DINKWANYANA
AEROSPACE

UVH 25EL is a fully automatic drone with an electric motor

UVH 25EL VTOL

designed for commercial use
and data capturing applications
using LiDAR

www.dinkwayana.com

UVH 25EL with 25 kg MTOW

with extended carrying capacity, flying range and temperature range

OVERVIEW

ENDURANCE	**1.5 hours**
OPERATIONAL RANGE	**67 km**

ADVANTAGES

- The spatial frame of the helicopter makes it possible to conveniently place the payload and easily adjust the center of mass of the aircraft
- The chassis has been designed to fit the LiDAR installation
- The rechargeable battery module is located inside the helicopter's bearing frame, which protects it from damage
- The open fuselage structure in the area of servo actuators allows convenient control of the main mechanical elements of the helicopter, electrical wiring and other main components
- The helicopter is equipped with a radio altimeter

UVH 25EL with 25 kg MTOW

PERFORMANCE

Parameter	Value
Cruising speed	45 km/h
Maximum speed	100 km/h
Maximum range	67 km
Practical ceiling	3500 m
Flight time	1,5 h
Max. Payload	5 kg
MTOW	25 kg
Temperature range	-20 °C...+40 °C

SPECIFICATION

Parameter	Value
Max. climbing capacity	3 m/s
Max. wind speed during taking off or landing	14 m/s
Height	670 mm
Length	2670 mm
Main rotor diameter	2600 mm
Engine type	BLDC Electric
Level surface	10 m x 10 m
Emergency landing	Parachute/ Autorotation
Ground support equipment	Not required

PAYLOAD: GSG -140D Three-axis gyro-stabilized gimbal for day surveillance

OVERVIEW

FEATURES

- Weight: 1.34 kg
- Housing: aluminum
- Max. dimensions (length, diameter): 172.6x137mm
- Environmental protection: IP65
- Drying cartridge
- Direct drive
- Rotation limits: Angle of rotation: roll — +/- 30°, yaw — 360°, pitch — +/- 100°
- Supply voltage: 8-25V
- Vibration-proof frame
- Operational temperature range: -40 ... +50°C

Day camera parameters

- Video output: FHD H.264 Ethernet
- Max look-up angle: 63.7°
- Resolution: 1920x1080/ 60p
- Optical zoom: 30
- Effective resolution: 2.13 MP
- Focus: auto / manual
- Lens: F 4.3 mm 129 mm

PAYLOAD: Lidar

OVERVIEW

- Measurement range: 200 km
- Accuracy: ±3 cm
- Field of View (Vertical): -25° to +15°
- Field of View (Azimuth): 360°
- Rotation Rate: 5 - 20 Hz
- Points/Second: 0.6/1.2 million

- Pixel Resolution: 12.94mm x 60m
- Pixel Size: 3.45 µm
- Resolution: 4096 × 2160

Portable UAV control Unit PGCU-3

OVERVIEW

Based on a console with controls and a docking interface for a military-grade rugged Getac X500 laptop computer.
Console joysticks, push-buttons and switches are industrial water-proofed units. Console housing is made of aluminum alloy.

Can be used as a simulator.

A digital modem integrated into the core technology systems provides UAV control without using an external antenna complex.

A switching and power supply board allows the PGCU.3 to work from various power sources, as well as to charge the docked computer.

