







Petite Series

Assisted Driving Outdoors CS192 Automotive-grade LiDAR Handheld Thermal Monocular IVS Series Intelligent Vehicle Night Vision System (5.5-inch screen) 03 MK Series IVS Series Intelligent Vehicle Night Vision System (4-inch screen) 05 SMART Series (iF Design Award 2025 Winner) IVS Series Intelligent Vehicle Night Vision System (10-inch screen) Handheld Thermal Binocular 07 **NE Series Infrared Panoramic Radar ESSD Series Thermal Scope ESPT Series** LK Series 09 Mini Series 11 Gas detection thermal imager **Demon Series** 13 **Tube Series** 15 **HGD** Handheld Type Multi-purpose Thermal Monocular NGD Online Type ND-IR Series 17 **Night Vision Long-wave Uncooled Thermal Camera Core** ND-NV31 19 Fireye Series ND-NV14 21 Fireye V2 Series Laser Rangfinder Fireye A Series Valiant Series 22 Spiritpupil Series Heroic Series 23 Mid-wave Cooled Thermal Camera Core **Thermal Imager for Phones** HT Series HOT Miniaturized Thermal Camera Core

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SM Series Scorpio Cooled Thermal Camera Core

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THERMAL MONOCULAR

MK SERIES







Laser Ranging 1200m







Hot Track



IP67

MK-IRS-E19 MK-IRS-E25 MK-LR-E19 MK-LR-E25 MK-IR-Q25 MK-IR-Q35 MK-IR-Q50 MK-LR-Q25 MK-LR-Q35 MK-LR-Q50 Model MK-IRS-Q35 MK-LR-E35 MK-LR-E50 MK-IR-E35 MK-IR-E50 MK-IRS-E35 MK-IRS-Q50 MK-IRS-E50 Uncooled VOx Microbolometer Detector 384x288/12μm 640x512/12μm 384x288/12µm 640x512/12µm 384x288/12µm 640x512/12µm Resolution/Pixel Pitch 19/25/35/50mm 25/35/50mm 19/25/35/50mm 25/35/50mm 19/25/35/50mm 25/35/50mm Objective Lens (F1.0) 13.9° ×10.4° / 10.6° ×7.9° 7.6° ×14.1° / 12.6° ×10.1° 13.9° ×10.4° / 10.6° ×7.9° 7.6° ×14.1° / 12.6° ×10.1 13.9° ×10.4° / 10.6° ×7.9° 17.6° ×14.1° / 12.6° ×10.1 Field of View 7.5° ×5.7° / 5.3°×4.0° 7.5° ×5.7° / 5.3°×4.0° 2.09~8.37 / 2.75~11.01 1.61~6.45 / 2.26~9.03 2.09~8.37 / 2.75~11.01 1.61~6.45 / 2.26~9.03 2.09~8.37 / 2.75~11.01 1.61~6.45 / 2.26~9.03 Visual Magnification 3.85~15.41 / 4.82~19.26 2.82~11.29 3.85~15.41 / 4.82~19.26 3.85~15.41 / 4.82~19.26 650nm | Class II | Range >100m Laser Indicator (IRS) Spectral Band 8~14µm -5~+5 Eyepiece Diopter Eye Relief 20mm ≤ 25mk@300K NETD 0.39" OLED 1024x768 Display 1x、2x、4x Digital Zoom 50Hz Frame Rate.Hz IP67 Protection Rating 1200m Measuring Distance One 18650 Li-ion Battery Power Source ≥ 5h Operating Time Type-C (Support External Power Supply) Interface ≤ 470g ≤ 515g Weight (Without Battery) **Dimensions** 196×70×58mm 196×70×90mm -20°C ~+50°C Operating Temperature 19mm/1800m 25mm/2370m 35mm/3310m 50mm/4730m Detection Range (Human)

19mm/1590m 25mm/2090m 35mm/2920m 50mm/4730m

MK-IR

MK-IR-E19

MK-IRS

MK-IRS-Q25

MK-LR

2.82~11.29

03

Detection Range (Hog)

SERIES

THERMAL MONOCULAR

SMART SERIES



SERIES	SMART				
Model	S-IR-E10	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	≤ 25mk@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 1	8650 battery (bui	lt in)	
Operating Time	≥ 7h	≥ 6h	≥ 6h	≥ 6h	≥ 6h
Interface			Type-C		
Weight (Including batteries)	≤ 251g ≤ 260g				
Dimensions	≤ 170×60×59mm				
Operating Temperature	-20°C ~+55°C				
Detection Range (Human)	450m	900m	1200m	900m	1200m
Detection Range (Hog)	400m	800m	1000m	800m	1000m



SERIES	S NE-Q55		
Specification	Infrared	Visible Light	
Resolution/Pixel Pitch	640×512 /12μm	2592×1944/2.0μm	
Objective Lens	55mm F1.0	25mm F1.8	
Field of View	7.94° ×6.37°	11.8° ×8.9°	
Frame Rate	50Hz	30Hz	
Identification Range (Human)	650m	900m	
Recognition Range (Human)	1300m	1800m	
Detection Range(Human)	5200m	7100m	
Visual Magnification	3.66	2.5	
Fusion Visual Magnification	3.	66	
Eyepiece Diopter	-5	×+5	
Wavelength	153	5nm	
Max Measuring Range	Human/2300	m Car/5000m	
Measuring Accuacy	±0.5n	n~±2m	
Positioning	GPS & BeiDou	Dual Positioning	
Horizontal Positioning Accuracy	2.5m		
Digital Compass	Support		
Display	0.39" OLED 1024x768		
Digital Zoom	1x-4x		
NETD	≤ 25mk@300K		
Observation Mode	Binocular		
Eye Relief	30mm		
Operating Time	≥ 6h		
Waterproof	IP	67	
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°C ~+55°C		
Storage Temperature	-55°C ~+70°C		



