

2024

JINGPIN NIGHT VISION

P R O D U C T B R O C H U R E



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Chengdu Jingpin Night Vision Optoelectronic Technology Co., Ltd.

LEADING A NEW ERA OF PERCEPTION



ABOUT US

Chengdu Jingpin Night Vision Optoelectronics Technology Co., Ltd. (JPNVision), a subsidiary of Vital Optics Technology Co., Ltd. (Stock Code: 300489), specializes in pioneering infrared thermal imaging technology. We offer a wide array of products, from infrared cores and thermal imaging modules to night vision and visual perception devices, catering to a global clientele alongside tailored solutions. Leveraging cutting-edge proprietary technology and a commitment to customer satisfaction, JPNVision represents the forefront of industry innovation. We are devoted to enhancing human sensory experiences and shaping a new era in the world of perception.

MK-IR

Handheld Thermal Imaging Monocular

The MK-IR series is a high-performance infrared thermal imaging device that allows you to observe thermal distribution of objects or scenes at a distance under any lighting conditions.



- Shutterless
- Power Safety
- Safety Detection
- Environmental Protection
- Intelligent Industry
- Search Rescue
- Forest Fire Prevention
- Outdoor Night Vision
- Wireless Image Transmission

Specifications

Model	MK-IR 384 MK-IRS 384	MK-IR 640 MK-IRS 640
Detector	Uncooled VOx Microbolometer	
Resolution, pixels	384×288/12μm	640×512/12μm
Objective Lens (F1.0)	19mm 25mm 35mm	25mm 35mm
Field of View	13.9° ×10.4° 10.6° ×7.9° 7.5° ×5.7°	17.6° ×14.1° 12.6° ×10.1°
Visual Magnification	2.09~8.37 2.75~11.01 3.85~15.41	1.61~6.45 2.26~9.03
Laser Indicator (IRS)	650nm Class II Range >100m	
Spectral Band	8~14μm	
Eyepiece Diopter	-5~+5	
Eye Relief	20mm	
NETD	≤ 35mk@300K	
Display	0.39" OLED 1024x768	
Digital Zoom	1x、2x、4x	
Frame Rate.Hz	50Hz	
Protection Rating	IP67	
Power Source	3400mAh Li-ion Battery	
Standby Time	≥ 5h	
Interface	Type-C	
Weight (Without Battery)	≤ 470g	
Dimensions	196×70×58mm	
Operating Temperature	-20℃ ~+50℃	
Detection Range (Human)	19mm/1800m 25mm/2370m 35mm/3310m	
Detection Range (Animal)	19mm/1590m 25mm/2090m 35mm/2920m	

Effective Range

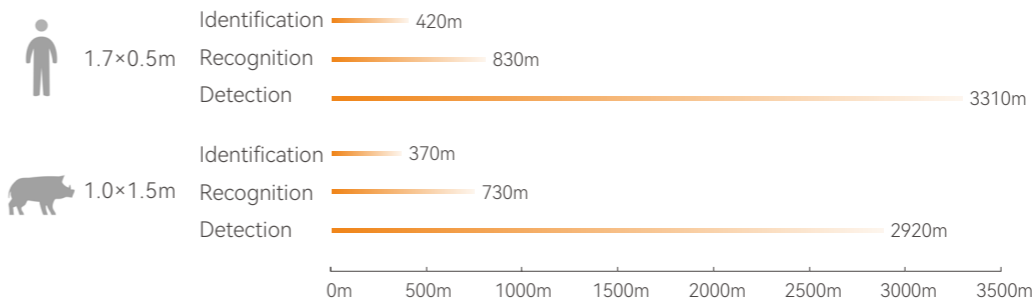


Image Mode



MK-LR

Handheld Thermal Imaging Monocular

-  Shutterless
-  Power Safety
-  Safety Detection
-  Environmental Protection
-  Intelligent Industry
-  Search Rescue
-  Forest Fire Prevention
-  Outdoor Night Vision
-  Wireless Image Transmission
-  Laser Ranging



Handheld Thermal Imaging Monocular

The MK-LR series adds precise rangefinding capabilities to the MK-IR series products, enabling accurate positioning and target searching.

