



C ZENMUSE H30T





General

Product Name	Zenmuse H30 Series
Dimensions	170×145×165 mm (L×W×H)
Weight	920±5 g
Power	H30: 26 W H30T: 28 W
Ingress Protection Rating	IP54
Supported Aircraft	Matrice 300 RTK (requires DJI RC Plus) Matrice 350 RTK

Environment

Operating Temperature	-20° to 50° C (-4° to 122° F)
Storage Temperature	-20° to 60° C (-4° to 140° F)

Gimbal

Stabilization System	3-axis (tilt, roll, pan)	
Angular Vibration Range	Hover: ±0.002° Flight: ±0.004°	30 T
Mounting	Detachable DJI SKYPORT	
Mechanical Range	Tilt: -132.5° to +73° Roll: ±60° Pan: ±328° (Structural limit, not controllable range)	
Controllable Range	Tilt: -120° to +60° Pan: ±320°	
Operation Mode	Follow/Free/Re-center	0



Zoom Camera

Sensor	1/1.8-inch CMOS, Effective Pixels: 40 MP
Lens	Actual Focal Length: 7.1-172 mm (Equivalent focal length: 33.4-809.3 mm) Aperture: f/1.6-f/5.2 DFOV: 66.7°-2.9°
Focus Mode	MF, AFC, AFS
Exposure Mode	Manual, Auto
Exposure Compensation	±3.0 (1/3 increments)
Metering Mode	Spot Metering, Average Metering
AE Lock	Supported
Electronic Shutter Speed	1/8000-2 s
ISO Range	Single Shot: 100-25600 Night Scene: 100-819200
Video Resolution	Single Shot: 3840×2160@30fps, 1920×1080@30fps Night Scene: 1920×1080@25fps, 1920×1080@15fps, 1920×1080@5fps
Video Format	MP4
Video Subtitles	Supported
Video Codec and Bit Rate Strategy	H.264, H.265 CBR, VBR
Max Photo Size	7328×5496, 3664×2748
Photo Format	JPG

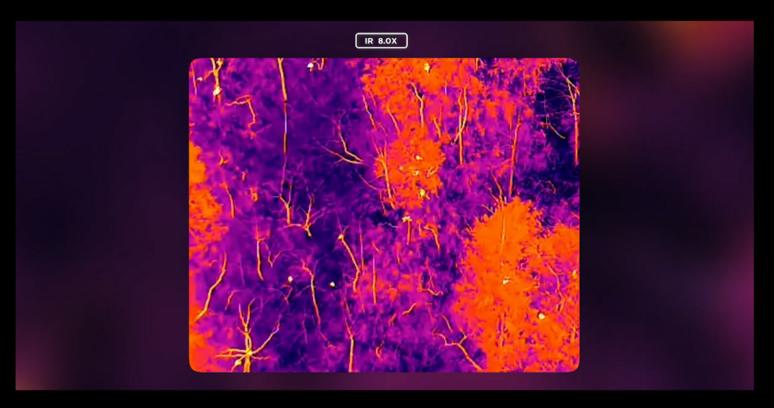
Wide-Angle Camera

Sensor	1/1.3-inch CMOS, Effective Pixels: 48 MP
Lens	Actual Focal Length: 6.72 mm (Equivalent focal length: 24 mm) Aperture: f/1.7 DFOV: 82.1°
Focus Mode	MF, AFC, AFS



1280×1024 Infrared Resolution

The infrared thermal camera boasts a resolution of 1280×1024, 4× the previous generation, $^{[6]}$ with up to 32× digital zoom. This allows for both an overview of the entire scene and the ability to zoom in on specific areas. At higher zoom levels, the Zenmuse H30T automatically activates a UHR (Ultra-High Resolution) Infrared Image function, $^{[7]}$ ensuring the infrared images remain clear.



High-Res Mode for Precise Observation

Zenmuse H30T supports three infrared gain modes: High Gain mode for more precise temperature measurement, Low Gain mode for a wider temperature measurement range, and the new High-Res mode, [8] which is especially useful for observing objects, people, or animals with small temperature differences, making it highly practical for security, emergency, and search-and-rescue operations.





