Product Manual

TP-Mavic3



Portable DJI Mavic 3 Tethered Lighting System



1、Tethered Lighting Drone

1. Tethered lighting and ground control system for a DJI Mavic 3 supplied by you. The aircraft is not included; Deployment time ≤ 3 minutes.

Aircraft specifications in this manual are reference information for your DJI Mavic 3. The system also operates on 230 VAC, 50 Hz grids within its normal input range.

2. The power supply cable has an automatic pay-out and take-up function.

3. High-strength tensile and high-temperature resistant wire, with a high-strength Kevlar protective layer, and the length of the power supply cable ≥ 50 meters.
4. Equipped with an adjustable telescopic rod (65mm - 170mm).
5. Power supply methods: generator, built-in energy storage power supply, mains power supply; Input power: 220V AC, 50Hz; It has output protection, short-circuit protection, and over-voltage protection.
6. One-stop pull rod box design, enabling single-soldier operation; Built-in energy storage battery can meet 2-hour flight emergency lighting needs.
7. Reference dimensions of the equipment: 566mm × 467mm × 359mm
8. Weight: ≤ 28KG (including the built-in energy storage power supply)

2、Parameters of Aerial Lighting Vehicles

1. Number of Axes: ≥ 4;
2. Symmetrical Motor Wheelbase: ≤ 380mm;
3. Folded Dimensions: ≤ 240mm * 110mm * 120mm;
4. Equipped with a 5.5-inch remote control touch screen, and the remote control flight distance ≥ 6KM;
5. Weight (including lighting and functional modules) ≤ 1.25kg;
6. Positioning: Supports Beidou/GPS dual-mode positioning;
7. Hovering Accuracy: Horizontal ± 0.5m, Vertical ± 0.5m;
8. Visual Positioning, Omnidirectional Binocular Obstacle Avoidance;
9. Flight Speed: Ascending speed 8m/s, Descending speed 6m/s, Maximum flight speed 21m/s;
10. Maximum Take-off Altitude above Sea Level: 6000m;
11. Power Supply Method: Powered by tethered cable;
12. Uninterrupted Sustainable Flight Time: ≥ 12 hours;
13. Protection Function: When the power supply is abnormally interrupted, the drone can make a normal emergency landing;
14. Propeller Material: Flexible propeller design to prevent accidental injury to personnel.

3、Parameters of Lighting System

1. Light Source Type of Illumination Lamp Group: LED or COB light source;
2. Power: Standard configuration is 400W, and 600W is optional;
3. Luminous Flux: ≥ 80,000 Lm for 400W; ≥ 120,000 Lm for 600W;
4. Height: ≥ 50m;
5. Illumination Range: ≥ 5000m²; Weight of Lamp Group: ≤ 220g;

4、Parameters of Ground Power Supply System

1. Dimensions: ≤ 566mm × 467mm × 359mm;
2. Weight: ≤ 28KG;(Including the energy storage power supply system, tethered power supply system and lighting system; the aircraft is not included);
3. Pull rod box design for single-soldier operation;
4. The mobile power box can use mains power, generators, and energy storage power, with a power failure protection function. When the external power supply is abnormally interrupted, the aircraft can fly and land normally;
5. The built-in energy storage power supply in the power box enables an illumination time of ≥ 2 hours;
6. It takes about 4.5 hours to fully charge the built-in energy storage.