

2025

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.

Infrared Camera Core

The core adopts a highly reliable infrared detector, possessing excellent resistance to shock and impact; independently developed core components including lenses, detectors, and structures ensure technical security and autonomous reliability; it integrates hardware and software seamlessly, effectively compensating for energy drift characteristics to ensure maximum image clarity and smoothness; customizable support for multiple interfaces and a variety of specifications for infrared lens selection cater to diverse application scenarios. With outstanding performance, stable structure, and flexible configurability, the core is suitable for the development and integration of infrared thermal imaging devices/systems in various fields, integration of imaging systems, and electro-optical systems, and can be applied in areas such as automotive night vision, security monitoring, outdoor sports, firefighting and rescue, law enforcement, and search and rescue.



High Sensitivity



High-Definition (HD) Quality



High Performance



Low Power



Adapts to Multiple Interfaces



Customized Services



High Frame Rate



Adaptation To Harsh Environments

FE-SL/FE-S

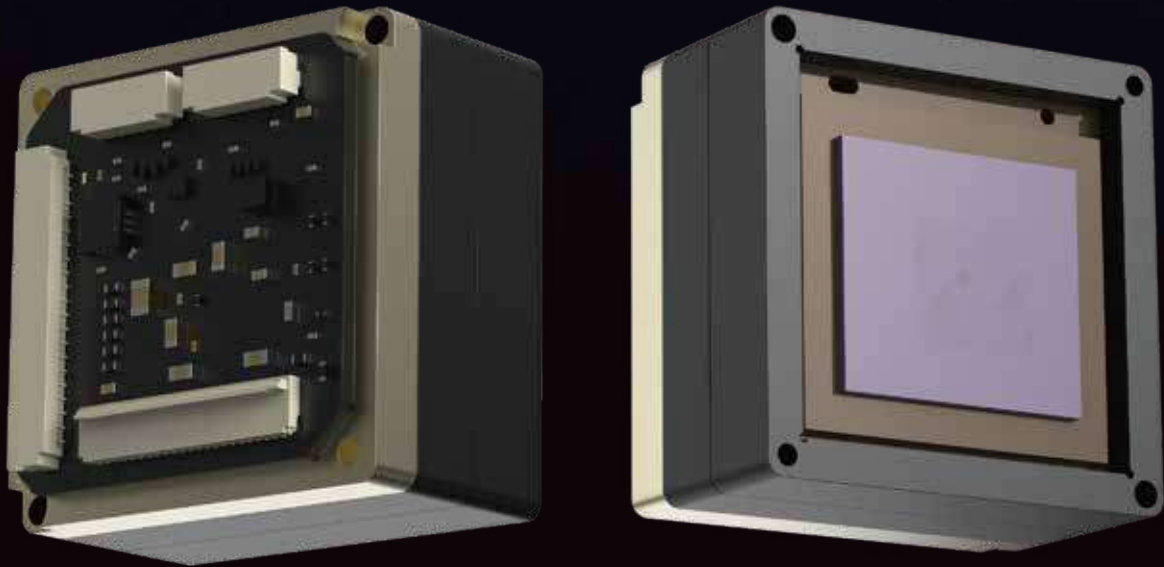
Detector Performance		
Type	Uncooled VOx Microbolometer	
Resolution	384×288	640×512
PixelsSize	12μm	
NETD	≤ 50mk, @F1.0, 300K	
Frame Frequency	≤ 50Hz	
Spectral Band	8 ~ 14μm	
Image Function		
Image Correction	Shutter/Shutterless (Selectable)	
Brightness Contrast Adjustment	Auto/Manual	
Digital Zoom	1-8x	
Reticle	Show/Hide/Move	
Pseudo-color	Whitehot / Blackhot / Iron / Rainbow	
Image Processing	Non-uniformity Correction, Digital Filtering for Noise Reduction, Digital Detail Enhancement	
Power Supply		
Power Supply Protection	Supports Over-voltage, Under-voltage and Reverse Connection Protection	
Power Input	DC 3.8 ~ 5.5V	
Power Consumption	≤ 1W	
Environmental Parameters		
Vibratory	6.06g, Random Vibration, All Axial Directions	
Reliability	200g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions	
Humidness	5 ~ 95%, Non-condensing	
Operation Temperature	-20°C~+55°C	
Storage Temperature	-55°C~+70°C	
Lens Options (Selectable)		
Objective Lens	9.1/13/19/25/35/50mm, F1.0	
Focusing Method	Manual	
Field of View	28.9° × 21.62° (9.1mm) 20.1° × 15.14° (13mm) 13.83° × 10.39° (19mm) 10.53° × 7.91° (25mm) 7.53° × 5.65° (35mm) 5.28° × 3.96° (50mm)	49.1° × 38.74° (9.1mm) 32.91° × 26.59° (13mm) 22.85° × 18.37° (19mm) 17.46° × 14.01° (25mm) 12.52° × 10.03° (35mm) 8.78° × 7.03° (50mm)
Interface		
Analog Video	CVBS	
Digital Video	BT.656/LVDS/MIPI/Cameralink/SDI/ETH (Selectable)	
Communication Interface	UART/I2C	
Physical Parameter		
Weight	Shutter ≤ 22.3g / Shutterless ≤ 20g (Lens Free)	
Dimensions	25 × 25 × 19mm (Lens Free)	










Fireeye A

Infrared Camera Core

The uncooled infrared core component is a small, lightweight, and low-power module. It operates without shutter and TEC, ensuring smooth continuous imaging. The core uses a highly reliable infrared detector, offering excellent shock and impact resistance. It is independently developed, ensuring technical safety and reliability, with integrated software and hardware design that effectively compensates for energy drift, maximizing image clarity and smoothness.

