

MUG-V5000 VTOLS

www.armour.gr

INTERNATIONAL
ARMOUR
OUR™
www.armour.gr





MUG-V5000 (DRAGON Series)

The MUG-V5000 is an exceptionally large aircraft designed for professional use and can be equipped with a full system of advanced control electronics to run in sync with the most advanced ground stations. With full fuel of 27 liters, the flight time can be over 7 hours.

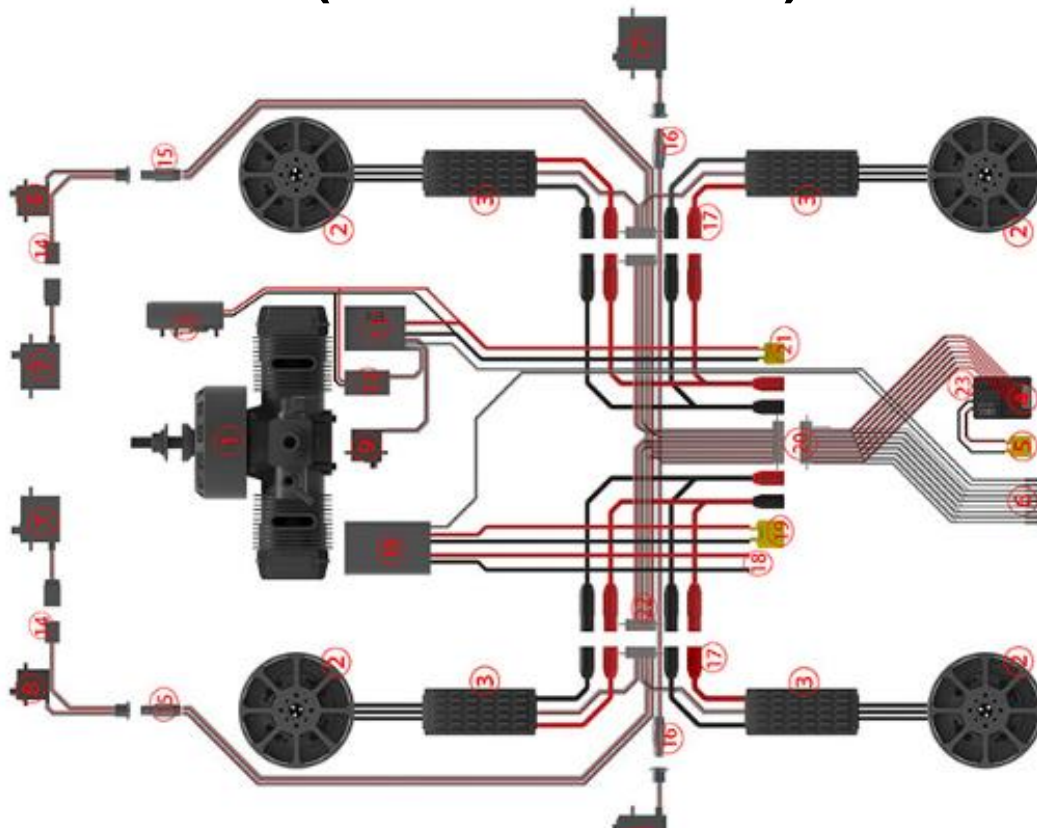
Specifications

Main material: Carbon Fiber
Wingspan: 5000mm
Length: 3500mm
Maximum Width of Fuselage: 375mm
Wing Area: 261.5 dm²
Empty Weight: 34kg
Maximum Take-off Weight: 100kg
Maximum Speed: 38m/s
Cruise Speed: 35m/s
Stalling Speed: 24m/s
Maximum Payload: 20kg
Volume of Fuel Tank: 28Liters
Maximum Flying Time: up to 8 Hours
Equipment cabin size: 1000mm x 340mm x 350mm

Recommended Setup (Additionally Charged):

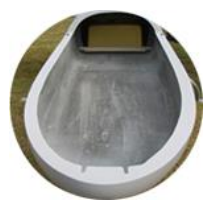
- DLA 232cc Engine w/ EFI, Starter & Alternator
- Customized T-motor 65kv VTOL Motors x 4
- Customized T-motor 24S 200A ESC x 4
- Pilot PY-48AH Servo x 2
- Pilot PW-27AH Servo x 4
- Tower Pro MG958 Servo x 2
- 32"x14" Forward Propeller x 1
- T-motor 40" Carbon Fiber VTOL Propeller x 2 Pairs
- 6s 8000mAh Lipo x 17

MUG-V5000 (DRAGON Series)