Specifications

Model	MK-LR 384			MK-LR 640	
Detector	Uncooled VOx Microbolometer				
Resolution, pixels	384×288/12μm			640×512/12μm	
Objective Lens(F1.0)	19mm	25mm	35mm	25mm	35mm
Field of View	13.9°×10.4°	10.6° ×7.9°	7.5° ×5.7°	17.6° ×14.1°	12.6° ×10.1°
Visual Magnification	2.09~8.37	2.75~11.01	3.85~15.41	1.61~6.45	2.26~9.03
Spectral Band	8~14μm				
Eyepiece Diopter	-5~+5				
Eye Relief	20mm				
NETD	≤ 35mk@300K				
Display	0.39" OLED 1024x768				
Digital Zoom	1x、2x、4x				
Frame Rate.Hz	50Hz				
Protection Rating	IP67				
Measuring Distance	1200m				
Power Source	3400mAh Li-ion Battery				
Standby Time	≥ 5h				
Interface	Type-C				
Weight (Without Battery)	≤ 515g				
Dimensions	196×70×90mm				
Operating Temperature	-20℃ ~+50℃				
Detection Range(Human)	19mm/1800m	25mm/2370m	35mm/3310m		
Detection Range(Animal)	19mm/1590m	25mm/2090m	35mm/2920m		

Image Mode



Black Hot

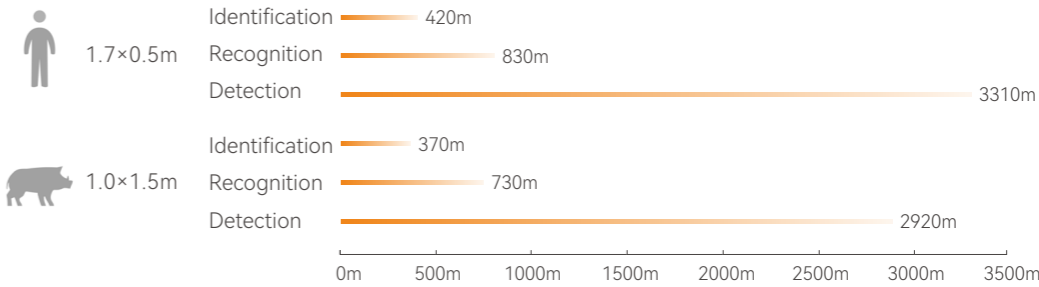
Red Hot

White Hot

Green Hot

Fusion

Effective Range

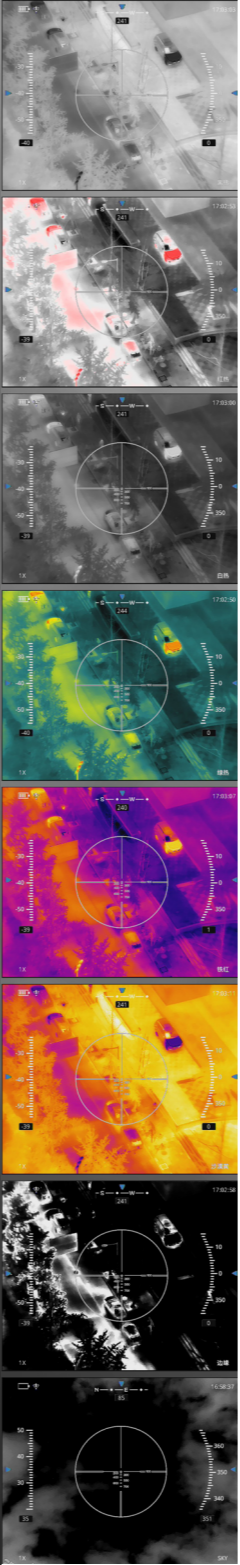


LK-Mini

Uncooled Infrared Thermal Imager



- Shutterless
- Quick Response
- Real-time Denoising
- Multiple Pseudo-Colors
- Hot Target Tracking
- Wireless Image Transmission
- Digital Compass
- Picture-in-Picture
- Reticle