The core supports both analog and digital video output, along with convenient control interfaces. It is compatible with various specifications of infrared lenses, making it suitable for applications in vehicle night vision, security monitoring, outdoor sports, firefighting and rescue, and law enforcement search and rescue.



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Shutterless
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High Sensitivity
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High-Definition (HD) Quality
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High Performance
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Low Power
- 
Adapts to Multiple Interfaces
- 
Customized Services
- 
High Frame Rate
- 
Adaptation To Harsh Environments

FE-SL-E-A/FE-SL-Q-A


Detector Performance		
Type	Uncooled VOx Microbolometer	
Resolution	384×288	640×512
PixelsSize	12μm	
NETD	≤ 50mk@300K	
Frame Frequency	≤ 50Hz	
Spectral Band	8 ~ 14μm	
Interface		
Analog Video	PAL/NTSC	
Digital Video Interface	BT656	
I/O	UART (TTL 3.3V)	
DC	4.5V ~ 18V	
Typical DC	12V	
Typical Power @25℃	≤ 0.9W (PAL on) ≤ 0.72W (PAL off)	
Shutter	Shutterless	
Functional Parameters		
Brightness Contrast Adjustment	Auto/Manual	
Gain Control	Manual/Semi-automatic/Auto	
Pseudo-color	Blackhot, Whitehot, Redhot, Rainbow, Sky, Edge, Polarity reversal	
Image enhancement	On/Off	
Image Processing	Digital Filtering for Noise Reduction	
Reticle	Show/Hide/Move	
Environmental Parameters		
Reliability	600g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions	
Operation Temperature	-40℃ ~+60℃	
Storage Temperature	-50℃ ~+70℃	
Humidness	5 ~ 95%, Non-condensing	
Physical Parameter		
Weight	≤ 21g (Lens Free)	
Dimensions	26.5 × 26.5 × 17.56mm (Lens Free)	


Spiritpupil


Infrared Camera Core


The core module incorporates a high-reliability infrared detector with outstanding shock and vibration resistance. All critical components, including the lens, detector, and structural elements, are developed in-house to ensure technical safety and reliability. The integrated software and hardware design effectively compensates for energy drift, providing exceptional image clarity and smoothness. Notably, the module is compact and features a small form factor. It supports customizable interfaces and offers a variety of interchangeable infrared lenses to meet diverse application needs. With its superior performance, durable construction, and versatile configurability, this module is well-suited for integration into infrared thermal imaging systems, optical-electronic devices, and applications such as automotive night vision, security surveillance, outdoor activities, fire rescue, and law enforcement.





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High Sensitivity
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High-Definition (HD) Quality
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High Performance
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Compact
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Low Power
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Adapts to Multiple Interfaces
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Customized Services
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High Frame Rate
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Adaptation To Harsh Environments



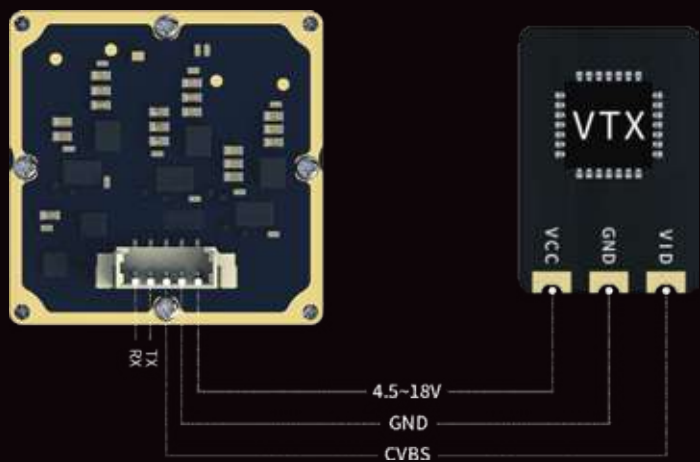
SP-SL/SP-S

Detector Performance		
Type	Uncooled VOx Microbolometer	
Resolution	384×288	640×512
PixelsSize	12μm	
NETD	≤ 50mk, @F1.0, 300K	
Frame Frequency	≤ 50Hz	
Spectral Band	8 ~ 14μm	
Image Function		
Image Correction	Shutter/Shutterless (Selectable)	
Brightness Contrast Adjustment	Auto/Manual	
Digital Zoom	1–8x	
Reticle	Show/Hide/Move	
Pseudo-color	Whitehot / Blackhot / Iron / Rainbow	
Image Processing	Non-uniformity Correction, Digital Filtering for Noise Reduction, Digital Detail Enhancement	
Power Supply		
Power Supply Protection	Supports Over-voltage, Under-voltage and Reverse Connection Protection	
Power Input	DC 3.8 ~ 5.5V	
Power Consumption	≤ 600mW	
Environmental Parameters		
Vibratory	6.06g, Random Vibration, All Axial Directions	
Reliability	200g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions	
Humidness	5 ~ 95%, Non-condensing	
Operation Temperature	-20°C~+55°C	
Storage Temperature	-55°C~+70°C	
Lens Options (Selectable)		
Objective Lens	9.1/13/19/25/35/50mm, F1.0	
Focusing Method	Manual	
Field of View	28.9° × 21.62° (9.1mm) 20.1° × 15.14° (13mm) 13.83° × 10.39° (19mm) 10.53° × 7.91° (25mm) 7.53° × 5.65° (35mm) 5.28° × 3.96° (50mm)	49.1° × 38.74° (9.1mm) 32.91° × 26.59° (13mm) 22.85° × 18.37° (19mm) 17.46° × 14.01° (25mm) 12.52° × 10.03° (35mm) 8.78° × 7.03° (50mm)
Interface		
Analog Video	CVBS	
Digital Video	BT.656/LVDS/MIPI	
Communication Interface	UART	
Physical Parameter		
Weight	≤ 10g (Lens Free)	
Dimensions	21mm × 21mm × 9mm (Lens Free)	