SERIES	LK-IR		LK-LR	
Model	LK-IR-E19 LK-IR-E25 LK-IR-E35 LK-IR-E50	LK-IR-Q35 LK-IR-Q55 LK-IR-Q75	LK-LR-E19 LK-LR-E25 LK-LR-E35 LK-LR-E50	LK-LR-Q35 LK-LR-Q55 LK-LR-Q75
Detector		Uncooled V	Ox Microbolometer	
Resolution/Pixel Pitch	384×288/12μm	640×512/12μm	384×288/12μm	640×512/12μm
Objective Lens (F1.0)	19/25/35/50mm	35/55/75mm	19/25/35/50mm	35/55/75mm
Field of View	13.9°×10.4° / 10.6°×7.9° 7.5°×5.7° / 5.3° ×4.0°	12.6°×10.1° 8.0° ×6.4° / 5.9° ×4.7°	13.9°×10.4° / 10.6°×7.9° 7.5°×5.7° / 5.3° ×4.0°	12.6°×10.1° 8.0° ×6.4° / 5.9° ×4.7°
Visual Magnification	1.83~7.32 / 2.41~9.63 3.37~13.48 / 4.82~19.26	1.98~7.9 3.1~12.42 / 4.23~16.93	1.83~7.32 / 2.41~9.63 3.37~13.48 / 4.82~19.26	1.98~7.9 3.1~12.42 / 4.23~16.93
Spectral Band		8~14	4μm	
Frame Rate		50	Hz	
NETD	≤ 25mk@300K			
Display	0.39" OLED 1024x768			
Digital Zoom	1x、2x、4x			
Eyepiece Diopter	-5 ~ +5			
Eye Relief	45mm			
Laser Ranging	/ 1200m			00m
Power Supply		Two 18650 Li	-ion Batteries	
Operating Time		≥ (8h	
Weight (Without Battery)	≤570g (19/25/35mm) ≤620g (50mm)	≤570g (35mm) ≤635g (55mm) ≤720g (75mm)	≤670g (19/25/35mm) ≤720g (50mm)	≤670g (35mm) ≤735g (55mm) ≤820g (75mm)
Dimensions	221x83x	266mm	221x83	x100mm
Interface	Type-C (optional external power supply)			
Operating Temperature	-30°C ~+55°C			
Protection Rating	IP67			
Reliability	≥ 1200g Shock Resistance (19/25/35mm) ≥ 2000g Shock Resistance (50/55/75mm)			(50/55/75mm)
Altitude	≥ 5000m			
Detection Range (Human)	19mm/1800m 25mm/2370m 35mm/3310m 50mm/4730m 55mm/5200m 75mm/7090m			
Detection Range (Vehicle)	19mm/2430m 25mm/3200m 35mm/4480m 50mm/6390m 55mm/7030m 75mm/9590m			



SERIES	Mini				
Model	M-IR-E25 M-IR-E35	M-IR-Q35	M-LR-E25 M-LR-E35	M-LR-Q35	
Detector	Uncooled VOx Microbolometer				
Resolution/Pixel Pitch	384×288/12μm	640×512/12μm	384×288/12μm	640×512/12μm	
Objective Lens (F1.0)	25mm / 35mm	35mm	25mm / 35mm	35mm	
Field of View	10.6°×7.9° / 7.5°×5.7°	12.6°×10.1°	10.6°×7.9° / 7.5°×5.7°	12.6°×10.1°	
Visual Magnification	2.41~9.63 / 3.37~13.48	1.98~7.9	2.41~9.63 / 3.37~13.48	1.98~7.9	
Spectral Band		8~14	- 4μm		
Frame Rate		50	Hz		
NETD	≤ 25mk@300K				
Display	0.39" OLED 1024x768				
Digital Zoom	1x、2x、4x				
Eyepiece Diopter	-5 ~ +5				
Eye Relief	45mm				
Measuring Distance	-		1200m		
Power Supply		Two 16340 Li-	-ion Batteries		
Operating Time	≥ 2.5h ≥ 2h		≥ 2.5h	≥ 2h	
Weight (Without Battery)	≤ 458g		≤ 498g		
Dimensions	208×57×	x58mm (Including E	Eyepiece/Objective Covers)		
Interface	Type-C				
Operating Temperature	-30°C ~+50°C				
Protection Rating	IP67				
Reliability	冲击800g				
Altitude	≥ 5000m				
Adaptability	All-weather				
Detection Range (Human)	25mm/2370m 35mm/3310m				
Detection Range (Vehicle)		25mm/3200m	35mm/4480m		

THERMAL SCOPE

Demon SERIES





Small Size and Low Weight



Working Time up to 4h



Max Shock Resistance 800g



Picture in Picture



Hot Track



IP67

SERIES	Demon	
Model	D-IR-Q19/D-IR-Q25/D-IR-Q35	
Detector	Uncooled VOx Microbolometer	
Resolution/Pixel Pitch	640×512/12μm	
Objective Lens (F1.0)	19mm / 25mm / 35mm	
Field of View	22.9° x18.4° / 17.5° x14° / 12.5° x10°	
Magnification	1.1x~8.8x / 1.4x~11.6x / 2x~16x	
Spectral Band	8~14µm	
Frame Rate	50Hz	
NETD	≤ 25mk @300k	
Display	0.39" OLED 1024×768	
Digital Zoom	1x、2x、4x、8x	
Eyepiece Diopter	-5D ~ +5D	
Eye Relief	45mm	
Power Supply	Two 16340 Li-ion Rechargeable Batteries	
Operating Time	≥ 4h	
Weight (No Battery)	≤ 500g	
Dimensions(Including Eyepiece/Objective Covers)	155x55x70mm / 160x55x70mm / 168x55x70mm	
Interface	Type-C (Support External Power Supply)	
Operation Temperature	-20°C ~+55°C	
Protection Rating	IP67	
Reliability	800g/0.5ms Shock Resistance	
Altitude	≥ 5000m	
Adaptability	All-weather	
Detection Range (Wolf)	19mm/1260m 25mm/1660m 35mm/2330m	
Detection Range (Rabbit)	19mm/530m 25mm/690m 35mm/970m	



SERIES	Tube		
Model	T-IR-Q35	T-IR-Q50	
Detector	Uncooled VOx Microbolometer		
Resolution/Pixel Pitch	640×51	2/12μm	
Spectral Band	8~14	4μm	
NETD	≤ 25mk	@300K	
Frame Rate	50	Hz	
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 (Vehicle)	4480m	6390m	
Display	0.39" OLED 1024*768		
Battery Type	Two 18650 Li-ion Batteries (Built-In) +One 18650 Li-ion Battery (Extern		
Operating Time (22°C)	15h		
External Power Supply	5V(Type-C)		
Scope Tube Diameter	30r	mm	
Reliability	1200g Shoc	k Resistance	
Protection Rating	IP67		
Memory Capacity	32GB		
Operation Temperature	-20°C ~+50°C		
Weight (Without Battery)	≤ 980g		
Dimensions	430×105×77mm 440×105×77mm		
Accessory Package	Mounting Bracket, Eyecup, Lens Cap, Security Case		