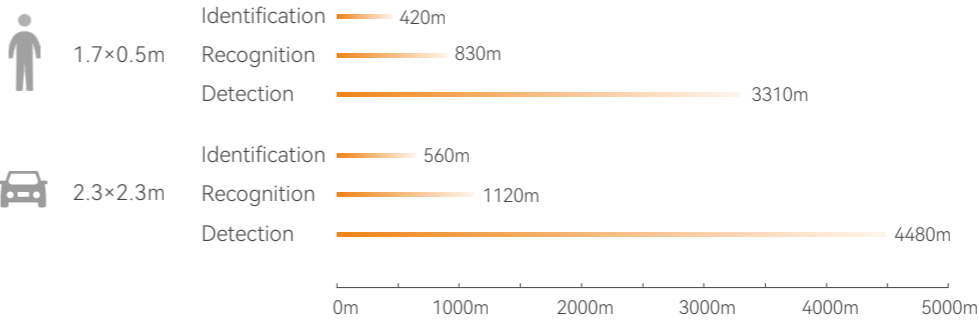
Specifications

Model	LK-Mini				
Detector	Uncooled VOx Microbolometer				
Resolution, pixels	384×288/12μm			640×512/12μm	
Objective Lens (F1.0)	19mm	25mm	35mm	25mm	35mm
Field of View	13.9° ×10.4°	10.6° ×7.9°	7.5° ×5.7°	17.6° ×14.1°	12.6° ×10.1°
Visual Magnification	1.83~7.32	2.41~9.63	3.37~13.48	1.41~5.64	1.98~7.9
Spectral Band	8~14μm				
Frame Rate,HZ	50Hz				
NETD	≤ 50mk@300K				
Display	0.39" OLED 1024x768				
Digital Zoom	1x、 2x、 4x				
Eyepiece Diopter	-5 ~ +5				
Eye Relief	45mm				
Power Supply	Two 16340 Li-ion Batteries				
Standby Time	≥ 2.5h			≥ 2h	
Weight (Without Battery)	≤ 480g				
Dimensions	208x57x58mm (Including Eyepiece/Objective Covers)				
Interface	External Power/Type-C				
Operation Temperature	-30℃ ~+55℃				
Protection Rating	IP67				
Reliability	800g Shock Resistance				
Altitude	≥ 5000m				
Adaptability	All-weather				
Detection Range (Human)	19mm/1800m	25mm/2370m	35mm/3310m		
Detection Range (Object)	19mm/2430m	25mm/3200m	35mm/4480m		

LK-Mini

The LK-Mini series features a more compact and portable design, with button-based human-machine interaction, achieving equally clear observation.

Effective Range



LK-IR

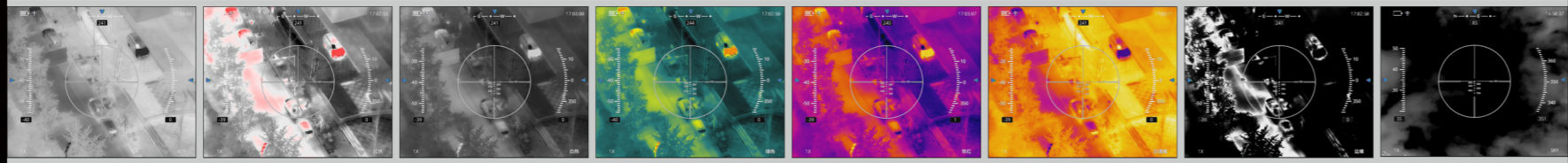
- Shutterless
- Quick Response
- Real-time Denoising
- Multiple Pseudo-Colors
- Hot Target Tracking
- Wireless Image Transmission
- Digital Compass
- Picture-in-Picture
- Reticle



Uncooled Infrared Thermal Imager

The LK-IR series thermal imager is an advanced infrared observation device featuring innovative no-shutter technology. It ensures seamless image output and offers flexibility with various lens options, making it ideal for long-range observation across diverse scenarios.