Fireye V2

Infrared Camera Core

The core adopts a highly reliable infrared detector, possessing excellent resistance to shock and impact; independently developed core components including lenses, detectors, and structures ensure technical security and autonomous reliability; it integrates hardware and software seamlessly, effectively compensating for energy drift characteristics to ensure maximum image clarity and smoothness, while being simple and easy to use. Thanks to its outstanding performance, stable structure, and flexible configurability, the core is specifically tailored for the field of unmanned aerial vehicles and suitable for the development and integration of infrared thermal imaging devices/ systems in various fields, integration of imaging systems, and electro-optical systems, and can be applied in areas such as automotive night vision, security monitoring, outdoor sports, firefighting and rescue, law enforcement, and search and rescue.



High Sensitivity



High-Definition (HD) Quality



High Performance



Low Power



Compact



Customized Services



High Frame Rate



Adaptation To Harsh Environments

FE-SL-E09V2/FE-SL-Q09V2/FE-S-E09V2/FE-S-Q09V2

Detector Performance		
Type	Uncooled VOx Microbolometer	
Resolution	384×288	640×512
PixelsSize	12μm	
NETD	≤ 50mk, @F1.0, 300K	
Frame Frequency	≤ 50Hz	
Spectral Band	8 ~ 14μm	
Image Function		
Image Correction	Shutter/Shutterless (Selectable)	
Brightness Contrast Adjustment	Auto/Manual	
Digital Zoom	1-8x	
Reticle	Show/Hide/Move	
Pseudo-color	Whitehot / Blackhot / Iron / Rainbow	
Image Processing	Non-uniformity Correction, Digital Filtering for Noise Reduction, Digital Detail Enhancement	
Power Supply		
Power Supply Protection	Supports Over-voltage, Under-voltage and Reverse Connection Protection	
Power Input	DC 4.5 ~ 18V	
Power Consumption	≤ 1W	
Environmental Parameters		
Vibratory	6.06g, Random Vibration, All Axial Directions	
Reliability	200g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions	
Humidness	5 ~ 95%, Non-condensing	
Operation Temperature	-20°C~-55°C	
Storage Temperature	-55°C~+70°C	
Lens Options (Selectable)		
Objective Lens	9.1mm, F1.0	
Focusing Method	Manual	
Field of View	28.9° × 21.62° (9.1mm)	49.1° × 38.74° (9.1mm)
Interface		
Analog Video	CVBS	
Communication Interface	UART	
Physical Parameter		
Weight	≤ 40g±2g (With Lens)	
Dimensions	25mm × 25mm × 42mm (With Lens)	

HI


Cooled Core Module


The module features a lightweight and compact cooled core that can start at high temperatures of 150K, supporting non-uniformity correction, digital noise reduction, digital dynamic compression, black-and-white hot switching, and digital detail enhancement. It is equipped with a variety of image output interfaces and can be widely used in fields such as handheld equipment for individual soldiers, optoelectronic pods, coastal defense surveillance, guidance and search, and gas detection.





HIE30/HIQ15


Detector Performance		
Detector Material	InAsSb	
Resolution	320×256	640×512
Pixels Size	30μm	15μm
Spectral Band	3.7um-4.8um/3.7um-5.1um	
Aperture	F2/F4/F5.5	
NETD@F4	<20mk	
Frame Frequency	25Hz/50Hz/100Hz/200Hz	
Image Function		
Brightness Adjustment	Auto/Manual	
Contrast Adjustment	Auto/Manual	
Pseudo-color	Blackhot/ Whitehot (Default)	
Digital Zoom	1/2/4/8	
Image Processing	Non-uniformity Correction/ Bad Pixel Detection and Correction/ Digital Filtering for Noise Reduction/ Contrast Stretching/ Digital Detail Enhancement/ Brightness Adjustment/ Image Compression	
Image Mirroring	Horizontal/ Vertical/ Diagonal	
Physical Data		
Dimension	69 × 67 × 44mm	
Weight	<340g	
Interface and Electrical Parameters		
Power Input	DC12V+1V	
Power Consumption	Initial Power: ≤ 18W@23℃ Stable Power: ≤ 6W@23℃	
Analog Interface	PAL	
Digital Interface	Cameralink/SDI/CML/BT1120/HDMI/RJ45/USB	
Communication Interface	RS422;The baud rate is configurable;Default:115200bps	
Operation Temperature	-40℃ ~+60℃	
Storage Temperature	-45℃ ~+65℃	
Environmental Parameters		
Random Vibration	5.98g	
Shock Resistance	50g/11ms, Half Sine Wave, In the X/Y/Z Direction	
Reliability	MTTE@63 2% ≥ 20000h	