MULTI-PURPOSE THERMAL MONOCULAR

ND-IR SERIES



Clip-on or Scope

Hot Track



IP67

SERIES	ND-IR			
Model	ND-IR-E16	ND-IR-E09	ND-IR-Q16	ND-IR-Q26
Detector	Uncooled VOx Microbolometer			
Resolution/Pixel Pitch	384×28	8/12µm	640×51	l2/12μm
Frame Rate,Hz		50Hz		
Shutterless		No Shutter	Calibration	
Display		0.39" OLED	1024x768	
Objective Lens (F1.0)	16mm	9.6mm	16mm	26.7mm
Field of View	16.4°x12.3°	27°x20.4°	27°x21.7°	16.4°x13.1°
Visual Magnification		1-	-4	
Eyepiece Diopter	-6~+3	-5~+5	-5~+5	-6~+3
Eye Relief	-	25r	nm	
Output Wavelength/Power		650nm/	/2-5mW	
Spot Range	> 100m			
Spot Size	< 20mm			
Digital Zoom	1-4x			
Digital Compass		Azimuth /	Pitch / Roll	
Wi-Fi	Support			
Video/Image Capture	Support			
Spectral Band	8~14µm			
NETD	≤ 25mk@300K			
Palettes	White Hot / Black Hot/ Iron Red / Deser Yellow Green Hot / Red Hot / Sky / Edge			
Use Method	Handheld, Head-mounted, Clip-On			
Weight	≤ 250g			
Dimensions	163x71x55mm (Including Eyepiece/Objective Lens Caps)			
Power Supply	One 18650 Li-ion Battery			
Operating Time (Without WiFi)	≥ 4h			
Interface	Туре-	C (Power Supply/Seria	l Port/Analog Video O	utput)
Mechanical Interface		2 x 1/4 Threaded h	noles, 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	Helmet support, Ca	arring Bag, User Manu	al, Cleaning Cloth, Pica	atinny rail(Optional

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NIGHT VISION

ND-NV SERIES



Small Size and Low Weight



Strong Light Protection

850nm IR Infrared Auxiliary Lighting



Working Time up to 15h

Auto-Screen-off for Upward and Sideward Tilting



IP67

SERIES	ND-NV	
Model	ND-NV31	
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	
LED Indicator (In The Field Of View)	Infrared auxiliary illumination/low battery indicator	
Image Intensifier	GEN 2+(≥ 64lp/mm)	
Image Tube Compatibility	MX10160 Contact、NNVT 3-Wire	
Power Supply	Single AA Battery	
Operating Time	15h(Monocular)	
IR (infrared) illuminator	850nm	
High-light protection	Support	
Flip-Up Screen Off	Support	
Flip-Side Screen Off	Support	
Indicator Light	Support	
IPD Adjustment	56-72mm	
Weight (NO Battery)	≤570g	
Dimensions	100x85x113mm	
Operation Temperature	-40°C~+50°C	
Protection Rating	IP67	
Interface	L4G24	
Ultimate Resolution	64	
Signal-to-Noise Ratio	28	
Phosphor	P43 (Green Phosphor)/P45 (White Phosphor)	

NIGHT VISION

ND-NV SERIES



SERIES	ND-NV	
model	ND-NV14	
focal length	26.8mm/ F1.28	
viewing angle	40°	
Visual magnification	1x	
focus range	250mm~ ∞	
Eyepiece visual acuity	-5~+5	
Exit pupil distance	25mm	
Exit Pupil	14mm	
LED indicator	nfrared auxiliary lighting/flip up screen/ strong light protection/low battery warning	
image intensifier	GEN 2+ (≥ 64lp/mm)	
Like tube compatibility	MX10160 contact, NNVT 3-wire	
power supply	1 AA battery	
endurance	20h	

SERIES	ND-NV	
fill light	850nm	
Strong light protection	Support	
Power off when flipping up	Support	
pilot lamp	Support	
Weight (excluding battery)	≤ 286g	
size	170×74×53mm	
operation temperature	-40°C ~ +50°C	
protection grade	IP67	
interface	2-M3	
limiting resolution	64	
Signal to Noise Ratio	28	
Phosphor	P45 (white phosphorus)	

LASER RANGFINDER

Valiant SERIES



Valiant
6x
20mm
914 m
731 m
457 m
4.5m
±1m @100m

SERIES	Valiant	
Maximum Angle Reading	± 60°	
Field of View	114m/1000m (6.5°)	
Eye Relief	15mm	
Battery Type	CR2	
Battery Life	~5000 Range Cycles	
Dimensions	96x74.6x35mm	
Weight w/ Battery	156g	

