

ZENMUSE XT
UNLOCK THE POSSIBILITIES OF THERMAL IMAGING

The Zenmuse XT combines DJI's expertise in camera stabilization, advanced flying platforms and long range video transmission with FLIR's state-of-the-art thermal camera technology, a first for the industry.

STATE-OF-THE-ART CAMERA

Developed by FLIR, this camera features high-sensitivity (50mK) infrared scanning at 640/30 fps or 336/60 fps and a suite of specialized image enhancements including DDE, SSO and ACE, all stabilized by an advanced DJI Gimbal for smooth imaging.



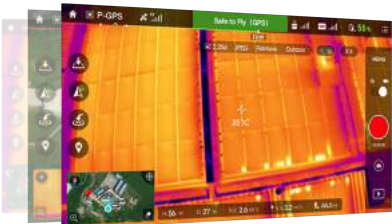
SEAMLESS INTEGRATION WITH THE INSPIRE 1 AND M100

Put the Zenmuse XT into the air in seconds and get instant access to intelligent features including Point of Interest, Course and Home Lock, Follow Me, 3.1Mi (5Km) of HD video transmission and much more.



FINGERTIP CONTROL

Control the Zenmuse XT completely through the DJI GO app, providing instant access to thermal camera functions including palette, digital zoom, gimbal control, photo taking and video recording;



DJI SDK COMPATIBILITY

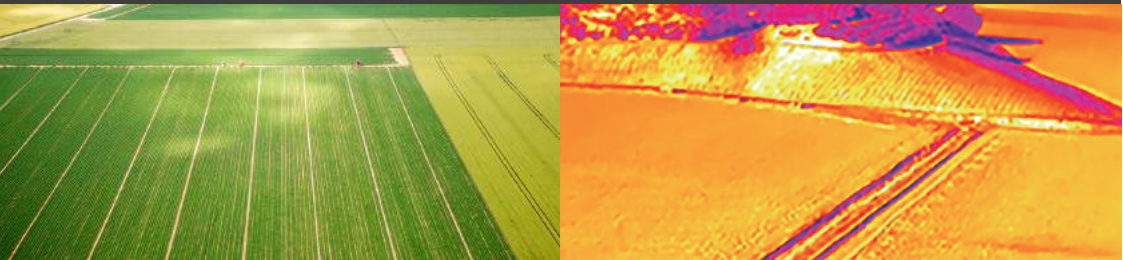
Develop custom applications for the Inspire 1 or the Matrice 100, ideal for large scale inspections and especially useful in search and rescue operations.