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High Sensitivity
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High Reliability
- 


High Performance
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Compact
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Low Power
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Adapts to Multiple Interfaces
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Customized Services
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High Frame Rate
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Adaptation To Harsh Environments

The Petite series of infrared thermal imaging cameras is a high-performance mobile phone plug-in infrared thermal imaging product developed based on uncooled VOx infrared detectors. It is capable of detecting home pipeline gas leaks,underfloor heating system, insulation conditions of doors and windows, electrical equipment failures, heat sources, automobiles, and also can be used for convenient power system inspections. This product is compatible with mobile devices such as smartphones, tablets, and computers with a USB TYPE-C interface, and when used with professional APPs or PC software, it can achieve real-time infrared image display and functional control.



Reticle



Hot Target Tracking



Portable and Compact



No Charging Required



Multiple Pseudo-Colors



Plug and Play



Low-Power Consumption



Real Time Sharing



Auto Capture



Multi-Scenario

Specifications

Product Categories	PT-Q19
Resolution	640×512
PixelsSize	12μm
Field of View	22.733° ×18.26°
Frame Rate,HZ	25Hz
NETD	≤ 50mk@25℃ ,F1.0
MRTD	≤ 400mk@25℃ ,F1.0
Operation Temperature	-20℃ ~ +50℃
Power Consumption	< 1W
Weight	≤ 58g
Dimension	27.5*27.5*46mm
Support System	Android 6.0 and Above
Image Enhancement	Digital Detail Enhancement
Image Correction	Manual
Pseudo-color	Whitehot / Blackhot / Rainbow/ Iron
Secondary Development	Provide Sdk Development Kit
Reticle	Division and Hot Spot Tracking
Video Saving	Support Photo Taking and Video Recording Functions
Software Updates	Support Online Software Update Function

Effective Range



1.7×0.5m

Recognition
Detection

450m
1800m



2.3×2.3m

Recognition
Detection

610m
2430m



4.6×2.3m

Recognition
Detection

1250m
4900m

0m 1000m 2000m 3000m 4000m 5000m

Night Demon

Monocular Head-Mounted Thermal Imager

ND-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



- Shutterless
- Image Storage
- large storage space
- APP
- Outdoor Search
- Night Vision Observation
- High Concealment
- Digital Compass

ND-IR

Model	ND-IR-E16	ND-IR-E09	ND-IR-Q16	ND-IR-Q26
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	16.4° ×12.3°	27° ×20.4°	27° ×21.7°	16.4° ×13.1°
Visual Magnification	1-4x			
Eyepiece Diopter	-6~+3	-5~+5	-5~+5	-6~+3
Eye Relief	25mm			
Laser Indicator				
Output Wavelength/Power	650nm/2-5mW			
Spot Range	> 100m			
Spot Size	< 20mm			
Functional Parameters				
Digital Zoom	1-4x			
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 / Edge			
Use Method	Handheld, Head-mounted, Clip-On			
Weight	≤ 250g			
Dimensions	119x39x79mm			
Power Supply	One 18650 Li-ion Battery			
Operating Time (Without WiFi)	≥ 4h			
Interface	Power Supply/Serial Port/Analog Video Output/Type-C			
Mechanical Interface	2 x 1/4 Threaded holes, Piccatini Rail			
Operation Temperature	-20℃ ~+50℃			
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			

Specifications

Model	ND-NV31
Optical Specifications	
Objective Lens	26.8mm/ F1.28
Field Of View	40°
Visual Magnification	1x
Focal Length Range	250mm~ ∞
Eyepiece Diopter	-5~+5
Eye Relief	25mm
Exit Pupil Diameter	14mm
Performance Specifications	
LED Indicator (In The Field Of View)	Infrared auxiliary illumination/ flip up or flip side screen off/ High-light protection/ low battery indicator
Image Intensifier	GEN 2+ (≥ 64lp/mm)
Image Tube Compatibility	MX10160 Contact、NNVT 3-Wire
Power Supply	Single AA Battery
Operating Time	20h
IR (Infrared) illuminator	850nm
High-light protection	Supports
Flip-Up Screen Off	Supports
Flip-Side Screen Off	Supports
Indicator Light	Supports
IPD Adjustment	56-72mm
System Information	
Weight (No Batt.)	≤ 550g
Dimensions	100×85×113mm
Operation Temperature	-40°C ~ +50°C
Protection Rating	IP67
Interface	L4G24
Night Vision Intensifier	
Ultimate Resolution	64
Signal-to-Noise Ratio	28
Phosphor	P43 (Green Phosphor) /P45 (White Phosphor)

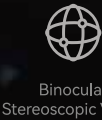
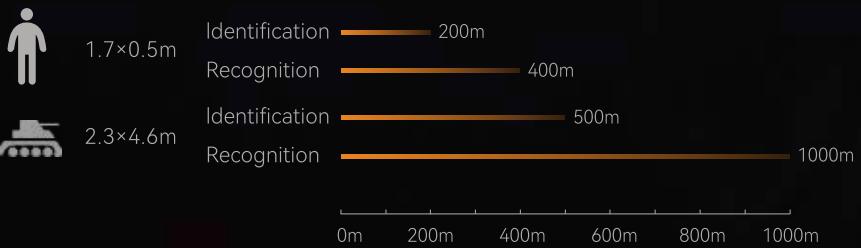
ND-NV31 binocular Low-Light night vision device is a portable tool designed for low-light or nighttime use. It features two independent image intensifiers that simulate human vision to provide stereoscopic effects, enhancing depth perception and spatial awareness. The device can be mounted directly onto a helmet using a bracket, allowing hands-free observation. It is widely used in military, law enforcement, and rescue operations.