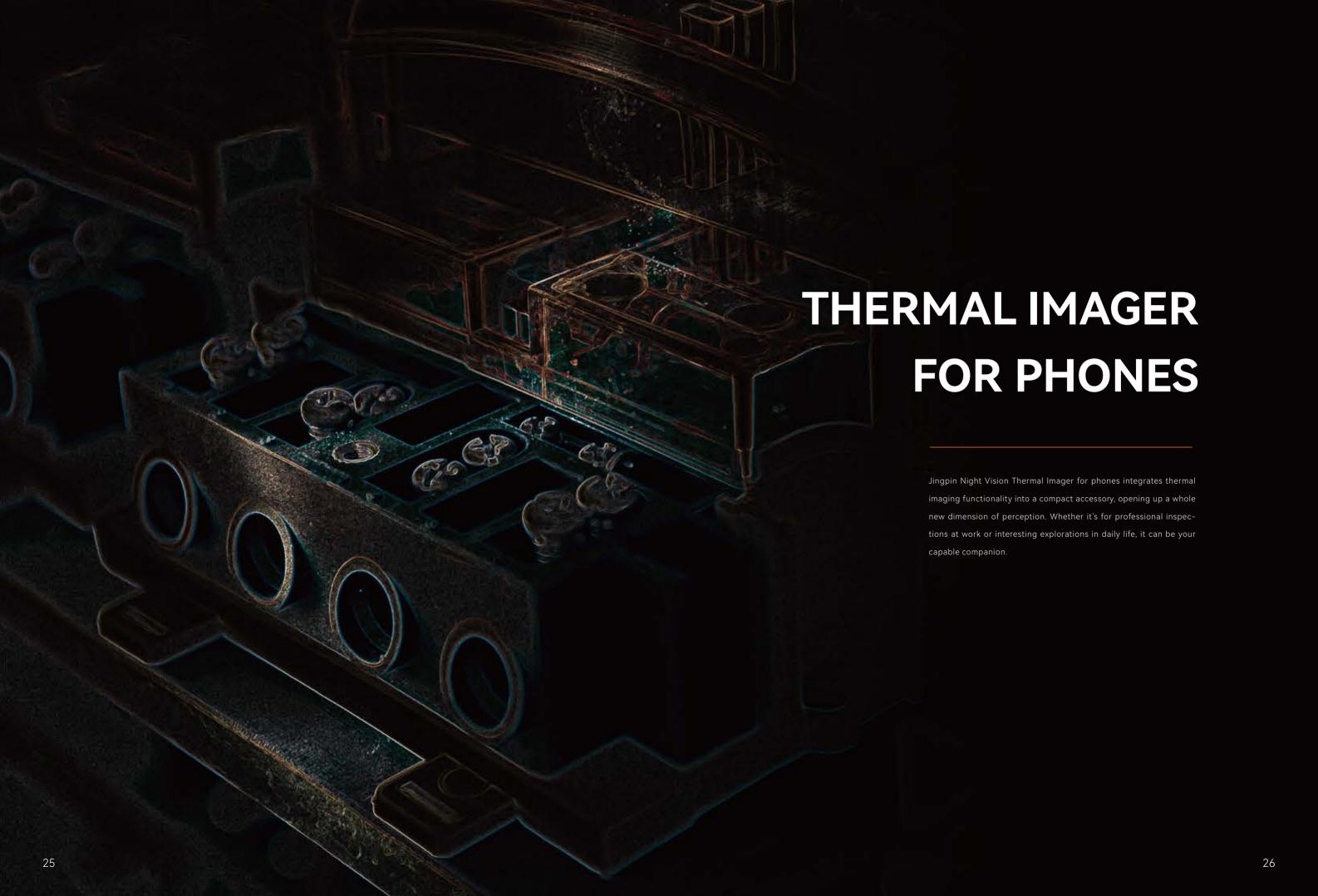
LASER RANGFINDER

Heroic Series



SERIES	Heroic	
	Effective : 5-2286m	
Measure Range	Non Reflective : 2286m	
Measure Range	Reflective : 1828m	
	Deer/Game : 1189m	
Magnification	10x	
Deer Range	5m - 2286m	
Accuracy	±1m (<300m); ±2m (300m - 1500m)	
Angle Range	±60°	
Display Type	Red OLED	
	THE RESIDENCE OF THE PARTY OF T	

SE	RIES	Heroic
FOV	m@1000m	102
FUV	Angular	5.8°
Ex	it Pupil	4.2mm
Еу	e Relief	14mm
Min. Fo	cus Distance	6m
Ocular	Adjustment	±5
В	attery	CR2
V	Veight	705g
Din	nensions	160.8x136.8x63mm

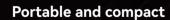


THERMAL IMAGER FOR PHONES

Petite Series









Multiple pseudo-colors





Plug-and-play



Applicable to multiple scenarios



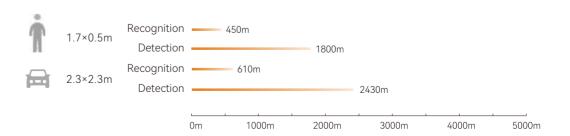
Hotspot tracking



Supports Android 7.0 and above

SERIES	PETITE	
Product Categories	PT-Q19	
Resolution	640×512	
PixelsSize	12μm	
Field of View	22.74°×18.26°	
Frame Rate,Hz	25Hz	
NETD	≤50mk@25°C,F1.0	
MRTD	≤400mk@25°C,F1.0	
Operation Temperature	-20°C ~ +50°C	
Power Wastage	<1W	
Weight	< 53g	
Dimension	27.5×27.5×46mm	
Support System	Android 7.0 and above	
Image Enhancement	Digital detail enhancement	
Image Correction	Manual	
Pseudo-color	Whitehot / Blackhot / Rainbow/ Iron / Red Hot	
Secondary Development	Provide SDK development kit	
Reticle	Support	
Hot Tracking	Support	
Video Saving	Support photo taking and video recording functions	
Software Update	Support online software update function	

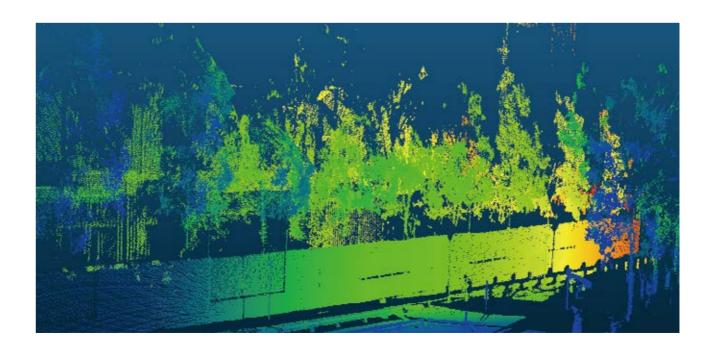
Operating distance







SERIES	CS192	
Wavelength	905nm	
Detection Rang	180m @10%target / 250m @ maximum	
Vertical Equivalent Beam	192 lines	
Horizontal Beam	1400 lines	
FOV	Horizontal: 140° Vertical: 20°	
Resolution	0.1(H) x 0.1(V)	
Laser Divergence Angle	1.3mrad	
Frame Rate	10Hz/20Hz	
Points/Sec	2.6Million Points @10Hz	
Supply Voltage	9~36Vdc	
Power Consumption	10W	
Interface	Gigabit Ethernet Port	
Protection Rating	IP69K / IPX9K	
Dimensions	140 x 110 x 42mm	
Work Temperature Range	-40℃ ~125℃	



INTELLIGENT IN-VEHICLE AI SYSTEM (5.5-INCH SCREEN) **IVS Series**



All-weather perception



Ultra-long-range night vision



HD image quality



Intelligent early warning



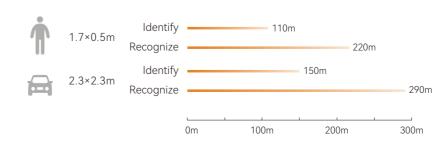
Multi-purpose device



Human-machine interaction

SERIES	IVS	
Product Name	Intelligent In-Vehicle AI System	
Product Model	IVS05-Q09	
Туре	Uncooled VOx Microbolometer	
Resolution, pixels	640×512/12μm	
Spectral Band	8~14μm	
Frame Rate,Hz	25Hz	
Objective Lens	9mm/6.6mm	
Field of View	H40°/H39°	
Recognition Range (Human1.7m)	200m/150m	
Recognition Range (Car2m)	250m/200m	
Display	5.5"LCD 1080*2160	
Interface	GMSL/FAKRA/Type-C	
Wi-Fi Transmission	Wi-Fi	
External Power Supply	Type-C (5V 3A) / 5000mAh	
Power Wastage	≤ 15W	
Protection Rating	IP67(Thermal Camera)	
Operation Temperature	-20 °C ~+80 °C	
Weight	≤ 600g	
Dimensions	170*88*19mm	
Defrosting function	Supports	
Intelligent recognition	Supports	
Camera protection window	Front of vehicle installation (9mm) or Roof installation (6.6mm)	