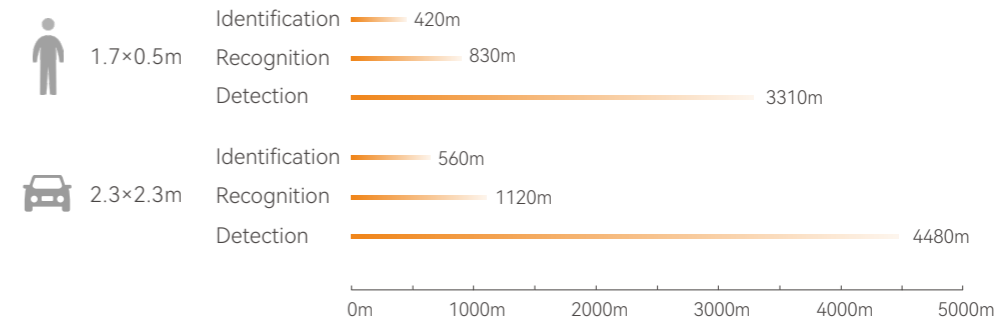
Image Mode



Specifications

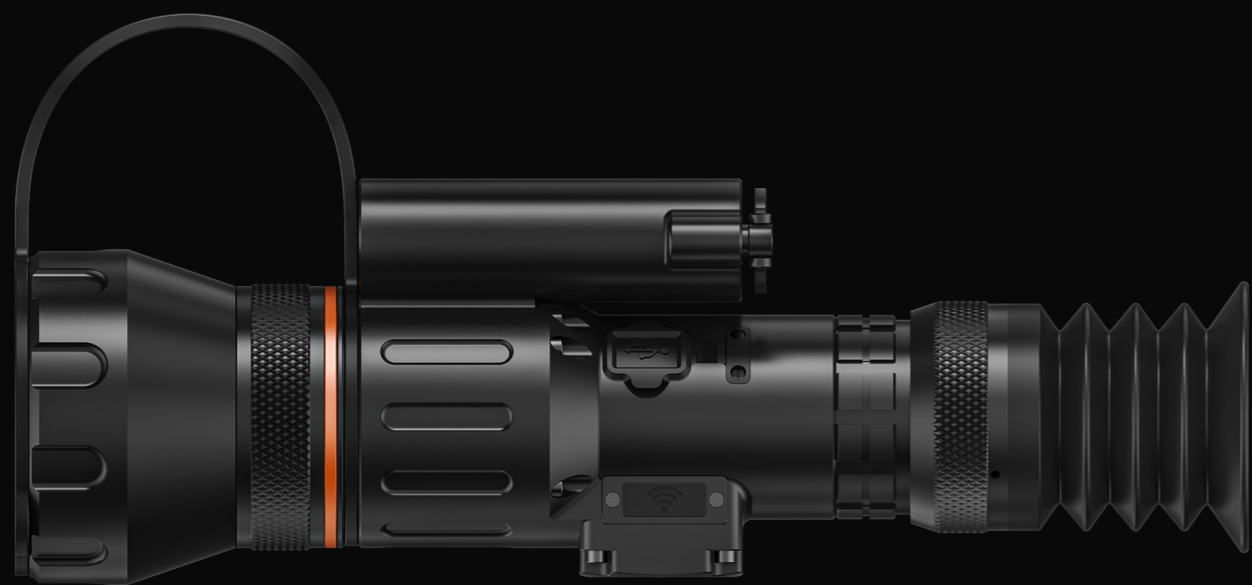
Model	LK-IR					
Detector	Uncooled VOx Microbolometer					
Resolution, pixels	384×288/12μm			640×512/12μm		
Objective Lens (F1.0)	19mm	25mm	35mm	25mm	35mm	
Field of View	13.9° ×10.4°	10.6° ×7.9°	7.5° ×5.7°	17.6° ×14.1°	12.6° ×10.1°	
Visual Magnification	1.83~7.32	2.41~9.63	3.37~13.48	1.41~5.64	1.98~7.9	
Spectral Band	8~14μm					
Frame Rate,HZ	50Hz					
NETD	≤ 35mk@300K					
Display	0.39" OLED 1024x768					
Digital Zoom	1x、 2x、 4x					
Eyepiece Diopter	-5 ~ +5					
Eye Relief	45mm					
Power Supply	Two 18650 Li-ion Batteries					
Standby Time	≥ 8h					
Weight (Without Battery)	≤ 570g					
Dimensions	221x83x66mm (Including Eyepiece/Objective Covers)					
Interface	External Power/Type-C					
Operation Temperature	-30℃ ~+55℃					
Protection Rating	IP67					
Reliability	≥ 1200g Shock Resistance					
Altitude	≥ 5000m					
Adaptability	All-weather					
Detection Range (Human)	19mm/1800m	25mm/2370m	35mm/3310m			
Detection Range (Object)	19mm/2430m	25mm/3200m	35mm/4480m			

Effective Range



LK-IR HD

Uncooled Infrared Thermal Imager



- Shutterless
- Quick Response
- Real-time Denoising
- Multiple Pseudo-Colors
- Hot Target Tracking
- Wireless Image Transmission
- Digital Compass
- Picture-in-Picture
- Reticle

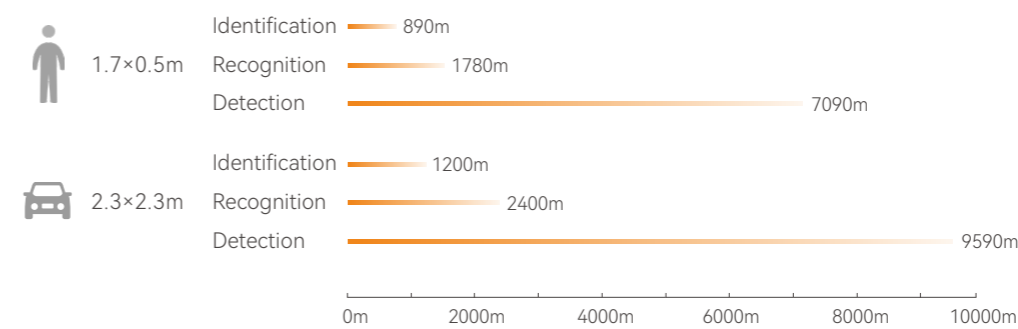
Model	LK-IR HD		
Detector	Uncooled VOx Microbolometer		
Resolution, pixels	384×288/12μm	640×512/12μm	
Objective Lens (F1.2)	50mm	55mm	75mm
Field of View	5.3°×4.0°	8.0°×6.4°	5.9°×4.7°
Visual Magnification	4.82~19.26	3.1~12.42	4.23~16.93
Spectral Band	8~14μm		
Frame Rate,Hz	50Hz		
NETD	≤ 35mk@300K		
Display	0.39" OLED 1024x768		
Digital Zoom	1x、2x、 4x		
Eyepiece Diopter	-5 ~ +5		
Eye Relief	45mm		