Wide-Angle Camera

Exposure Mode	Manual, Auto
Exposure Compensation	±3.0 (1/3 increments)
Metering Mode	Spot Metering, Average Metering
AE Lock	Supported
Electronic Shutter Speed	1/8000-2 s
ISO Range	Single Shot: 100-25600 Night Scene: 100-409600
Video Resolution	Single Shot: 3840×2160@30fps, 1920×1080 @30fps Night Scene: 1920×1080@25fps, 1920×1080 @15fps, 1920×1080@5fps
Video Format	MP4
Video Subtitles	Supported
Video Codec and Bit Rate Strategy	H.264, H.265 CBR, VBR
Max Photo Size	8064×6048, 4032×3024
Photo Format	JPG

Infrared Thermal Camera (H30T)

Thermal Imager	Uncooled VOx Microbolometer
Lens	Focal Length: 24 mm (equivalent focal length: 52 mm)
Aperture: f/0.95	DFOV: 45.2°
Digital Zoom Equivalent	32×
Video Resolution	1280×1024@30fps
Video Format	MP4
Video Subtitles	Supported
Video Codec and Bit Rate Strategy	H264, H265 CBR, VBR



Visual and IR Cameras Simultaneous Zoom

The Zenmuse H30T's zoom camera and infrared thermal camera support Link Zoom, allowing operators to scale the visible light and thermal images in tandem and maintain the same viewpoint. This side-by-side comparison of image details helps locate the subject faster, increasing efficiency while saving effort.



Temperature Measurement Range from -20° to 1600° C (-4° to 2912° F)

With the installation of an infrared density filter, ^[9] the infrared thermal camera can measure temperatures up to 1600° C (2912° F), 3× the previous generation. ^[10] This is particularly useful for firefighting and high-temperature operations as it allows for more effective judgment of temperature changes and rapid locating of hotspots, increasing rescue efficiency.



Infrared Thermal Camera (H30T)

Photo Resolution	1280×1024
Photo Format	R-JPEG
Pixel Pitch	12 μm
Spectral Band	8-14 μm
Noise Equivalent Temperature Difference (NETD)	≤ 50 mk@f/1.0
Temperature Measurement Method	Spot Measurement, Area Measurement, Center Point Temperature Measurement
Temperature Measurement Range	High Gain: -20° to 150° C (-4° to 302° F), -20° to 450° C (-4° to 842° F) (With Infrared Density Filter) Low Gain: 0° to 600° C (32° to 1112° F), 0° to 1600° C (32° to 2912° F) (With Infrared Density Filter)
Temperature Alert	Supported
Sun Burn Protection	Supported
FFC	Auto, Manual
Palette	White Hot, Black Hot, Tint, Iron Red, Rainbow 1, Rainbow 2, Medical, Arctic, Fulgurite, Hot Iron

Laser Range Finder

Wavelength	905 nm
Measurement Range	3-3000 m Range for Common Objects: Grasslands 2000 m, woodlands 1900 m, road surfaces 1700 m*
Measurement Accuracy	≤ 500 m: ±(0.2 m+measurement distance×0.15%) > 500 m: ±1.0 m
Laser Spot Size	@100 m: approx. 50×450 mm @1000 m: approx. 450×4500 mm
Safety Regulation Level	Class 1
Accessible Emission Limit(AEL)	260 nJ
Reference Aperture	18 mm
Max Laser Pulse Emission Power Within 5 Nanoseconds	52 W



Data Storage

Supported microSD Cards	U3/Class10/V30 or above is required, or use a memory card from the recommended list.
Supported File System	exFAT
Recommended microSD Cards	Lexar 1066x V30 A2 64GB/128GB/256GB/512GB microSDXC Kingston CANVAS GO! Plus V30 A2 64GB/128GB /256GB/512GB microSDXC

NIR Auxiliary Light

Wavelength	850 nm
FOV	4.6±0.6° (Round)
Safety Regulation Level	Class 1
Illumination Range	@100 m: Approx. 8m diameter circle