作用距离



INTELLIGENT IN-VEHICLE AI SYSTEM (4-INCH SCREEN) **IVS Series**









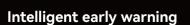
4G module reserved

Ultra-long-range night vision

HD image quality







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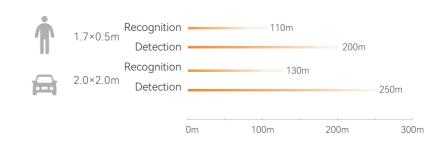
Multi-purpose device



Human-machine interaction

SERIES	IVS	
Product Name	Intelligent In-Vehicle AI System	
Product Model	IVS4G-Q09(06)	
Detector Parameters		
Туре	Uncooled VOx Microbolometer	
Resolution, pixels	640×512/12μm	
Spectral Band	8~14μm	
Frame Rate,Hz	25Hz	
Optical Parameters		
Objective Lens	9mm/6.6mm	
Field of View	H40°/H39°	
Recognition Range (Human 1.7m)	200m/150m	
Recognition Range (Car 2m)	250m/200m	
Device Information		
Display	4"LCD 720*720	
Interface	GMSL/FAKRA/Type-C	
Wi-Fi Transmission	Wi-Fi	
External Power Supply	Type-C (5V 3A)	
Power Wastage	≤15W	
Protection Rating	IP67(Thermal Camera)	
Operation Temperature	-20 °C~+60 °C	
Host Weight	≤400g	
Dimensions	96*92*18mm	
Smart recognition	Supports	
Thermal camera installation options (choose one)	Front of vehicle installation (9mm) or Roof installation (6.6mm)	

| Operating distance







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INTELLIGENT IN-VEHICLE AI SYSTEM (10-INCH SCREEN)





Intelligent early warning



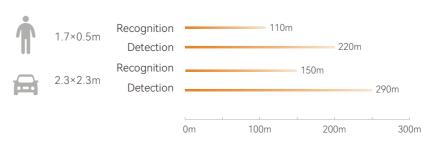
Multi-purpose device



Human-machine interaction

SERIES	IVS	
Product Name	Intelligent In-Vehicle AI System	
Product Model	IVS10G-Q09(06)	
Detector Parameters		
Туре	Uncooled VOx Microbolometer	
Resolution, pixels	640×512/12μm	
Spectral Band	8~14μm	
Frame Rate,Hz	25Hz	
Optical Parameters		
Objective Lens	9mm/6.6mm	
Field of View	H40°/H39°	
Recognition Range (Human 1.7m)	200m/150m	
Recognition Range (Car 2m)	250m/200m	
Device Information		
Display	10"LCD 1280*800	
Interface	GMSL/FAKRA/Type-C	
Wi-Fi Transmission	Wi-Fi	
External Power Supply	Type-C (5V 3A)	
Power Wastage	≤15W	
Protection Rating	IP67(Thermal Camera)	
Operation Temperature	-20 °C~+60 °C	
Host Weight	≤820g	
Dimensions	252*245*30mm	
Smart recognition	Supports	
Thermal camera installation options (choose one)	Front of vehicle installation (9mm) or Roof installation (6.6mm)	

Operating distance





INFRARED PANORAMIC RADAR

ESSD Series









360° panoramic view

Multi-target trajectory









HD image quality



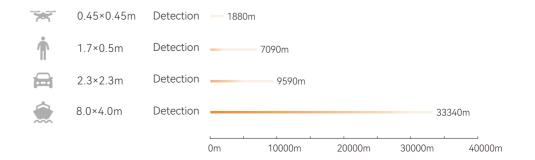
Plug-and-play



High reliability

SERIES	ESSD	
Model	ES-IR-Q75	
Туре	Uncooled VOx Microbolometer	
Resolution, pixels	640×512	
Spectral Band	8~14μm	
Objective Lens	75mm	
Panoramic Image Resolution	39200×512	
Horizontal field of view	360°	
Elevation Field of View	5.9°	
Pitch Angle Adjustment Range	-35°~+20°	
Detection Range(UAV)	1880m	
Detection Range (Human)	7090m	
Detection Range(car)	9590m	
Detection Range(boat)	33340m	
Electricity Supply	DC24V	
Average Power Consumption	<50W	
Image Data Output Interface	RJ45 Network Port	
Protection Rating	IP65	
Operation Temperature	-20°C~+70°C	
Weight	<13Kg	
Dimensions	395x340x402mm	
Usage Scenarios	Factories, Ports, Key Sites, Airports, Border Security	