Weight (Without Battery)	≤ 620g	≤ 635g	≤ 720g
Dimensions	241x83x69mm	249x83x66mm	278x88x80mm
	(Including Eyepiece/Objective Covers)		
Power Supply	Two 18650 Li-ion Batteries		
Standby Time	≥ 8h		
Interface	External Power/Type-C		
Operation Temperature	-30℃ ~+55℃		
Protection Rating	IP67		
Reliability	2000g Shock Resistance		
Altitude	≥ 5000m		
Adaptability	All-weather		
Detection Range(Human)	50mm/4730m	55mm/5200m	75mm/7090m
Detection Range(Object)	50mm/6390m	55mm/7030m	75mm/9590m

LK-IR HD

The LK-IR Heavy Duty series, building upon the foundation of the LK-IR product line, employs lenses with extended focal lengths to achieve longer observation distances of up to nearly 10 kilometers. This advancement significantly expands its observational capabilities.

Effective Range

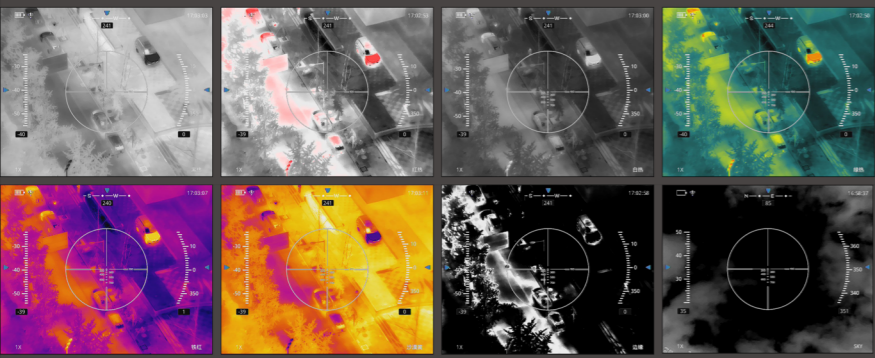


LK-LR

Uncooled Infrared Thermal Imager

The LK-LR series adds precise rangefinding capabilities to the LK-IR series products, enabling accurate positioning and target searching.

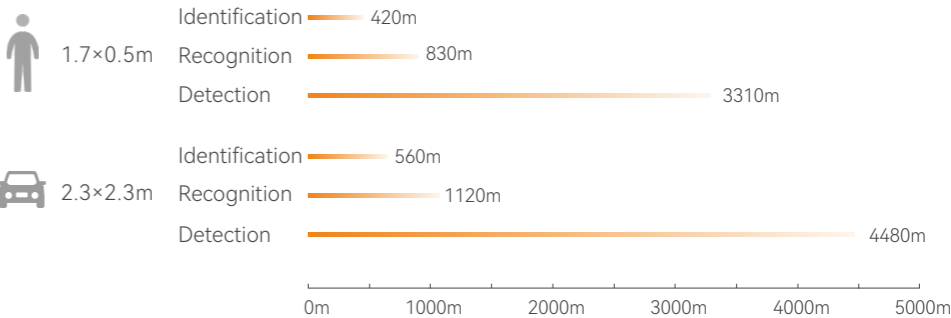
Image Mode



- Shutterless
- Quick Response
- Real-Time Noise Reduction
- Multiple Pseudo-Colors
- Hot Target Tracking
- Wireless Image Transmission
- Digital Compass
- Picture-in-Picture
- Reticle
- Laser Ranging



Effective Range



Model	LK-LR					
Detector	Uncooled VOx Microbolometer					
Resolution, pixels	384×288/12μm			640×512/12μm		
Objective Lens (F1.0)	19mm	25mm	35mm	25mm	35mm	
Field of View	13.9°×10.4°	10.6°×7.9°	7.5°×5.7°	17.6°×14.1°	12.6°×10.1°	
Visual Magnification	1.83~7.32	2.41~9.63	3.37~13.48	1.41~5.64	1.98~7.9	
Spectral Band	8~14μm					
Frame Rate,Hz	50Hz					
NETD	≤ 35mk@300K					
Display	0.39" OLED 1024x768					
Digital Zoom	1x、2x、4x					
Eyepiece Diopter	-5 ~ +5					
Eye Relief	45mm					
Laser Ranging	1200m					
Power Supply	Two 18650 Li-ion Batteries					
Standby Time	≥ 8h					
Weight (Without Battery)	≤ 670g					
Dimensions	221x83x100mm (Including Eyepiece/Objective Covers)					
Interface	External Power/Type-C					
Operation Temperature	-30°C ~+55°C					
Protection Rating	IP67					
Reliability	≥ 1200g Shock Resistance					
Altitude	≥ 5000m					
Adaptability	All-weather					
Detection Range (Human)	19mm/1800m	25mm/2370m	35mm/3310m			
Detection Range (Object)	19mm/2430m	25mm/3200m	35mm/4480m			

