battery

Flight Specification

Wind Resistance:	10 m/s
Endurance:	90 - 120 min
Cruise Speed:	60 - 120 km/h
Payload:	Visible Light, Hyperspectral, Gimbal, etc.
Take-off and Landing Mode:	VTOL



Payload Specification

Visible Light Camera

Number of Pixels (effective):	42.4 MP
Lens:	f=35 mm
Sensor Type:	CMOS
Sensor Size:	35.9x24 mm

Multi-spectral Camera

Spectral Bands:	Blue, green, red, red edge, near-IR (global shutter, narrowband)
Wavelength (nm):	Blue (475 nm center, 20 nm bandwidth), green (560 nm center, 20 nm bandwidth), red (668 nm center, 10 nm bandwidth), red edge (717 nm center, 10 nm bandwidth), near-IR (840 nm center, 40 nm bandwidth)
RGB Color Output:	Global shutter, aligned with all bands
Ground Sample Distance (GSD):	8 cm per pixel (per band) at 120 m (~400 ft) AGL
Capture Rate:	1 capture per second (all bands), 12-bit RAW
Interfaces:	Serial, 10/100/1000 ethernet, removable Wi-Fi, external trigger, GPS, SDHC
Field of View:	47.2° HFOV
Triggering Options:	Timer mode, overlap mode, external trigger mode (PWM, GPIO, serial, and Ethernet options), manual capture mode

Please get in contact with us for more payload options.

Autopilot

The autopilot of the ugly-duckling 2.0 was integrated with flight control unit, air data sensor, navigation unit, data link, redundancy power, etc.

Ground Control Station

The ground control station of ugly-duckling 2.0 is compatible with Windows and Android.

More Info & Contact Us

Please visit our website: www.aiutechnology.com.