- ① DLA232 EFI Engine w/ Starter & Alternator
- ② VTOL Motor
- ③ VTOL ESC
- ④ 25A UBEC
- ⑤ BEC Input (3~18s)
- ⑥ Connector Definition From the Left (1~9):
- ⑦ Pilot PY-35AH Servo
- ⑧ Pilot PW-27AH Servo
- ⑨ Throttle Servo
- ⑩ Starter Power Manager
- ⑪ ECU
- ⑫ Ignition
- ⑬ Pump
- ⑭ Dupont 3-pin Connector
- ⑮ PAG 6-pin Connector
- ⑯ PAG 3-pin Connector
- ⑰ AS150
- ⑱ 24V Output
- ⑲ XT90 (6s Input)
- ⑳ DB25 Connector
- ㉑ XT60 (3s 12V Input)
- ㉒ DB15 Connector
- ㉓ Backup Power (1-2s)

- 1. Aileron
- 2. Elevator
- 3. Rudder
- 4. Upper Right ESC
- 5. Down Right ESC
- 6. Upper Left ESC
- 7. Down Left ESC
- 8. Starter
- 9. Engine Throttle



Equipment Cabin



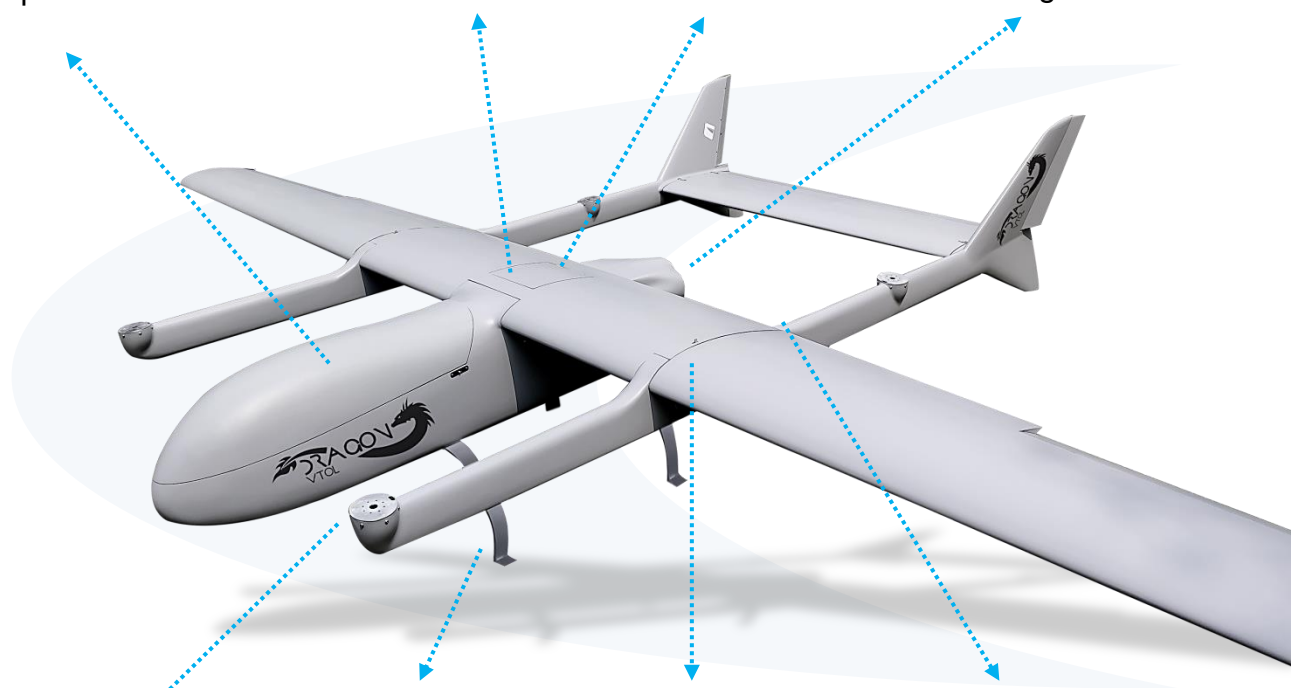
Parachute Cabin



27L Kevlar Fuel Tank



Engine Cover



VTOL Motor Mount



Landing Gear



Wing Connection



Boom Connection

MUG-V5000 (DRAGON Series) - AirFrame

Parts/Details	Model V5000	Model V5000S	Model V5000G
Wing Span	5000mm	5000mm	5000mm
Length	3500mm	3500mm	3500mm
Height	940mm	940mm	940mm
Fuselage Dimensions	2080mm×360mm×390mm		
Wing Area	261.5dm²	312dm²	312dm²
Fuel Tank	27L	27L	27L
Empty Weight	36.5kg	34.0kg	34.0kg
Engine	o	DLA232 EFI w/ Alternator & Starter	
Throttle Servo	o		
Engine Propeller	o	32*14	32*14
VTOL Motor	o	T-motor 65kv VTOL Motors x 4	
VTOL ESC	o	T-motor 24S 200A ESC x 4	
VTOL Propeller	o	T-motor 40" x 2 Pairs	
Horizontal Stabilizer Servo	o	Pilot PW-48AH	
Vertical Stabilizer Servo	o	Pilot PW-27AH 27kg	
Aileron Servo	o	Pilot PW-48AH	
Battery	o	o	o
MTOW	110kg	110kg	110kg
Cruise Speed	35m/s	35m/s	35m/s
Stall Speed	24m/s	24m/s	24m/s
Maximum Speed	38m/s	38m/s	36m/s
Flight Duration	Up to 8 Hrs		
Maximum Payload	20kg		
Wind Resistance	6	6	6
Build Kit	o	Yes	Yes
UBEC	o	12V	12V
Navigation Lights	o	o	o
Flight Controller	o	o	o
Data Transmission	o	o	o
RTK	o	o	o
Video Transmission	o	o	o
Gimbal	o	o	o
Ground station	o	o	o
Basic Installation	o	o	Yes
Autopilot Installation	o	o	o

MUG-V5000 (DRAGON Series)



MUG-V5000 (DRAGON Series)

Offered System Details



Specifications

- Main material: Carbon Fiber
- Wingspan: 5000mm
- Length: 3500mm
- Maximum Width of Fuselage: 375mm
- Wing Area: 261.5 dm²
- Empty Weight: 34kg
- Maximum Take-off Weight: 100kg
- Maximum Speed: 38m/s
- Cruise Speed: 35m/s
- Stalling Speed: 24m/s
- Maximum Payload: 20kg
- Volume of Fuel Tank: 28Liters
- Maximum Flying Time: up to 8 Hours
- Equipment cabin size: 1000mm x 340mm x 350mm

Gasoline Power Package