Operating distance



INFRARED PANORAMIC RADAR

ESPT Series











All-time



Multi-target trajectory



HD image quality



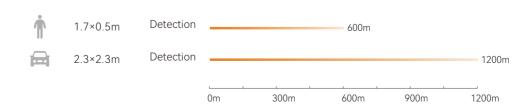
Plug-and-play

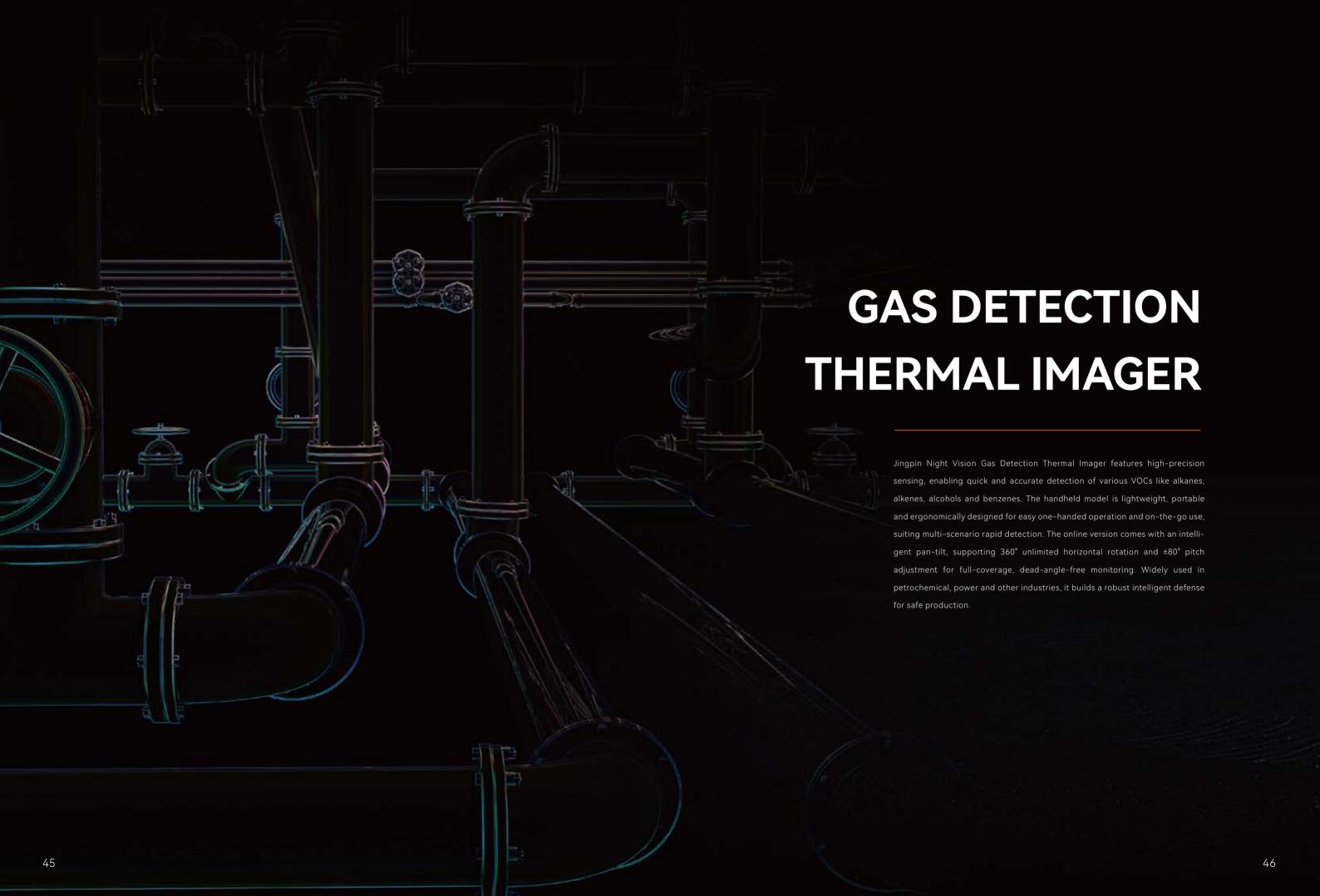


High reliability

SERIES	ESPT	
Model	ESPT-Q19	
Туре	Uncooled VOx Microbolometer	
Resolution, pixels	640×512	
Spectral Band	8~14μm	
Objective Lens	19mm	
Panoramic Image Resolution	5 million 100 thousand	
Horizontal Field of View	360°	
Vertical Field of View	18.4°	
Scan Frequency	0.5Hz	
180° Sector Scan Rate	1Hz	
Detection Range (Human)	600m	
Detection Range (Car)	1200m	
Electricity Supply	DC24V/POE	
Average Power Consumption	<30W	
Image Data Output Interface	RJ45 Network Port	
Wireless Interface	4G	
Audio Interface	AUDIO	
Protection Rating	IP66	
Operation Temperature	-20°C~60°C	
Weight	≤2.2Kg	
Dimensions	122x122x166mm	

Operating distance





GAS DETECTION THERMAL IMAGER

HGD Handheld Type









Lightweight and easy to carry

Automatic focusing

The body design refers to GJB150A











Low image delay



Core components are independently designed

FUNCTION	ТҮРЕ	PARAMETER	INDEX
		Detector	CMOS
	Data atau na sana atau	Resolution	2594 x 1944
	Detector parameters	Pixel Size	2.0μm
		Frame Rate	30Hz
Vicible Liebt		Aperture (F)	F2.5
Visible Light		Focal Length	3.5~9mm
	0		Diagonal 93°(W)~39.4°(T)
	Optical parameters	FOV	Horizontal 83°(W)~32°(T)
			Vertical 51°(W)~20°(T)
		Focusing Type	Manual/Automatic
		Photosensitive materials	InAsSb
		Resolution	640 x 512
	_	Pixel Size	15µm
	Detector parameters	Spectral Band	3.2μm~3.4μm
		NETD	≤25mK
Infrared		Frame Rate	25/30Hz
		Aperture (F)	F1.2
	Optical parameters	Focal Length	25mm
		FOV	22.3°× 17.7°
		Focusing Type	Manual/Automatic
		Display Screen	5 inch LCD, Resolution1920x1080, rotatable
Display		Viewfinder (eyepiece)	0.39 inch OLED, Resolution1024×768, rotatable
		Display Interface	HDMI
		Range	-20°C~350°C
Temperature Measurement		Mode	SUPPORT POINT/REGIONAL TEMPERATURE MEASUREMENT, AUTOMATICALLY TRACK THE HIGHEST TEMPERATURE POINT, SET THE HIGHEST AND LOWEST TEMPERATURE, ISOTHERM, TEMPERATURE DIFFERENCE, SUPPORT TEMPERATURE ALARM
ricusurement		Accuracy	±1°C (0~100°C) ±2%Range (-20~0°C or > 100°C)
	key	power switch	Equipment power switch control
system	communication	USB	TYPE-C
		Fill Light	White Light Fill Light
		Laser Indicator	II Class,1mW/635nm Red
		GPS	Support
Others		Memory	Internal 32GB
		Battery	Rechargeble Li-ion
		Operating Time	≥2h
		Fixing Method	Support tripod fixation
Dimension	complete machine	Dimension	374 x 159 x 180.8mm
Weight	complete machine	Weight	≤ 2050g
Gas leak detection	Detection Type	Detectable gas types	METHANE, ETHANE, PROPANE, BUTANE, PENTANE, HEXANE, HEPTANE, OCTANE, ETHYLENE OXIDE, PROPYLENE OXIDE, ETHYLENE, PROPYLENE, 1-BUTENE, METHANOL, ETHANOL, BUTANOL,ETHYLENE GLYCOL, ISOPROPANOL, ETHER, PROPIONALDEHYDE, BENZENE, TOLUENE, ETHYLBENZENE, ANILINE, ETC.

