

TK GEN2 Series Handheld Thermal Imaging Monocular See Sharper, Work Smarter



Equipped with the new self-developed infrared detector and the patented image processing technology, the TK Gen2 Kitalpha Series captures sharp imaging and is packed with powerful features like image and video recording, smooth zoom, pseudo-color adjustment, approximate ranging and PIP. Personalized image observation is supported in different scene modes. The builtin laser indicator and illuminator facilitate itself to be operated in harsh environment.



- New self-developed infrared metal detector with high sensitivity
- PureIR adaptive filtering algorithm for sharp images in complex environments
- Built-in laser indicator to locate the targets up to 200m
- 0.4-inch 1280x960 display for comfortable observation
- Differential buttons for easy operation in total darkness
- The connected app via WIFI for remote control, live image and video transmission
- Designed to be operated under extreme environmental conditions with IP66 and 1-meter drop test

- Night Hunting
- Search & Rescue
- Law Enforcement
- Night Patrol
- **Outdoor Sports**
- Personal Security

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Specifications

Product model	TK421	TK431	TK451	TK611	TK621	TK631
Infrared Detector						
Detector type	VOx, 8 to 14 µm					
Detector resolution	400 × 300, 17 μm 640 × 480, 12 μm					
NETD	≤30mk					
Frame rate	50Hz					
Lens						
Focal length	25mm; F1.1	35mm; F1.2	50mm; F1.2	19mm; F1.0	25mm; F1.0	35mm; F1.0
Field of view	$15.4^{\circ} \times 11.6^{\circ}$	$11.1^{\circ} \times 8.3^{\circ}$	$7.8^{\circ} \times 5.8^{\circ}$	$22.9^{\circ} \times 17.2^{\circ}$	$17.5^{\circ} \times 13.1^{\circ}$	$12.5^{\circ} \times 9.4^{\circ}$
Optical zoom	1.7x	2.3x	3.3x	1.1x	1.5x	2.0x
Digital zoom	1 ~ 4x 1 ~ 8x					
Focus	Manual					
Power						
Battery type	2 built-in 18650 batteries (6000mAh)					
Battery life	\geq 5 hours \geq 4.5 hours					
Interface						
USB	Type C (USB 2.0 standard), supporting power supply and data access					
Video interface	micro HDMI					
Mechanical interface	UNC ¼"-20 (Tripod mounting), Mechanical expansion interface					
Display						
Display type	0.4" FLCOS					
Resolution	1280 × 960					
Eyepiece	Monocular, exit pupil distance≥10 mm, diopter adjustment: -4 to + 2					
Eyepiece zoom						
Video output	Digital video					
Functions			Digital			
Recording function			Photo	/Video		
Hot spot tracking	Available					
Rough ranging	Available					
PIP	Upper left, Upper middle, Upper right, Closed					
Scene modes	Enhanced, Highlight and Natural					
Color palettes	Black Hot, White Hot, Adjustable Red Hot, Iron Red, Blue Hot, Green Hot					
Compensation modes	Automatic, shutter and scene compensation					
WIFI	Transmission of real-time video via WIFI for remote control in the 2.4G frequency band and within 15 meters					
Laser	Laser indicator (up to 200m)					
Other	Illuminator					
System			IIIuIIII	IIdlUI		
			Chinago / English / Dug	aion / Cormon / Fra	aab	
Language settings Memory capacity	Chinese / English / Russian / German / French					
Memory capacity Environmental	16 GB					
			00.00			
Storage temperature range	-30 °C to 60 °C					
Humidity	10 % to 95 % non-condensing					
Shock	30 G at 11 ms half sine pulse (as per IEC60068-2-27)					
Vibration	10 Hz~150 Hz~10 Hz 0.15 mm (as per IEC60068-2-6)					
Drop	1 m					
Encapsulation	IP66					
Certification	IP66, FCC, CE, RoHS, EAC, un38.3					
Detection Range	700	1000	4400	000	1000	4400
Detection range	700 m	1000 m	1400 m	800 m	1000 m	1400 m
Physical	- 170	- 10 -	- 505		400	
Weight	≪470 g	≤485 g	≤535 g	-		≤560 g
Size (L × W × H)						214 × 65 × 71 m
Standard	Power adapter, USB cable (Type C), micro HDMI cable, lens cap, wrist strap, inner bag, shoulder strap, quick start guide					
Optional	Extended bracket					