LK-LR HD

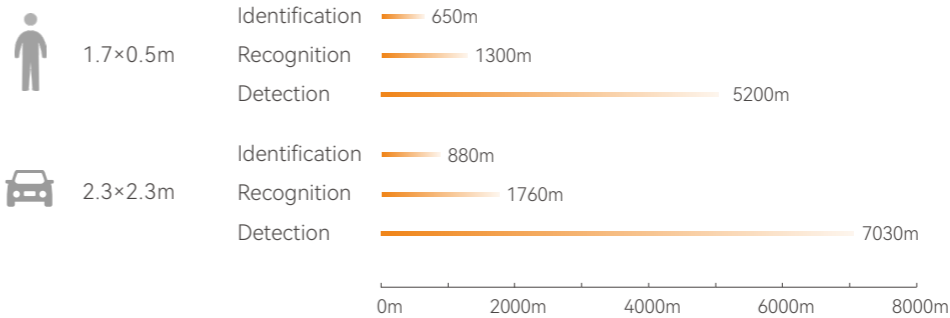
Uncooled Infrared Thermal Imager

The LK-LR Heavy Duty series, in addition to incorporating precise rangfinding capabilities on top of the LK-IR product base, is also equipped with lenses of greater focal lengths, facilitating even longer observation distances.

Specifications

Model	LK-LR HD		
Detector	Uncooled VOx Microbolometer		
Resolution, pixels	384×288/12μm	640×512/12μm	
Objective Lens (F1.2)	50mm	55mm	75mm
Field of View	5.3° ×4.0°	8.0° ×6.4°	5.9° ×4.7°
Visual Magnification	4.82~19.26	3.1~12.42	4.23~16.93
Spectral Band	8~14um		
Frame Rate,HZ	50Hz		
NETD	≤ 35mk@300K		
Display	0.39" OLED 1024x768		
Digital Zoom	1x、 2x、 4x		
Eyepiece Diopter	-5 ~ +5		
Eye Relief	45mm		
Measuring Distance	1200m		
Weight (Without Battery)	≤ 720g	≤ 735g	≤ 820g
Dimensions	241x83x100mm	249×83x100mm	278×88x100mm
	(Including Eyepiece/Objective Covers)		
Power Supply	Two 18650 Li-ion Batteries		
Standby Time	≥ 8h		
Interface	External Power/Type-C		
Operation Temperature	-30℃ ~+55℃		
Protection Rating	IP67		
Reliability	2000g Shock Resistance		
Altitude	≥ 5000m		
Adaptability	All-weather		
Detection Range(Human)	50mm/4730m	55mm/5200m	75mm/7090m
Detection Range(Object)	50mm/6390m	55mm/7030m	75mm/9590m

Effective Range



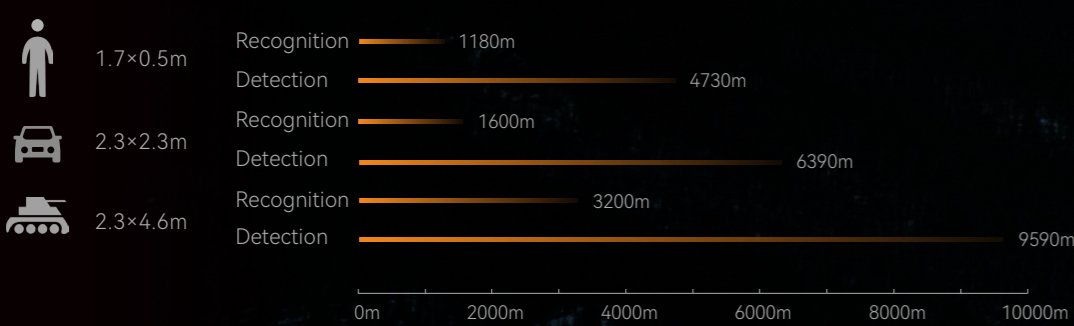
LK-Tube

Uncooled Infrared Thermal Imager

The Tube series of long-barrel thermal imaging cameras is a product designed for outdoor observation, which can observe targets behind obstacles, regardless of day and night, adverse weather conditions (such as rain, snow, fog, haze, etc.), without the influence of strong light and without the need for external light sources. This series of uncooled thermal imaging cameras has clear and continuous images, long battery life, and uses a standard 30mm pipe diameter to adapt to the universal fixture, which can be widely used for observation and positioning in low visibility conditions.