- DLA 232cc Engine w/ EFI, Starter & Alternator
- Customized T-motor 65kv VTOL Motors x 4
- Customized T-motor 24S 200A ESC x 4
- Pilot PY-48AH Servo x 2
- Pilot PW-27AH Servo x 4
- Tower Pro MG958 Servo x 2
- 32"x14" Forward Propeller x 1
- T-motor 40" Carbon Fiber VTOL Propeller x 2 Pairs
- Build Kit x 1
- Sprintlink 5W 1.4Ghz 100km Long Range Wireless Video-Data-RC Link w/ Sprint Tracker
- CUAV X7 autopilot + GPS + airspeed sensor

Camera

U30TIR 30x Zoom EO & IR Dual Sensor Object Tracking Camera Gimbal

Terms

Set Price: **113,000\$** CIF any safe international airport

Payment: 50% down payment and payment in full before system is ready to be exported/transit

Delivery time: Within 60 days from down payment

Disclaimer: Any illegal utilization of this product is forbidden.

Our company will not take any responsibility for any consequences by illegal use, nor provide any technical support.

U30TIR 30x Zoom EO & IR Dual Sensor Object Tracking Camera Gimbal



U30T 30x Optical Zoom Starlight Camera with Aerodynamic Shape

Stabilizing the U30T is a highly optimized 2-axis camera gimbal with pinpoint-precise motor rotation with a control accuracy of $\pm 0.02^\circ$ powered by a dedicated processor.

U30T uses a unique mechanically limited design and concealed wires to ensure more stable data transmission and greater durability



Vibration is eliminated using four damping balls and a lightweight damping board, creating seamlessly smooth video.

300° rotation remains possible through gimbal rotation.

Stable, smooth footage image can be captured even when flying at high speed flight.

The tracking speed is up to 32 pixel/frame, object size range is from 16*16 pixel to 160*160 pixel, with the minimal signal-to-noise ratio(SNR) 4dB, the mean square root values of pulse noise in the object position < 0.5 pixel, which greatly improve the accuracy and tracking effect.

Build-in normalization, cross-correlation and tracking algorithm, combining with object missing recapture algorithm, achieve stable track of the target. Support custom characters of user OSD, adaptive gate, cross cursor, trace information display.

Portable Dual Screen Ground Control Station



Mugin 13.3" Portable Ground Control Station features a professional layout and functions. It is equipped with two 1000nits touch screens to minimize glare in bright conditions, ideal for your flight use in the field.