Night Demon-NV31

Binocular Head-Mounted Low-Light



Effective Range



Binocular Stereoscopic Vision



Extra-large Exit Pupil



Magnesium Alloy



GEN 2+ HD Night Vision



Lightweight



Compact

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-E MK-IRS-E	MK-IR-Q MK-IRS-Q
Detector	Uncooled VOx Microbolometer	
Resolution, pixels	384×288/12μm	
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	
Operating Time	≥ 5h	
Interface	External Power/ 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

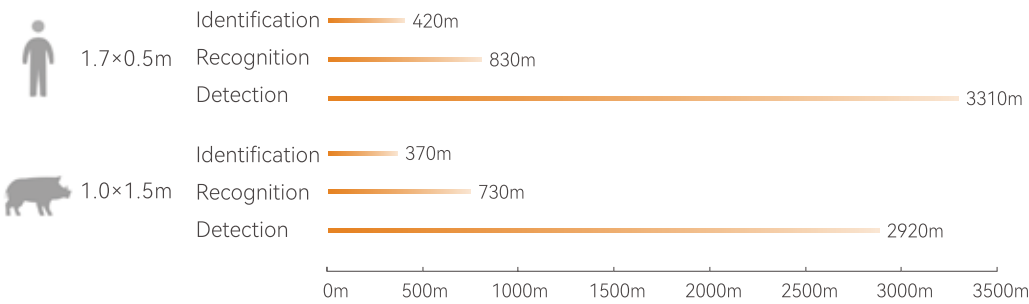


Image Mode



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-E			MK-LR-Q	
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				
Operating Time	≥ 5h				
Interface	External Power/ 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

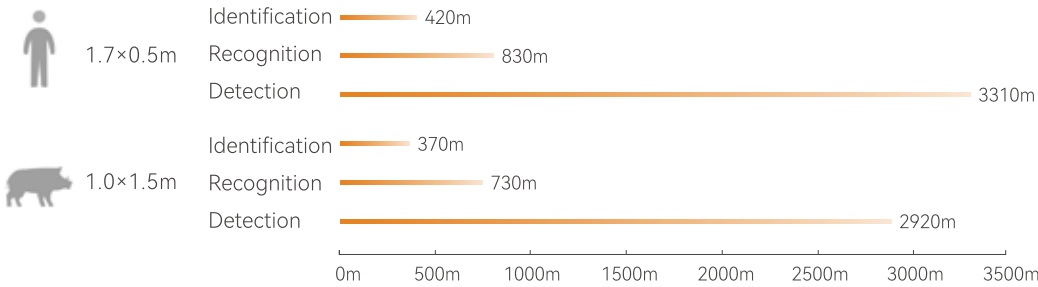


Green Hot



Fusion

Effective Range



SMART

Handheld Thermal Imaging Monocular

The SMART is a compact and lightweight high-performance infrared thermal imager designed with a minimalist aesthetic that combines ease of use and reliability. With long-lasting battery life,It allows you to observe the thermal distribution of objects or scenes at a distance under various lighting conditions.



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

Specifications

Model	S-IR-E09	S-IR-E19	S-IR-E25	S-IR-Q19	S-IR-Q25
Detector	Uncooled VOx Microbolometer				
Resolution, pixels	384×288/12μm			640×512/12μm	
Objective Lens (F1.0)	9.7mm	19mm	25mm	19mm	25mm
Field of View	26.7° ×20.2°	13.8° ×10.4°	10.5° ×7.9°	22.9° ×18.4°	17.5° ×14.0°
Visual Magnification	1~4	1.8~7.2	2.4~9.6	1.1~4.4	1.5~5.8
Laser Indicator (IRS)	650nm Class II Range >100m				
Spectral Band	8~14μm				
Eyepiece Diopter	-5~+5				
Eye Relief	23mm				
NETD	≤ 35mk@300K				
Display	0.39"OLED 1024x768				
Digital Zoom	1x、2x、4x				
Frame Rate.Hz	25Hz	50Hz	50Hz	50Hz	50Hz
Protection Rating	IP67				
Power Source	one 18650 battery				
Operating Time	≥ 7h	≥ 6h	≥ 6h	≥ 6h	≥ 6h
Interface	Type-C				
Weight (Including batteries)	≤ 251g			≤ 260g	
Dimensions	≤ 170×60×59mm				
Operating Temperature	-20℃ ~+55℃				
Detection Range (Human)	9.7mm/450m 19mm/900m 25mm/1200m			19mm/900m	25mm/1200m
Detection Range (Animal)	9.7mm/400m 19mm/800m 25mm/1000m			19mm/800m	25mm/1000m