Effective Range















- Shutterless
- Multiple Pseudo-Colors
- Hot Target Tracking
- Real-Time Noise Reduction
- Reticle
- Wireless Image Transmission
- Digital Compass
- Picture-in-Picture
- APP
- High Concealment
- Outdoor Search
- Night Vision Observation

LK-Tube

Model	Tube35	Tube50
Detector Parameters		
Type	Uncooled VOx Microbolometer	
Resolution, pixels	640×512/12μm	
Spectral Band	8~14μm	
NETD	≤ 35mk@300K	
Frame Rate,HZ	50Hz	
Optical Parameters		
Objective Lens	35mm(F1.0)	50mm(F1.0)
Field of View	12.5° ×10°	8.7° ×7°
Visual Magnification	2~8x	3~12x
Digital Zoom	1~4x	
Eye Relief	50mm	
Eyepiece Diopter	-5~+5	
Detection Range (Human)	3310m	4730m
Detection Range (Object)	4480m	6390m
Display Screen Parameters		
Type	0.39" OLED	
Resolution, pixels	1024×768	
Battery Powered		
Battery Type	Two 18650 Li-ion Batteries (Built-In) +One 18650 Li-ion Battery (External)	
Standby Time (22℃)	15h	
External Power Supply	5V(Type-C)	
Physical Parameters		
Scope Tube Diameter	30mm	
Reliability	1200g Shock Resistance	
Protection Rating	IP67	
Memory Capacity	32GB	
Operation Temperature	-20℃ ~+50℃	
Weight (Without Battery)	≤ 950g	
Dimensions	430×105×77mm	440×105×77mm
Accessory Package	Mounting Bracket, Eyecup, Lens Cap, Security Case, Wiring Harness	

The NightEye series combines advanced thermal imaging and digital multi-spectrum capabilities with a precise laser rangefinder. Designed for superior observation in darkness or no-light conditions, it enables clear viewing across multiple wavelengths, ensuring detailed and accurate target acquisition.

NightEye

- 
Shutterless
- 
Real-Time Noise Reduction
- 
Multiple Pseudo-Colors
- 
Hot Target Tracking
- 
Image Fusion
- 
Visible Light
- 
Quick Response
- 
Wireless Image Transmission
- 
Digital Compass
- 
Picture-in-Picture
- 
Reticle
- 
Laser Ranging



Effective Range



Handheld Thermal Imaging Binocular

Specifications

Specification	Infrared	Visible Light
Resolution, pixels	640×512 /12μm	2592×1944/2.0μm
Optical Specifications		
Objective Lens	55mm F1.0	25mm F1.8
Field of View	7.94° ×6.37°	11.8° ×8.9°
Frame Rate, Hz	25HZ	30HZ
Identification Range (Human)	650m	900m
Recognition Range (Human)	1300m	1800m
Detection Range(Human)	5200m	7100m
Eyepiece Diopter	-5~+5	
Laser Rangefinder		
Wavelength	1535nm	
Max Measuring Range	Human/2300m	Car/5000m
Measuring Accuacy	±0.5m~±2m	
Positioning Specifications		
Positioning	GPS & BeiDou Dual Positioning	
Horizontal Positioning Accuracy	2.5m	
Electronic Compass	√	
Device Information		
Display	0.39" OLED 1024x768	
NETD	≤ 50mk@300K	
Observation Mode	Binocular	
Eye Relief	30mm	
Standby Time	≥ 6h	
Waterproof	IP67	
Memory	64G	
Wi-Fi Transmission	WIFI	
Power Source	Four 18650 Li-ion Batteries	
Interface	Type -C/HDMI	
Weight (Without Battery)	≤ 1350g	
Dimensions	229×190×82mm	
Operating Temperature	-25° ~+55°	
Storage Temperature	-55° ~+70°	

Night Demon

Monocular Head-Mounted Thermal Imager

Night-Demon IR is a multifunctional monocular head-mounted thermal imaging camera, suitable for night, dim, no light, bad weather and other complex scenes under the conditions of observation and target search, small size, light weight, clear and continuous image, long endurance, can be used as a head-mounted, hand-held, clip-on, infrared thermal aiming, a multifunctional combination. Suitable for security law enforcement, field adventure, search and rescue and other fields.



