

## EGT-2500 VTOL Flight Drone for Mapping or Surveillance



### Package Includes

#### **RTF Combo (RC with 10KM range control and telemetry)**

- 1 x VTOL fixed-wing airframe
- 4 x T-motor lift motor
- 4 x T-motor ESC for lift motor
- 1 x T-motor ESC for fixed-wing motor
- 2 x T-motor 1654 CF Propeller CW&CCW
- 1 x T-motor fixed-wing motor
- 1 x APC type 15x8 Propeller CW
- 4 x KST Servos or similar Servos
- 1 x PX4 Air Speedometer
- 1 x Power Module For Flight Controller
- 1 x Pixhawk Orange Cube
- 1 x DK32S Radio Controller



1 x Assembly and Flight Test Service

1 x Aviation box

Options

Battery:

1. 6S Tattu 25000mAh 6S 25C 22.8V High Voltage Lipo Battery

2. 6S Solid state 30000mAh 6S Lipo Battery

## **Main system parameters**

The basic information and system parameters of the MD-25 UAV are as follows:

Plain standard power unit: The power type of MD-25 UAV is electric. This model is powered by four T-MOTOR motors and T-MOTOR flame high-voltage electronic governor to provide rotor power. The T-MOTOR high-voltage electronic governor provides fixed-wing power.

EGT-2500 UAV chassis, its main parameters are as follows:

1. Body material: carbon fiber,
2. Wingspan: 2500mm      Landing gear height: 195mm
3. Battery compartment size: 260mm\*150mm\*85mm
4. Structural weight: about 3450g (including all structural parts and installation parts)
5. Maximum take-off weight: 13.5kg
6. Maximum payload: 3kg (standard load: 1.2kg)
7. Wing area: about 52dm<sup>2</sup>
8. Wing load: about 240g/dm<sup>2</sup>@12.5kg
9. Endurance time: 3.67H (220min)@1kg load (measured near calm sea level)
10. Maximum control distance: manual control by remote control/about 0.5km-1km, ground station/5km-30km
11. Standard cruising speed: 20m/s@12.5kg (recommended operating speed for mountain operations is 21m/s@12.5kg)



12. Maximum cruising speed: 93.6km/h (26m/s)
13. Standard battery configuration: 22.8v/25Ah\*2 (45.6V)
14. Never exceed the speed: 122km/h (about 34m/s)
15. Stall speed: 15.5m/s@12.5kg (16m/s@roll 25°/pitch 15°)
16. Minimum circling radius: 120m@19m/s (roll 18°) (safety turning radius on plateau is not less than 200m)
17. Maximum level flight ceiling: 4800m above sea level
18. Wind resistance in fixed-wing mode: no less than 6 winds (gust 7)
19. Maximum wind resistance in rotor take-off and landing mode: no less than 4 winds (gust 6)
20. UAV use environment: -20°C~45°C; can fly in light rain (safe operation time is more than 10min)
21. Rotor emergency operation time: not less than 6.5min (when the rotor battery is independently powered (non-standard power configuration))
22. Take-off and landing method: vertical take-off and landing
23. Vertical power blade size: 16/17 inches (recommended)
24. Fixed wing tail thruster blades: 15~18 inches (recommended)
25. Maximum thrust-to-weight ratio of fixed wing: 0.6 (standard configuration)
26. Plateau performance: passed the plateau test (please contact the manufacturer for the standard power configuration of the plateau)
27. Standard no-load take-off weight: about 11.5kg
28. Safety voltage when entering the landing route: not less than 44V (Greg's high-voltage battery)