Effective Range

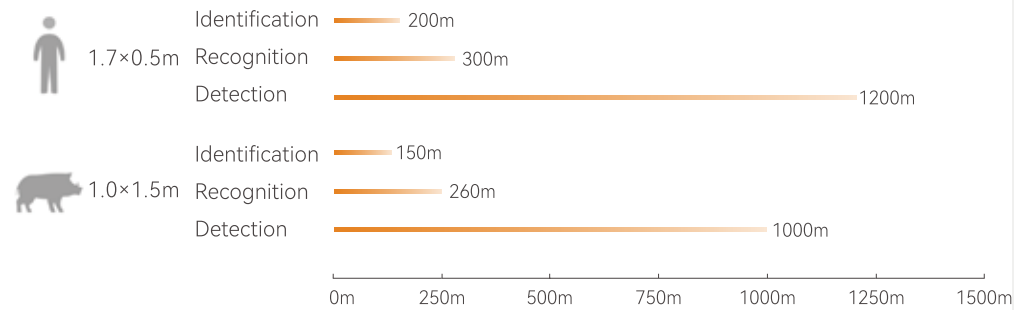
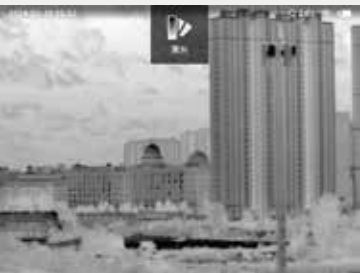


Image Mode

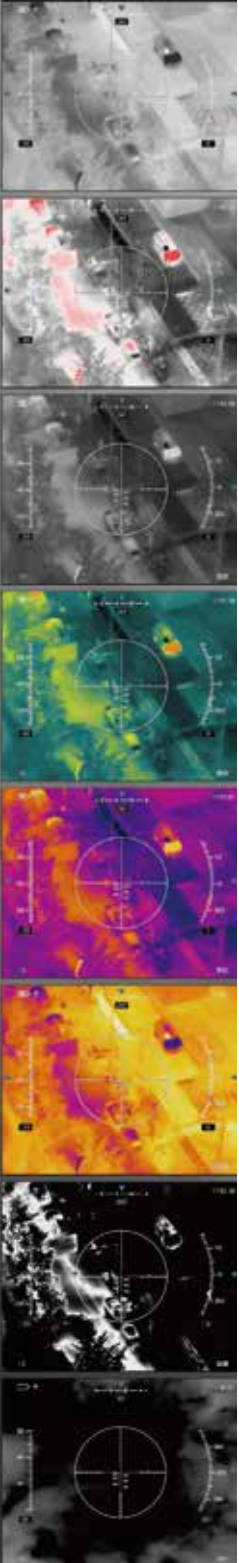


Mini

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



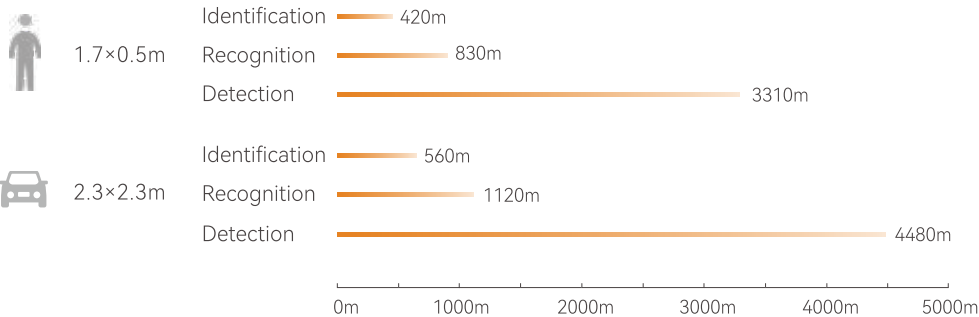
Specifications

Model	M-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 16340 Li-ion Batteries				
Operating 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		

Mini

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

Effective Range



LK-IR

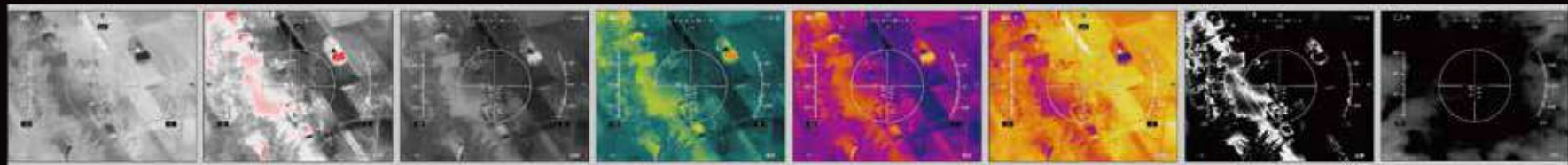
- Shutterless
- Quick Response
- Real-time Denoising
- Multiple Pseudo-Colors
- Hot Target Tracking
- Wireless Image Transmission
- Digital Compass
- Picture-in-Picture
- Reticle



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.