POWER LINE INSPECTION



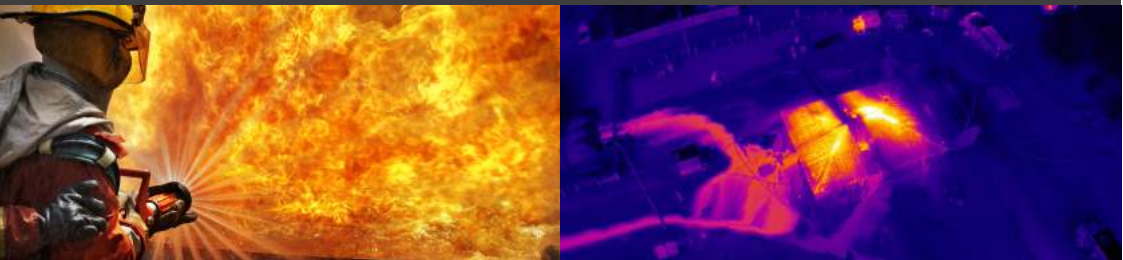
SEARCH AND RESCUE



PRECISION AGRICULTURE



SOLAR PANEL INSPECTION



FIRE FIGHTING

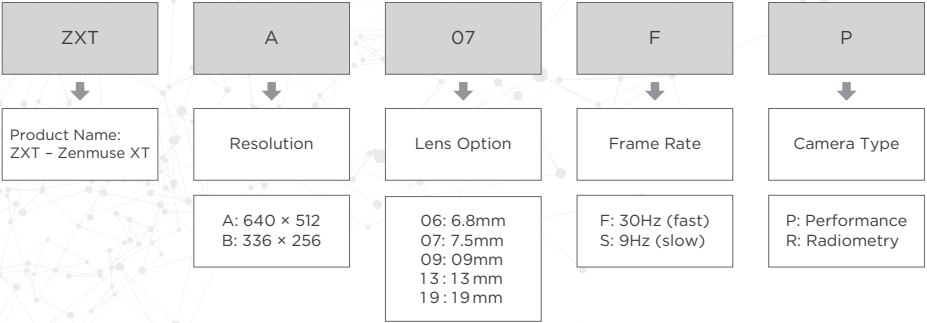
*Thermal image courtesy of FLIR

ZENMUSE XT SPECIFICATIONS

General		
Name	Zenmuse XT	
Dimensions	103 × 74 × 102 mm	
Weight	270 g	
Gimbal		
Angular Vibration Range	±0.03°	
Mount	Detachable	
Controllable Range	Tilt: -35° to +135°; Pan: ±320°; Roll: ±30°	
Mechanical Range	Tilt: -45° to +135°; Pan: ±320°; Roll: -45° to +45°	
Max Controllable Speed	120°/s	
Camera		
Thermal Imager	Uncooled VOx Microbolometer	
FPA/Digital Video Display Formats	640 × 512	336 × 256
Analog Video Display Formats	720 × 480 (NTSC); 720 × 576 (PAL)	
Pixel Pitch	17 μm	
Spectral Band	7.5 - 13.5 μm	
Full Frame Rates	30 Hz (NTSC) 25 Hz (PAL)	30/60 Hz (NTSC) 25/50 Hz (PAL)
Exportable Frame Rates	7.5 Hz NTSC; 8.3 Hz PAL	
Sensitivity (NEΔT)	<50 mK at f/1.0	
Scene Range (High Gain)	-25° to 135° C	-25° to 100° C
Scene Range (Low Gain)	-40° to 550° C	
Spot Meter	Temperatures measured in central 4×4	
File Storage	Micro SD Card	
Photo Format	JPEG, TIFF	
Video Format	MP4	
Image Processing & Display Controls		
NTSC/PAL(field switchable)	yes	
Image Optimization	yes	
Digital Detail Enhancement	yes	
Polarity Control (black hot/white hot)	yes	
Color & Monochrome Palettes (LUTs)	yes	
Digital Zoom	2x, 4x, 8x	2x, 4x

Lens Models		6.8 mm	7.5 mm	9 mm	13 mm	19 mm
17μ 640x512	FoV iFoV	/	f/1.4 90° × 69° 2.267 mr	f/1.4 69° × 56° 1.889 mr	f/1.25 45° × 37° 1.308 mr	f/1.25 32° × 26° 0.895 mr
17μ 336x256	FoV iFoV	/	f/1.4 49.1° × 37.4° 2.519 mr	f/1.25 35° × 27° 1.889 mr	f/1.25 25° × 19° 1.308 mr	f/1.25 17° × 13° 0.895 mr
Min Focus Distance		2.3 cm	2.5 cm	3.2 cm	7.6 cm	15.3 cm
Hyperfocal Distance		1.2 m	1.2 m	2.1 m	4.4 m	9.5 m
Hyperfocal Depth of Field		0.6 m	0.6 m	1.1 m	2.2 m	4.8 m
Environmental						
Operating Temperature Range		-10 ° to 40 °C				
Non-Operating Temperature Range		-30 ° to 70 °C				
Temperature Shock		5 °C/min				
Humidity		5% to 95%				

