TD20U

UAV Dual Light UV Camera

The TD20U UAV Dual Light UV 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 3.0×10⁻¹⁸watt/cm²

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°×13.5°

Synchronous focusing of ultraviolet and visible

Small size, light weight, easy to operate



Applications

Power industry

Electrified railway

Research institutions

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: $\pm 30^\circ$ to -120 $^\circ$, yaw: ± 320
Control accuracy	<0.15°
Protection level	IP44(Pan & Tilt)
Size	128×140×145mm
Image Performance	1207 (1107 (110111111
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	
	IPFG
	JPEG AVI
Video format	AVI
Video format Media download	AVI USB(external)
Video format Media download Storage	AVI
Video format Media download Storage Communication	AVI USB(external) Maximum 16G
Video format Media download Storage Communication Communication protocol	AVI USB(external)
Video format Media download Storage Communication Communication protocol Interface	AVI USB(external) Maximum 16G TD20U-Protocol, MAVlink, S. BUS(bus)
Video format Media download Storage Communication Communication protocol Interface Communication Interface	AVI USB(external) Maximum 16G TD20U-Protocol, MAVlink, S. BUS(bus) DJI SkyPort V2
Video format Media download Storage Communication Communication protocol Interface Communication Interface USB	AVI USB(external) Maximum 16G TD20U-Protocol, MAVlink, S. BUS(bus)
Video format Media download Storage Communication Communication protocol Interface Communication Interface USB Power System	AVI USB(external) Maximum 16G TD20U-Protocol, MAVlink, S. BUS(bus) DJI SkyPort V2 Type-C
Video format Media download Storage Communication Communication protocol Interface Communication Interface USB Power System Power input	AVI USB(external) Maximum 16G TD20U-Protocol, MAVlink, S. BUS(bus) DJI SkyPort V2 Type-C DC: 13.6V (DJI X-Port)
Video format Media download Storage Communication Communication protocol Interface Communication Interface USB Power System Power input Power consumption	AVI USB(external) Maximum 16G TD20U-Protocol, MAVlink, S. BUS(bus) DJI SkyPort V2 Type-C
Video format Media download Storage Communication Communication protocol Interface Communication Interface USB Power System Power input	AVI USB(external) Maximum 16G TD20U-Protocol, MAVlink, S. BUS(bus) DJI SkyPort V2 Type-C DC: 13.6V (DJI X-Port)

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