Features:

- Two high-brightness LCD screens, screen brightness adjustable.
- Optional memory, solid-state disk size.
- Two Gigabit Ethernet ports for fast network communication.
- 8 custom buttons.
- Lithium battery with 4 hours long battery life.
- Internal reserved space for secondary development.
- Made of aluminum alloy, hard anodized and sandblasted.
- Supports Windows 7 /Linux system.

This GCS works great with **Potomac 80km transmission system** and **Potomac 150km transmission system**

Potomac Video/Data wireless transmission system is a point-to-multipoint broadband access and data transmission product. It supports multiple bandwidth allocations, supports a central hub to connect up to 16 hosts. With the flat system structure design, it meets the requirements of long-range video feed in all sorts of scenarios, featuring strong anti-interference ability, low delay, low power consumption, rich interfaces and real time recording.

Portable Dual Screen Ground Control Station



System Parameters:

- Processor: Intel I7-7500U
- Battery Endurance: 4 Hours with Full Capacity
- Memory: 8GB/DDR4
- Disk: 256G SSD
- Operating System: Windows 7 /Linux

Screen:

- Monitor Type: 2 x 13.3" FHD TFT LCD
- Resolution: 1920*1200
- Display Dimensions: 293.472 x 165.078mm

I/O Interfaces

- Ethernet Port: 2
- USB Port: 5
- HDMI: 2
- SIM: 1
- Power Supply: DC19V

Buttons

- Screen Brightness Adjustment Button: Brightness/Signal Adjustment
- Customization: 8
- Numerical Keyboard: 1
- Knob: 1
- Two-axis Joystick: 2

Touch Screens:

- Upper Screen: Optional Resistive Touch Screen
- Down Screen: Capacitive Touch Screen

Environmental Requirements:

- Operating temperature: -20~50
- Storage Temperature: -30~60°C

OPTIONAL

Potomac 150km transmission system



Potomac 150km 816/1437MHz Video/Data Wireless Transmission System

Features:

1. Point-to-multipoint broadband access and data transmission, a central hub can connect up to 16 hosts.
2. Support up to 40dBm transmit power.
3. Support 1.4MHz, 3MHz, 5MHz, 10MHz, 20MHz bandwidth.
4. Support two frequency bands of 816MHz and 1437MHz (customized products).
5. Support up to the transmission of 150km).
6. Support automatic power control.
7. Support automatic frequency control.
8. Provide 2 Ethernet ports encapsulated by PH2.0 interface
9. Provide two RS232 serial ports with PH2.0 interface package
10. Two frequency bands of 816MHz and 1437MHz can be customized upon request

816Mhz and 1437Mhz two frequency bands available subject to end user request

Applications:

Point-to-multipoint mid-range communication.
Power and hydrological line patrol observation.
Emergency communications for fire protection and security.

Specifications:

Input Voltage: 24V±10%
Typical Power Consumption: Around 30W
Transmitting Power: 40±2dBm
Transmitting Antenna: 816MHz/1437MHz (Necessary)
Receiver Antenna: 816MHz/1437MHz (Not necessary)
Storage Temperature: -40°C~+85°C
Working Temperature: -20°C~+55°C
Humidity: 5%~95%
Weight: 250 grams (Either for air unit or ground unit)

Potomac 80km transmission system



Potomac 80km 816/1437MHz Video/Data Wireless Transmission System

Features:

1. Point-to-multipoint broadband access & data transmission, a central hub can connect up to 16 hosts.
2. Support up to 40dBm transmit power.
3. Support 1.4MHz, 3MHz, 5MHz, 10MHz, 20MHz bandwidth.
4. Support two frequency bands of 816MHz and 1437MHz (customized products).
5. Support up to the transmission of 80km (We have another model support 150km).
6. Support automatic power control.
7. Support automatic frequency control.
8. Provide 2 Ethernet ports encapsulated by PH2.0 interface
9. Provide two RS232 serial ports with PH2.0 interface package
10. Two frequency bands of 816MHz and 1437MHz can be customized upon request.

Applications:

Point-to-multipoint mid-range communication.
Power and hydrological line patrol observation.
Emergency communications for fire protection and security.

Specifications:

Input Voltage: 24V \pm 10%
Typical Power Consumption: Around 30W
Transmitting Power: 40 \pm 2dBm
Transmitting Antenna: 816MHz/1437MHz (Necessary)
Receiver Antenna: 816MHz/1437MHz (Not necessary)
Storage Temperature: -40 $^{\circ}$ C \sim +85 $^{\circ}$ C
Working Temperature: -20 $^{\circ}$ C \sim +55 $^{\circ}$ C
Humidity: 5% \sim 95%

