

TD40U

UAV Four Light UV Camera

The TD40U UAV Four Light UV camera is equipped with solar-blind UV camera, infrared temperature measurement camera, laser ranging module and HD visible light camera, which can detect the temperature and UV signals of the target at the same time, and timely find the thermal defects and corona discharges of the target. TD40U has multiple superimposition modes, such as UV and visible light superimposition, UV and infrared fusion superimposition, which can accurately locate the thermal defects and discharge positions, and work all day long. It is multifunctional, with UAV inspection, it can monitor in close range. Combined with inspection planning, it can complete infrared and UV line tasks at the same time.

Features

UV | Infrared | Laser ranging | Visible light four in one

Noise interference is small, using solar-blind detector

UV | visible light, UV | infrared multiple superposition modes

Accurately locate thermal defects and corona discharge

Complete infrared and UV inspection tasks at the same time in one inspection

Small size, light weight, easy to operate



Applications

Power industry

Electrified railway

Research institutions

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Technical Specifications

Item	TD40U
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
Infrared light optical properties	
Type	Uncooled FPA
Resolution	640×512
Pixel pitch	12μm
Spectral range	7~14μm
NETD/Sensitivity	40mK
FOV	33°×26°
IFOV	0.92mrad
Focus	Fixed
Amplification	1-4X Continuous zoom
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
Laser ranging performance	
Wavelength	850nm
Detection distance	50m
Image Performance	
Mode	UV light image / infrared light image / visible light image / UV and visible light superimposition / infrared and visible light superimposition / UV and infrared light superimposition
UV Superposition Accuracy	≤1mrad
UV imaging angular resolution	≤5mrad
Corona color	White, red, green, yellow, purple
Infrared image enhancement	IVE image enhancement algorithm

Infrared palette	10 palettes (including iron red, rainbow, black hot and white hot, etc.)
Image storage	
Image resolution	960×720
Image format	JPEG
Video format	AVI
Media download	USB(External)
Storage	32G
Communication	
Communication protocol	TD40U-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	11W
Environment Parameters	
Operating temperature range	-20℃~+50℃
Storage temperature range	-25℃~+60℃
Humidity	90%(non-condensing)
Protection level	IP42
Physical data	
Size	112mm×80mm×75mm
Weight	≤460g
other	
Suitable model	DJI M200, M300

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