

Specifications

Model	TK421	TK431	TK451	TK611	TK621	TK631
Infrared Detector						
IR Resolution	400×300@17μm			640×480@12μm		
Spectral Range	8~14μm					
NETD	≤50mk @ F1 25°C					
Lens						
Focal Length	25mm F1.1	35mm F1.2	50mm F1.2	19mm F1.0	25mm F1.0	35mm F1.0
Focus	Manual focusing					
FOV	15.4°×11.6°	11.1×8.3	7.8×5.8	22.9×17.2	17.5×13.1	12.5×9.4
Frame Rate						
Output Frame Frequency	50Hz					
Zoom						
Optical Zoom	1.7x	2.3x	3.3x	1.1x	1.5x	2.0x
Digital Zoom	1x—4x			1x—8x		
Visual Effect	It's like viewing at a 22" screen at a distance of 1m					
Power Supply						
Battery Type	Built-in 2*18650 batteries with a capacity of 6,000mah					
Battery Operating Time	Battery continuous working time ≥ 5 hours @ 25 °C (only observe the state)			Battery continuous working time ≥ 4.5 hours @ 25 °C (only observe the state)		
Interface						
USB	Type C (USB 2.0 standard) interface, chargeable and data access					
Video Interface	Micro HDMI					
WIFI	Transmission of real-time video via WIFI, 2.4G frequency, distance up to 15m					
External Extension	External display and external Bluetooth remote control					
Mechanical Interface	1/4" tripod base port					
Display						
Display	0.4", color LCOS screen					
Resolution Ratio	1280×960					
Monocular Eyepiece	Monocular, exit pupil distance ≥ 10mm, adjustable diopter -4~ + 2					
Eyepiece Zoom	13.8x					
Video Output	HDMI					
Button						
Button	Switch/Up/Menu/Down/Photo/video					
Functions						
Smooth Zoom	Available					
Screen Brightness Adjustment	10 levels					
Detector Brightness Adjustment	10 levels					
Detector Contrast Adjustment	10 levels					
Image Enhancement	Available					
Scene Mode Adjustment	Three modes: Default, Enhanced, Highlight					
Super Power Saving	Available					
Images	Available					
Videos	Available					
WIFI	Transmission of real-time video via WIFI for remote control, 2.4G frequency band, distance up to 15m					
Color Palettes	White Hot/ Black Hot/ Iron Red/ Blue Hot/ Green Hot/ Adjustable Red Hot					
Hot Spot Tracking	Available					
Working Indicator	Switch					
Charging Indicator	Switch					
Compensation Mode	Automatic compensation, shutter compensation and scene compensation					
Rough Ranging	Available					
Automatic Shutdown	Adjustable shutdown time from 15min, 30min to 60min					
Auto Sleep	Adjustable shutdown time from 5 min, 10 min to 15 min					
Language Settings	Chinese/English/Russian/German/French					
Laser Indicator	Up to 200m, Red/Yellow/Green					
Floodlight	Switch					
System						
Time Setting	Available					
Watermark Settings	Closure, and setting of date or date and location					
PIP	Capable to swipe left and up, or pause in the middle and swipe up; or swipe right and up to close					
Restore to Default	Available					
Startup Time	15s (turn on to live image) @25°C					
Internal Storage	16GB					
Environmental						
Working temperature	-10°C~50°C					
Storage Temperature	-30°C~60°C					
Humidity	10%~95%, non-condensing					
Impact	30G/1ms semi-sinoidal IEC60068-2-27					
Vibration	10Hz~150Hz~10Hz 0.15mm as per IEC60068-2-6					
Drop Test Rating	1m					
IP Rating	IP66					
Certifications	IP66/FCC/CE/Rohs/EAC/un38.3					
Physical parameters						
Weight	≤470g	≤485g	≤555g	≤490g	≤560g	≤560g
Size	192*65*71mm		214*65*71mm	192*65*71mm		214*65*71mm
Standard	Equipped with a power adapter, a USB cable (Type C), a micro HDMI cable, a lens cover, a wrist strap, an inner bag, a shoulder strap, a Quick User Guide					