GAS DETECTION THERMAL IMAGER

NGD Online Type









360° Horizontally and ±80° in pitch

Automatic focusing

Body design refers to GJB150A





online monitoring



Low image delay and long-distance detection



Core components are independently designed

FUNCTION	TYPE	PARAMETER	IND	EX
	Camera parameters	Detector	CMC	OS
		Electronic shutter	Automatic (1/25 Second	d to 1/100000 secon
		Auto Iris	DC+HALL driver	
		Resolution	2688 x 1520	
Visible Light		Frame Rate	25Hz	
		Aperture (F)	F1.61~ F5.19	
		Focal Length	6.6~264mm (Maximul	m 40x optical zoom
	Optical	Zoom	4 Seconds (Optical, w	ide-angle~telephot
	parameters	Close-up distance	100mm~1500mm (wid	de-angle~telephoto
		Horizontal field of view angle	57.62 °~2.95 ° (wide	-angle~telephoto)
		Light-Sensitive Material	InAs	sSb
		Resolution	320 x 256	640 x 512
		Pixel Size	30µm	15µm
	5	Spectral Band	3.2μm ~	3.5µm
	Detector - parameters	NETD	≤ 15mk	≤ 25mk
Infrared		Frame Rate	25Hz	
		Cooling time	≤3.5min @ 23°C	
		Cooling power consumption	≤ 19W @ 23 °C (peak) 、≤ 9W @ 23 °C (sta	
		Aperture (F)	F1	1.2
	Optical	Focal Length	30mm~ 90mm	
	parameters	FOV	18°~6°	
	\ /: I	Network	100M E	thernet
	Video interface	Interface type	Aviation plug	
Interface	Control interface	PTZ control interface	RS485 or 100Mbps Ethernet po	
interrace	Power interface	Supply Voltage	DC_36V	
	Overall Power Consumption	Power consumption (25 °C/24V)	≤ 18	30W
		Start Time	≤ 7	min
		Service life	> 5 y	/ears
Dimension and Weight		operation temperature	-20℃ ~55℃	
	Conoral status	storage temperature	-25°C ~60°C	
Jimension and Weight	General status	Working humidity	0~99%	
		Protection grade	IP6	66
		Battery certification	CE/FCC	
Dimensions		Size	450 x 450 x 500mm	
Others		Fill Light	Support visible light supplementary lighting	



The core components of Jingpin Night Vision's long-wave uncooled imaging module, including the lens, detector, and structure, are all independently developed. It adopts a highly reliable infrared detector and has excellent shock resistance and impact prevention capabilities. Jingpin Night Vision's uncooled core is small in size and low in power consumption. It supports customization of multiple interfaces and offers optional infrared lenses of various specifications. It is widely used in fields such as vehicle-mounted night vision security monitoring, outdoor sports, fire rescue, and law enforcement search and rescue.

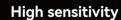
IRVOTEX

LONG-WAVE UNCOOLED THERMAL CAMERA CORE

Fireye Series









Small size



Low power consumption





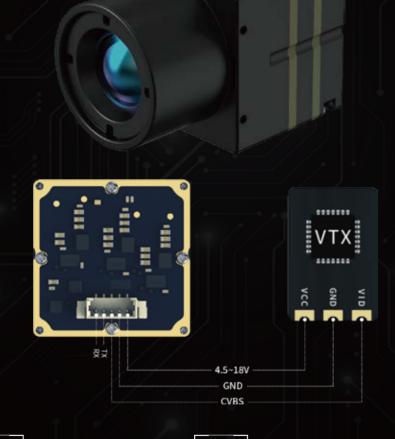


High frame rate

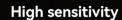
SERIES	Fireye		
Туре	Uncooled VOx Microbolometer		
Resolution	384×288 640×512		
PixelsSize	12	2μm	
NETD	≤ 50mk, @	0F1.0, 300K	
Frame Frequency	≤ 5	50Hz	
Spectral Band	8 ~	14μm	
Image Correction	Shutter/Shutte	rless (Selectable)	
Brightness Contrast Adjustment	Auto/	Manual	
Digital Zoom	1	-8x	
Reticle	Show/H	ide/Move	
Pseudo-color	Whitehot / Blackho	t / Iron Red/ Rainbow	
Image Processing	Non-uniformity Correction, Digital Filtering for Noise Reduction, Digital Detail Enhancement		
Power Supply Protection	Supports Over-voltage, Under-voltage and Reverse Connection Protection		
Power Input	DC 3.8	3 ~ 5.5V	
Power Consumption	≤ 1W		
Vibratory	6.06g,Random Vibration, All Axial Directions		
Reliability	200g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions		
Humidness	5 ~ 95%, No	on-condensing	
Operation Temperature	-20°C~+55°C		
Storage Temperature	-55°C~+70°C		
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)	
lAnalog Video	CVBS		
Digital Video	BT.656/LVDS/MIPI/Cameralink/SDI/ETH (Selectable)		
Communication Interface	UART/I2C		
Weight	Shutter ≤ 22.3g / Shutterless ≤ 20g (Lens Free)		
Dimensions	25mm X 25mm X 19mm (Lens Free)		

LONG-WAVE UNCOOLED THERMAL CAMERA CORE

Fireye V2 Series





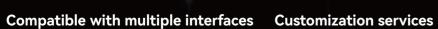






MINI

Small size





Low power consumption

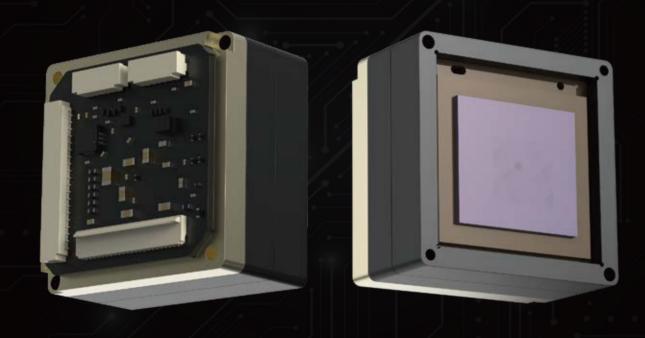


High frame rate

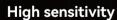
SERIES	Fireye V2	
Туре	Uncooled VOx Microbolometer	
Resolution	384×288	640×512
PixelsSize	12μm	
NETD	≤ 50mk, @F1.0, 300K	
Frame Frequency	≤ 50Hz	
Spectral Band	8 ~ 14μm	
Image Correction	Shutter/Shutterless (Selectable)	
Brightness Contrast Adjustment	Auto/Manual	
Digital Zoom	1-8x	
Reticle	Show/Hide/Move	
Pseudo-color	Whitehot / Blackhot / Iron Red/ Rainbow	
Image Processing	Non-uniformity Correction, Digital Filtering for Noise Reduction, Digital Detail Enhancement	
Power Supply Protection	Supports Over-voltage, Under-voltage and Reverse Connection Protection	
Power Input	DC 3.8 ~ 5.5V	
Power Consumption	≤ 1W	
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	
Objective Lens	9.1mm, F1.0	
Focusing Method	Manual	
Field of View	28.9° × 21.62° (9.1mm)	49.1° × 38.74° (9.1mm)
Analog Video	CVBS	
Communication Interface	UART	
Weight	≤ 40g±2g (With Lens)	
Dimensions	25mm X 25mm X 42mm (With Lens)	