Effective Range



Night Demon-IR

Model	ND-IR316	ND-IR396	ND-IR616	ND-IR626
Thermal Imaging Parameters				
Detector	Uncooled VOx Microbolometer			
Resolution, pixels	384×288/12μm		640×512/12μm	
Frame Rate,HZ	50Hz			
Shutterless	No Shutter Calibration			
Display	0.39" OLED 1024x768			
Optical Specifications				
Objective Lens (F1.0)	16mm	9.6mm	16mm	26.7mm
Field of View	16.3° ×12.3°	27.3° ×20.5°	27.3° ×20.5°	16.3° ×12.3°
Visual Magnification	1x			
Eyepiece Diopter	-6~+3			
Eye Relief	25mm			
Laser Indicator				
Output Wavelength/Power	650nm/2-5mW			
Spot Range	> 100m			
Spot Size	< 20mm			
Functional Parameters				
Digital Zoom	1-8x			
Electronic Compass	Azimuth / Pitch / Roll			
Wi-Fi	√			
Video/Image Capture	√			
Device Information				
Spectral Band	8~14μm			
NETD	≤ 35mk@300K			
Polarity Model	White Hot / Black Hot/ Iron Red / Desert Yellow Green Hot / Red Hot / Sky Blue / Edge			
Use Method	Handheld, Head-mounted, Clip-On			
Weight	≤ 260g			
Dimensions	119x39x79mm			
Power Supply	One 18650 Li-ion Battery			
Standby Time (Without WiFi)	≥ 6h			
Interface	Power Supply/Serial Port/Analog Video Output/Type-C			
Mechanical Interface	2 x 1/4 Threaded holes, Piccatini Rail			
Operation Temperature	-20°C ~50°C			
Protection Rating	IP67			
Reliability	800g Shock Resistance			
Adaptability	All-weather			
Recognition Range (Human)	370m	220m	370m	630m
Detection Range (Human)	1500m	900m	1500m	2500m
Accessory Kit	Cables(USB2.0&BNC) Helmet support, well-matched support, Carrying Bag, User Manual, Cleaning Cloth			

Lens specifications (384×288)

OBJECTIVE LENS	Field of View	Visual Magnification (MK Series)	Visual Magnification (LK Series)	Detection Range (Human)	Detection Range (Animal)	Detection Range (Object)
19mm(F1.0)	13.9° ×10.4°	2.09~8.37	1.83~7.32	1800m	1590m	2430m
25mm(F1.0)	10.6° ×7.9°	2.75~11.01	2.41~9.63	2370m	2090m	3200m
35mm(F1.0)	7.5° ×5.7°	3.85~15.41	3.37~13.48	3310m	2920m	4480m
50mm(F1.2)	5.3° ×4.0°	5.5~22.01	4.82~19.26	4730m	4170m	6390m
75mm(F1.2)	3.5° ×2.6°	8.26~33.02	7.22~28.89	7090m	6250m	9590m

MODEL	19mm	25mm	35mm	50mm	55mm	75mm
MK-IR	√	√	√	√	—	√
MK-IRS	√	√	√	√	—	—
MK-LR	√	√	√	√	—	—
LK-MINI	√	√	√	—	—	—
LK-IR	√	√	√	—	—	—
LK-IR HD	—	—	—	√	—	—
LK-LR	√	√	√	—	—	—
LK-LR HD	—	—	—	√	—	—

Lens specifications (640×512)

OBJECTIVE LENS	Field of View	Visual Magnification (MK Series)	Visual Magnification (LK Series)	Detection Range (Human)	Detection Range (Animal)	Detection Range (Object)
25mm(F1.0)	17.6° ×14.1°	1.61~6.45	1.41~5.64	2370m	2090m	3200m
35mm(F1.0)	12.6×10.1°	2.26~9.03	1.98~7.9	3310m	2920m	4480m
50mm(F1.2)	8.8° ×7.0°	3.23~12.9	2.82~11.29	4730m	4170m	6390m
55mm(F1.2)	8.0° ×6.4°	3.55~14.19	3.1~12.42	5200m	4590m	7030m
75mm(F1.2)	5.9° ×4.7°	4.84~19.35	4.23~16.93	7090m	6250m	9590m

MODEL	19mm	25mm	35mm	50mm	55mm	75mm
MK-IR	—	√	√	√	—	√
MK-IRS	—	√	√	√	—	—
MK-LR	—	√	√	√	—	—
LK-MINI	—	√	√	—	—	—
LK-IR	—	√	√	—	—	—
LK-IR HD	—	—	—	—	√	√
LK-LR	—	√	√	—	—	—
LK-LR HD	—	—	—	—	√	√