Autopilot: AP10.3

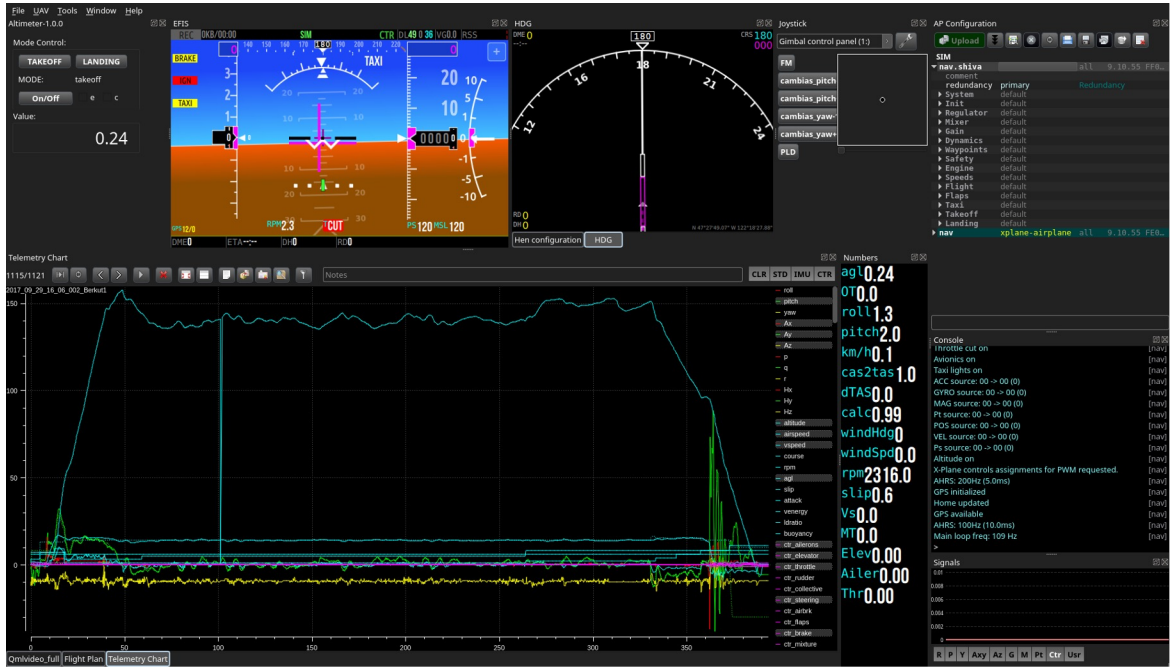
Autopilot: AP10.3

- Control of actuating mechanisms
- Engine control
- Semi-automatic control with automatic stabilization of the vehicles
- Manual control using the main 928MHz communication channel from ground control station (GCU)
- Control of the vehicles object in emergency mode
- Payload control
- Payload feedback
- Control of rotating platforms in gyro-stabilization mode
- Receipt and transfer of telemetric data between GCU and the vehicles simulation mode
- Flight simulator
- Onboard power control
- Power stabilization
- Power distribution, including emergency power supply mode

GCU Software

Telemetry

- Control of all drone parameters from the moment of switching-on the equipment both on the ground and in flight
- Real-time telemetry transfer to the ground control unit
- Data packet transfer when communication is reestablished
- Data recording on autopilot flash memory
- Easy telemetry analysis
- Flight review at the simulator for visualization of the aircraft behavior aloft



GALLERY

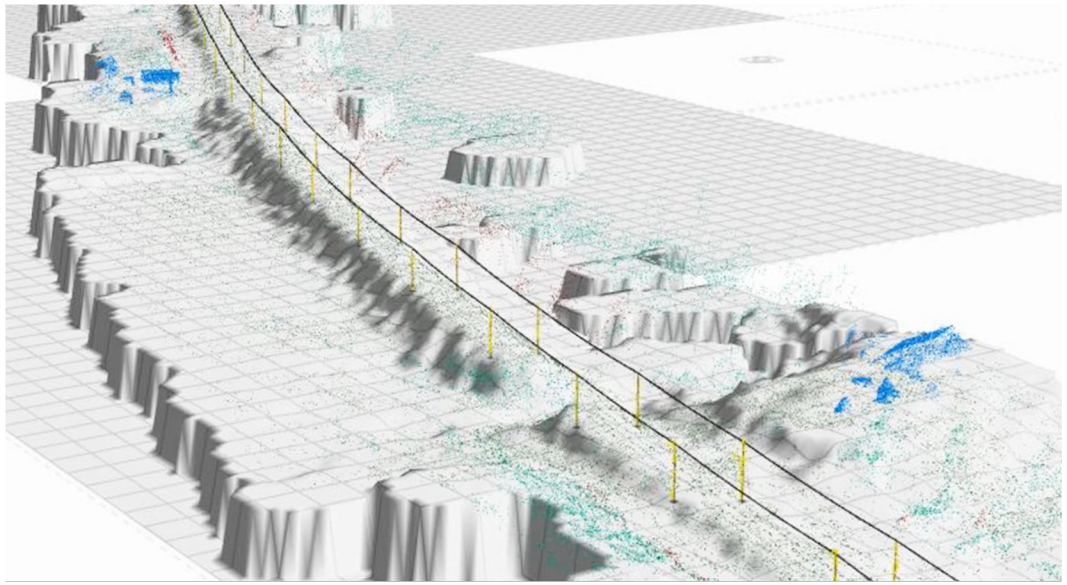
GALLERY

Observation height of 600 meters

Optical zoom

GALLERY

GALLERY



CONTACT INFORMATION

Dinkwayana Aerospace
www.dinkwayana.com
tkgalema@dinkwayana.com