LONG-WAVE UNCOOLED THERMAL CAMERA CORE

Fireye A Series









Small size



Low power consumption











High frame rate

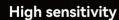
SERIES	Fire	Fireye A	
Туре	Uncooled VOx Microbolometer		
Resolution	384×288	640×512	
PixelsSize	12	ım	
NETD@25'C	≤ 50mk@300K		
Frame Frequency	≤ 50Hz		
Spectral band	8 ~ 14μm		
Analog Video	PAL or NTSC		
Interface Board	BT656 (20P 0.5mm pitch FPC or 27P 0.3mm pitch FPC selectable)		
Digital Video	BT656 Line by Line Output		
Communication Interface	UART (TTL 3.3V)		
DC Voltage Range	4.5V ~ 18V		
Typical Voltage DC	12V		
Typical Power@25℃	≤0.9W (PAL On)	≤0.72W (PAL Off)	
Image Correction	Shutter/Shutterless(Selectable)		
Lightness Contrast	Manual / Auto		
Gain Control	Manual / Semi-Auto / Auto		
Polarity	Whitehot / Blackhot / Red Hot / Pseudocolor / Sky / Edge Conversion		
Image Enhancement	On / Off		
Image Denoising	Digital Filtering Denoising		
Reticle	Display / Hide / Move		
Vibratory	600g, 4ms, Back Peak Sawtooth, 3 Axes, 6 Directions		
Operation Temperature	-40°C ~+60°C		
Storage Temperature	-50°C ~+70°C		
Humidity	5%~95%, Non-condensing		
Weight	≤21g (Without Lens)		
Dimensions	26.5 × 26.5 × 17.56mm (Without Lens)		

LONG-WAVE UNCOOLED THERMAL CAMERA CORE

Spiritpupil Series









Small size



Low power consumption





Compatible with multiple interfaces
Customization services



High frame rate

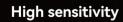
SERIES	SPIRITPUPIL	
Туре	Uncooled VOx Microbolometer	
Resolution	640×512	
PixelsSize	12μm	
NETD	≤ 50mk, @F1.0, 300K	
Frame Frequency	≤ 50Hz	
Spectral Band	8 ~ 14μm	
Image Correction	Shutter/Shutterless (Selectable)	
Brightness Contrast Adjustment	Auto/Manual	
Digital Zoom	1-8x	
Reticle	Show/Hide/Move	
Pseudo-color	Whitehot / Blackhot / Iron Red/ Rainbow	
Image Processing	Non-uniformity Correction, Digital Filtering for Noise Reduction, Digital Detail Enhancement, Histogram Stretching	
Power Supply Protection	Supports Over-voltage, Under-voltage and Reverse Connection Protecti	
Power Input	DC 3.8 ~ 5.5V	
Power Consumption	≤600mW, @5V, 25°C	
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	
Objective Lens	9.1/13/19/25/35/50mm, F1.0	
Focusing Method	Manual	
Field of View	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	
Analog Video	CVBS	
Digital Video	BT.656/BT.1120/LVDS/MIPI	
Communication Interface	UART	
Weight	≤ 10g (Lens Free)	
Dimensions	21mm X 21mm X 9mm (Lens Free)	

MID-WAVE COOLED THERMAL CAMERA CORE

HT Series HOT Miniaturized Thermal Camera Core









Small size



Low power consumption





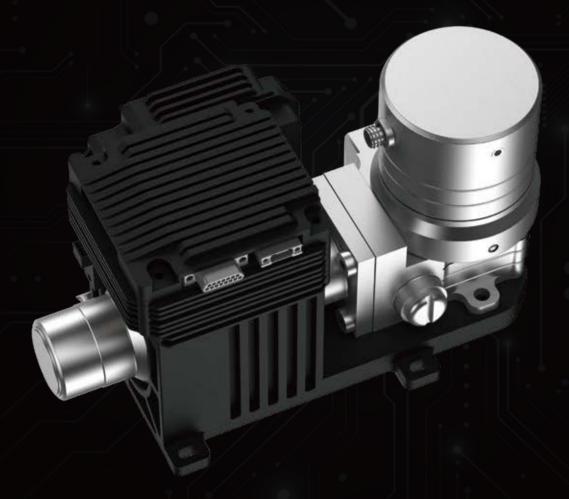


High frame rate

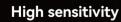
SERIES	HTE30	HTQ15
Туре	T2SL	
Resolution	320*256	640*512
PixelsSize	30μm	15µm
Spectral Band	3.7um	-4.8um
Aperture	F2/F4	4/F5.5
NETD@F4	<20)mk
Frame Frequency	25Hz/30	Hz/50Hz
Brightness Adjustment	Manual	
Contrast Adjustment	Manual	
Black and white hot switching	Support (default white hot)	
Black and white hot switching	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	
Dimensions	69×67×44mm	
Weight	<340g	
Power Supply	DC12V±1V	
Power Consumption	Initial Power:≤18W@23°C Stable Power:≤8W@23°C	
Analog Interface	PAL	
Digital Interface	Cameralink/SDI/CML/BT1120/HDMI/RJ45/USB/MIPI	
Communication Interface	RS422; Baud rate configurable system; Default 115200bps	
Operation Temperature	-40°C ~+60°C	
Storage Temperature	-45°C ~+65°C	
Random Vibration	5.98g	
Shock Resistance	50g/11ms, Half sine wave, in the X, Y, and Z axis directions	
Reliability	MTTF@63 2% ≥ 20000h	

MID-WAVE COOLED THERMAL CAMERA CORE

SM Series Scorpio Cooled Thermal Camera Core









Small size



Low power consumption







Compatible with multiple interfaces
Customization services





High frame rate

SERIES	SMQ15-R	
Туре	MCT	
Resolution	640*512	
PixelsSize	15μm	
Spectral Band	3.7um-4.8um	
Aperture	F4/F5.5	
NETD@F4	<20mk	
Frame Frequency	25Hz/30Hz/50Hz	
Brightness Adjustment	Manual	
Contrast Adjustment	Manual	
Black and white hot switching	Support (default white hot)	
Black and white hot switching	1/2/4/8	
Image Processing	Non-uniformity Correction/ Bad Pixel Detection and Correction/Digital Filtering for Noise Reduct / Contrast Stretching/ Digital Detail Enhancement/Brightness Adjustment/ Image Compression	
Image mirroring	Horizontal/Vertical/Diagonal	
Dimensions	144mmX80mmX79mm	
Weight	<820g	
Power Supply	DC24V±1V	
Power Consumption	Startup power consumption: ≤ 16W@23 Stable power consumption at °C: ≤ 13W@23 °	
Analog Video	PAL	
Digital Video	Cameralink/SDI/CML/BT1120/HDMI/RJ45/USB/MIPI	
Communication Interface	RS422; Baud rate configurable system; Default 115200bps	
Operation Temperature	-40°C ~+60°C	
Storage Temperature	-45°C ~+65°C	
Random Vibration	5.98g	
Shock Resistance	50g/11ms, Half sine wave, once in each of the X, Y, Z axes, three axes, and six direction	
Reliability	MTTF@63 2% ≥8000h	