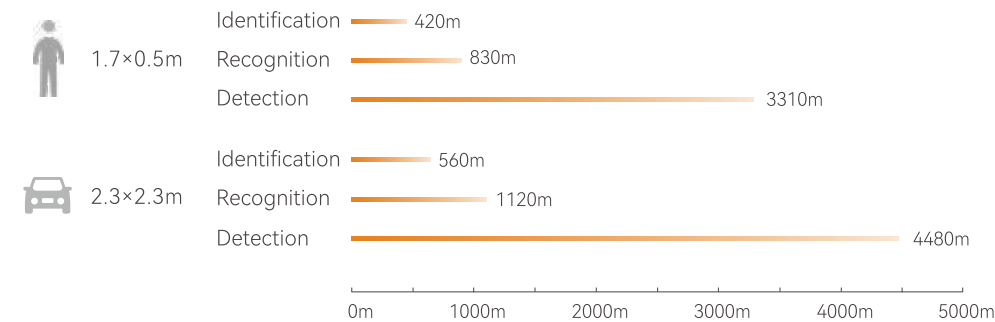
Image Mode



Specifications

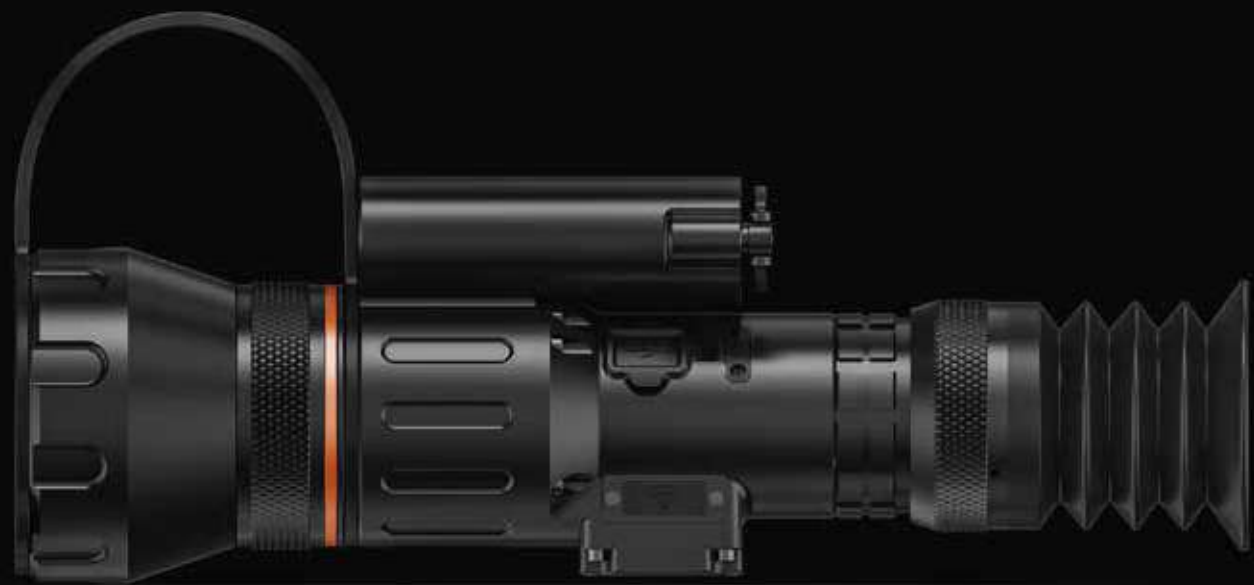
Model	LK-IR					
Detector	Uncooled VOx Microbolometer					
Resolution, pixels	384×288/12μm			640×512/12μm		
Objective Lens (F1.0)	19mm	25mm	35mm	25mm	35mm	
Field of View	13.9°×10.4°	10.6°×7.9°	7.5°×5.7°	17.6°×14.1°	12.6°×10.1°	
Visual Magnification	1.83~7.32	2.41~9.63	3.37~13.48	1.41~5.64	1.98~7.9	
Spectral 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					
Operating 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

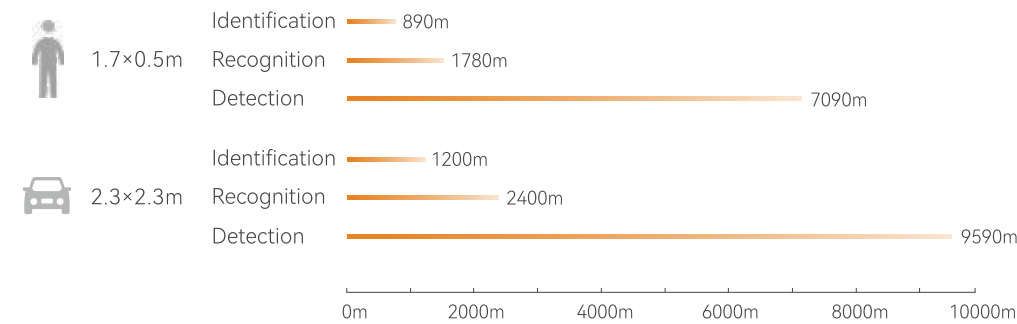
Model	LK-IR HD		
Detector	Uncooled VOx Microbolometer		
Resolution, pixels	384×288/12μm	640×512/12μm	
Objective Lens (F1.2)	50mm	55mm	75mm
Field of View	5.3°×4.0°	8.0°×6.4°	5.9°×4.7°
Visual Magnification	4.82~19.26	3.1~12.42	4.23~16.93
Spectral Band	8~14μm		
Frame Rate,Hz	50Hz		
NETD	≤ 35mk@300K		
Display	0.39" OLED 1024×768		
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		
Operating 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