SELECTION GUIDE



SKU LIST		
NO.	Model Code	Description
1	ZXTA07FP	Res. 640*512 with 7.5mm lens, 30/60HZ frame rate, camera type: performance
2	ZXTA09FP	Res. 640*512 with 9mm lens, 30/60HZ frame rate, camera type: performance
3	ZXTA13FP	Res. 640*512 with 13mm lens, 30/60HZ frame rate, camera type: performance
4	ZXTA19FP	Res. 640*512 with 19mm lens, 30/60HZ frame rate, camera type: performance
5	ZXTA07FR	Res. 640*512 with 7.5mm lens, 30/60HZ frame rate, camera type: radiometry
6	ZXTA09FR	Res. 640*512 with 9mm lens, 30/60HZ frame rate, camera type: radiometry
7	ZXTA13FR	Res. 640*512 with 13mm lens, 30/60HZ frame rate, camera type: radiometry
8	ZXTA19FR	Res. 640*512 with 19mm lens, 30/60HZ frame rate, camera type: radiometry
9	ZXTA07SP	Res. 640*512 with 7.5mm lens, <9HZ frame rate, camera type: performance
10	ZXTA09SP	Res. 640*512 with 9mm lens, <9HZ frame rate, camera type: performance
11	ZXTA13SP	Res. 640*512 with 13mm lens, <9HZ frame rate, camera type: performance
12	ZXTA19SP	Res. 640*512 with 19mm lens, <9HZ frame rate, camera type: performance
13	ZXTA07SR	Res. 640*512 with 7.5mm lens, <9HZ frame rate, camera type: radiometry
14	ZXTA09SR	Res. 640*512 with 9mm lens, <9HZ frame rate, camera type: radiometry
15	ZXTA13SR	Res. 640*512 with 13mm lens, <9HZ frame rate, camera type: radiometry
16	ZXTA19SR	Res. 640*512 with 19mm lens, <9HZ frame rate, camera type: radiometry
17	ZXTB06FP	Res. 336*256 with 6.8mm lens, 30/60HZ frame rate, camera type: performance
18	ZXTB09FP	Res. 336*256 with 9mm lens, 30/60HZ frame rate, camera type: performance
19	ZXTB13FP	Res. 336*256 with 13mm lens, 30/60HZ frame rate, camera type: performance
20	ZXTB19FP	Res. 336*256 with 19mm lens, 30/60HZ frame rate, camera type: performance
21	ZXTB06FR	Res. 336*256 with 6.8mm lens, 30/60HZ frame rate, camera type: radiometry
22	ZXTB09FR	Res. 336*256 with 9mm lens, 30/60HZ frame rate, camera type: radiometry
23	ZXTB13FR	Res. 336*256 with 13mm lens, 30/60HZ frame rate, camera type: radiometry
24	ZXTB19FR	Res. 336*256 with 19mm lens, 30/60HZ frame rate, camera type: radiometry
25	ZXTB06SP	Res. 336*256 with 6.8mm lens, <9HZ frame rate, camera type: performance
26	ZXTB09SP	Res. 336*256 with 9mm lens, <9HZ frame rate, camera type: performance
27	ZXTB13SP	Res. 336*256 with 13mm lens, <9HZ frame rate, camera type: performance
28	ZXTB19SP	Res. 336*256 with 19mm lens, <9HZ frame rate, camera type: performance
29	ZXTB06SR	Res. 336*256 with 6.8mm lens, <9HZ frame rate, camera type: radiometry
30	ZXTB09SR	Res. 336*256 with 9mm lens, <9HZ frame rate, camera type: radiometry
31	ZXTB13SR	Res. 336*256 with 13mm lens, <9HZ frame rate, camera type: radiometry
32	ZXTB19SR	Res. 336*256 with 19mm lens, <9HZ frame rate, camera type: radiometry



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OF THERMAL IMAGING



DJI
FOR PRODUCT INQUIRIES,
PLEASE CONTACT INDUSTRIAL@DJI.COM
FOR PRODUCT SPECIFICATION,
PLEASE VISIT WWW.DJI.COM/PRODUCT/ZENMUSE-XT