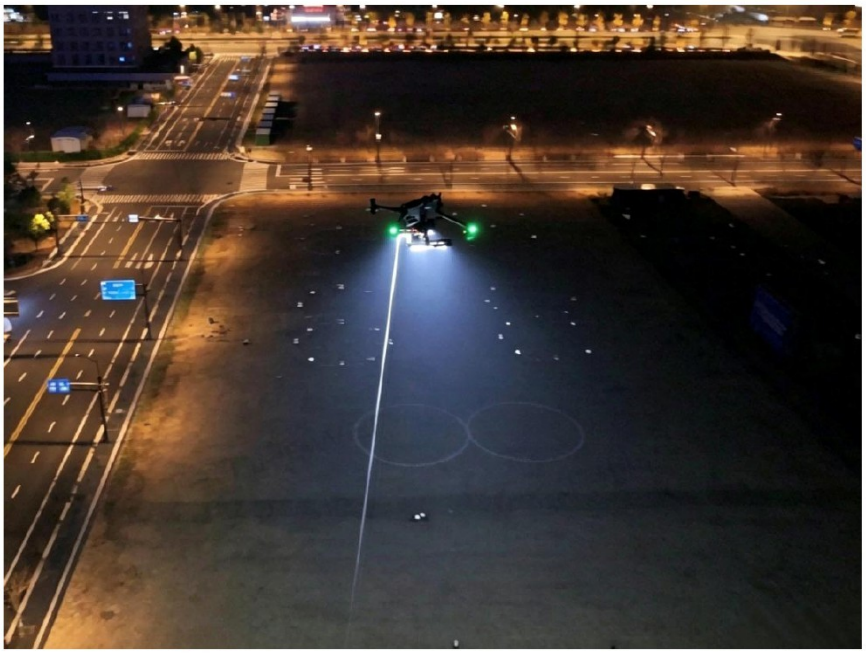
TP-A200 Lighting Lamp



1. Project Overview

The TP-A200 lighting module is specifically designed for high-altitude lighting operations using industry-grade UAV tethering systems and is compatible with the DJI M400 tethering platform. It features a COB high-power surface light source and an aviation-grade aluminum heat dissipation structure; it supports remote switch control, multi-level dimming, and independent angle adjustment, and incorporates a quick-release mounting system. It is widely used in scenarios such as nighttime emergency search and rescue, high-altitude lighting for large-scale events, nighttime power line inspections, flood control and emergency response, and nighttime lighting at disaster sites.



Product Parameter

1	size	125 mm × 45 mm × 20 mm (length × width × height)
2	Weight per lamp	145g
3	Power per lamp	375W
4	illuminant	COB
5	installation site	Side of the landing gear
6	fixed form	CNC bracket with quick-release design
7	Heat dissipation material	Aluminum alloy
8	remarks	Do not obstruct the infrared sensor

9	control method	Remote-controlled switch
10	Dimming	Adjustable high-intensity light and working light
11	Luminous angle	120°
12	Illumination angle	Adjustable by 180°
13	Optimal lighting range	1500 W: 2 pairs / 4 lamps; 3000 W: 4 pairs / 8 lamps. Up to 20,000 m² at 3000 W; test-boundary reference: 5 lm.

TP-A200 Lighting Product Image



Scenario Applications

The TP-A200 is installed on the DJI Matrice M400 and can be widely applied to emergency response and rescue operations, nighttime high-altitude lighting for fire and rescue services, nighttime inspection of power lines, high-altitude supplemental lighting for large-scale gatherings and sporting events, flood control, and nighttime survey lighting for geological hazards.

For nighttime rescue operations at fire scenes, collapse accidents, hazardous chemical response sites, and similar locations, high-altitude lighting can be employed to penetrate smoke and illuminate the work area over a wide area, facilitating search and rescue, structural breaching, personnel evacuation, and on-site cordon establishment; this compensates for the limited illumination range and severe obstructions encountered with ground-level lighting.

Nighttime inspection of power lines: nighttime fault detection and troubleshooting for transmission towers, overhead lines, and substations; high-altitude, long-distance illumination; and the identification of potential hazards such as conductor strand breaks, damaged insulators, line tree obstructions, and equipment discharge. This is suitable for emergency repair operations, nighttime special inspections, and post-disaster line re-inspection.

High-altitude supplemental lighting for large-scale gatherings and sporting events: for outdoor galas, sporting events, large open-air activities, and temporary security patrols, this provides wide-area, uniform high-altitude lighting to ensure venue illumination and supplemental lighting for surveillance cameras, thereby meeting the continuous lighting requirements at event sites, entrances/exits, and peripheral security zones.

Night-time illumination for flood control and geological-hazard surveying: riverbank and levee

patrols during the flood season, as well as investigations into pipe flow and seepage; nighttime

surveys in landslide, debris-flow, and collapse zones, featuring long-range, high-altitude projection; and support for disaster assessment, hazard monitoring, and personnel evacuation guidance in complex mountainous terrain and muddy river environments.