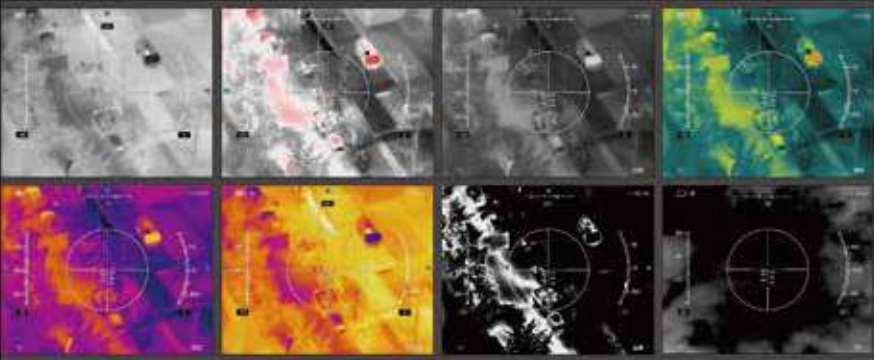


LK-LR

Uncooled Infrared Thermal Imager

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

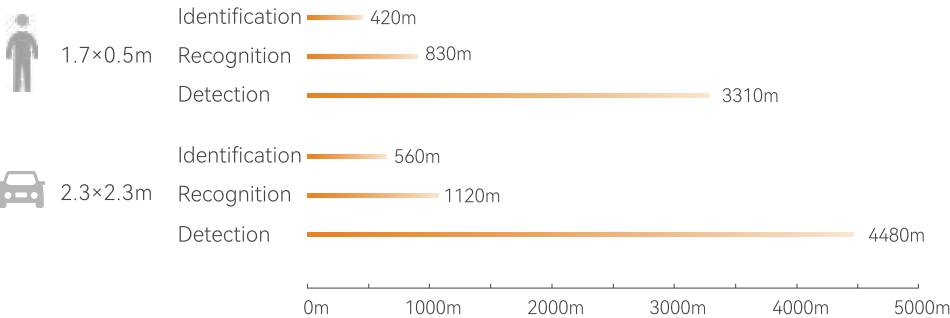
Image Mode



- 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					
Operating Time	≥ 8h					
Weight (Without Battery)	≤ 670g					
Dimensions	221x83x100mm (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			

LK-LR HD

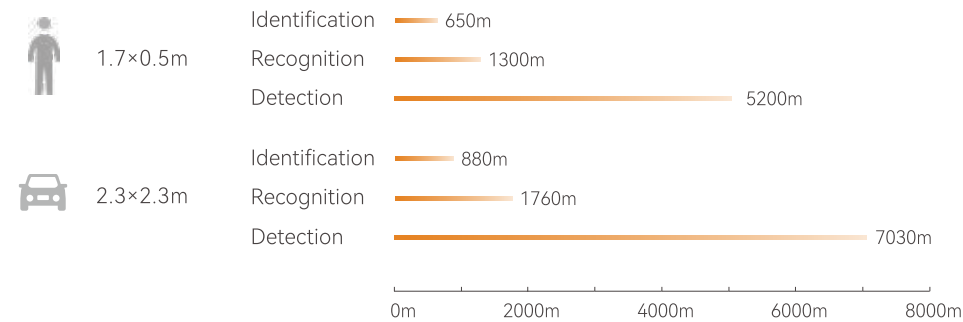
Uncooled Infrared Thermal Imager

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		
Operating 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



Tube

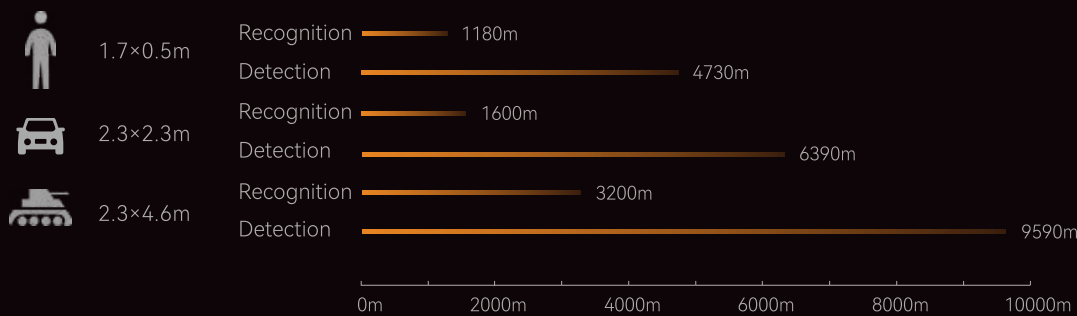
Uncooled Infrared Thermal Imager

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.

T-IR



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

Model	T-IR-Q35	T-IR-Q50
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)	
Operating 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



NE-Q55

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	50Hz	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 Accuracy	±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	
Operating Time	≥ 6h	
Waterproof	IP67	
Memory	64G	
Wi-Fi Transmission	Wi-Fi	
Power Source	Four 18650 Li-ion Batteries	
Interface	Type -C/HDMI	
Weight (Without Battery)	≤ 1025g	
Dimensions	229×190×82mm	
Operating Temperature	-25° ~+55°	
Storage Temperature	-55° ~+70°	