

TD20U

Airborne UV Imaging Camera

The TD20U Airborne UV Imaging Camera is equipped with solar-blind, high-sensitivity UV camera and HD visible light camera, which can accurately overlay the whole area, accurately locate the discharge position, and has strong anti-interference ability. It is completely free from the influence of sunlight and is able to work all day. It has a wide field of view, with compact and light size. Combined with UAV inspection, close-range monitoring can be achieved to detect small defects and faults, providing effective help for preventive inspections of substations and high-voltage transmission lines.

Features

High sensitivity up to $3.0 \times 10^{-18} \text{ watt/cm}^2$

Noise interference is small, using solar-blind detector

Accurate superposition and positioning of the whole area of ultraviolet and visible light

Wide field of view, $18^\circ \times 13.5^\circ$

Synchronous focusing of ultraviolet and visible light

Small size, light weight, easy to operate



Applications

Power industry

Electrified railway

Research institutions

ULIRVISION

Technical Specifications

Item	TD20U
UV-Optical properties	
Minimum UV sensitivity	3.0×10^{-18} watt/cm ²
Minimum discharge detection	1.0pC@10m
Spectral range	240~280nm
FOV	18°×13.5°
Amplification	1-4X Continuous zoom
Focus range	3m~∞
Detector life span	No degradation
Visible light optical properties	
Minimum visible light sensitivity	0.1Lux
Resolution	1080P, 1920×1080
Focus	Auto/manual
Focus range	1m~∞
Amplification	10X optical zoom, 4X digital zoom
Pan & Tilt	
PTZ Controllable rotation range	Tilt: +30° to -120° , yaw: ±320
Control accuracy	<0.15°
Protection level	IP44(Pan & Tilt)
Size	128×140×145mm
Image Performance	
Mode	Display UV images only/Display visible light images only/Combination of visible light and UV light
Overlay precision	≤1mrad
UV imaging angular resolution	≤5mrad
Corona color	White, red, green, yellow, purple
Image storage	
Image resolution	960×720
Image format	JPEG
Video format	AVI
Media download	USB(external)
Storage	Maximum 16G
Communication	
Communication protocol	TD20U-Protocol, MAVlink, S. BUS(bus)
Interface	
Communication Interface	DJI SkyPort V2
USB	Type-C
Power System	
Power input	DC: 13.6V (DJI X-Port)
Power consumption	8W
Environment Parameters	
Operating temperature range	-20°C~+50°C
Storage temperature range	-25°C~+60°C

Humidity	90%(non-condensing)
Protection level	IP42
Physical data	
Size	112mm×80mm×55mm
Weight	≤410g
Suitable model	DJI M200, M300