



Product Model Brochure

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Thermal Imaging Front-Mounted Scope



This thermal imaging front-mounted scope is specifically designed for all-weather missions. It can operate continuously day and night, with exceptional ability to penetrate smoke, dust, rain and snow. As a front-mounted in-line device, it can seamlessly work with white-light optics to simultaneously complete target searching, tactical observation and precise aiming. It is widely applicable to harsh fields such as anti-terrorism and stability maintenance, law enforcement patrols, outdoor hunting and border security.



High penetration



Perfect match



Multitasking



High-definition display



Functional Features

- ◆ Rapid Front-Mounted In-Line Installation, No Zeroing Required
- ◆ 12 μ m High-Sensitivity Vanadium Oxide Detector
- ◆ 1024 \times 768 OLED High-Definition and Delicate Display
- ◆ Supports WIFI Real-Time Image Transmission, Photo Taking and Video Recording
- ◆ 800G High Shock Resistance, IP67 High Protection Level
- ◆ Multiple False Color Modes to Adapt to Switching Between Various Scenarios

Indicator Name	Indicator Parameter
Product Name	PCQ2450A
Detector Type	Uncooled vanadium oxide
Resolution, Pixels	640*512
Pixel Size, μm	12 μm
Thermal Sensitivity, mK	35 \leq mk (@25 °C, F#=10)
Frame Rate, Hz	50fps
Objective Lens Size, mm	50mm/F1.0
Optical Magnification, \times	1x
Minimum Focus Distance, m/yd	5m
Exit Pupil Distance, mm	7mm
Exit Pupil Diameter, mm	18mm
Field of View (H \times V), °	8.7°*7.0°
Detection Distance, m (Target Size: 1.7m \times 0.5m)	1100m
Detection Distance, m (Vehicle: 2.3m \times 2.3m)	3000m
Display Type	OLED
Display Resolution, Pixels	1024*768
WIFI Frequency, GHz	2.4GHz
Video/Photo Format	MP4/JPEG
Memory Capacity, GB	32GB
Battery Voltage, V	3.7v
Battery Type * Quantity/Capacity, mAh	18650*1/cr123*2 in-serial
External Power Supply, V	5V2A
Operating Duration (at T=22 °C), h	>5h
Storage Temperature, °C	-20°C ~ +55°C
Storage Temperature, °C	-40°C ~ +70°C
Body Material	Aluminum
Waterproof Rating (IEC 60529)	IP67
Recoil, G/ms	800G
Product Dimensions (Length \times Width \times Height), mm/in	154*86*76mm / 6.06in*3.39in*2.99in
Product Weight (without battery), g/oz	518g/18.27oz



Infrared Ranging Sight

The Lightweight Thermal Imaging Series Rifle Scope is specifically engineered for all-weather tactical applications. Boasting exceptional fog and smoke penetration capabilities, it enables seamless day-and-night target searching, observation, and precise aiming. With an ultra-lightweight body (starting from just 400g), the rifle scope integrates a 1024×768 high-definition display, 32GB storage, and a high-precision rangefinder (accuracy < 1m). Powered by an 18500 battery, it delivers over 5 hours of continuous operation. This versatile equipment is widely suitable for mobility-focused fields with weight sensitivity requirements, such as counter-terrorism & law enforcement, outdoor hunting, and security patrols.



High penetration



Multitasking



High-definition display



Storage space



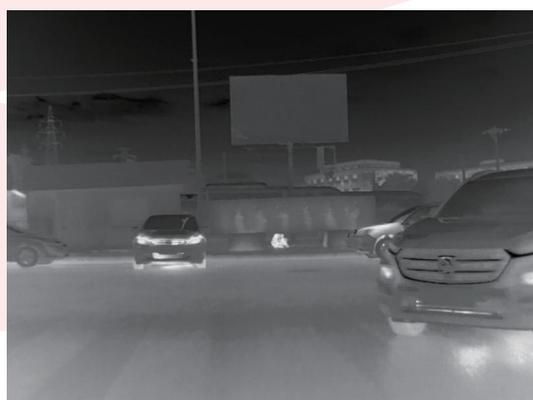
High-precision ranging



» Functional Features

- ◆ Compact and lightweight body design, weighing as little as 400 grams for ultimate portability.
 - ◆ 12μm detector with NETD ≤ 20mK, delivering exceptional thermal sensitivity.
 - ◆ Integrated high-precision ranging function, with a maximum range of 1000 meters and accuracy within 1 meter.
 - ◆ 1024×768 OLED high-definition display, presenting delicate and sharp image quality.
- Supports smooth electronic zoom from 1x to 8x, enabling flexible tactical observation.
- ◆ F1.0 large-aperture lens, ensuring sufficient light intake in low-light environments.

Detector	Indicator Parameter
Product Name	PCH2535B
Detector	384X288/12μm
NETD	≤20mK
Objective lens	35mmF1.0
Detection range (person)	>800m
Identification range (human)	>400m
Field of view	≥7.5°×5.5°
Focusing range	5m~∞
Electronic magnification	3.4×
Electronic magnification	1×、2×、4×、8×
Visual adjustment range	-5SD ~ +5SD
Exit pupil distance and diameter	≥50mm; 6mm
Image polarity	White hot, black hot, red hot, fake color
Working hours	≥5h
Power supply	1 piece of 18500 lithium battery
Display resolution	1024×768@7.8um (0.39inch)
Built-in storage	32G
Operating temperature	-20oC~+50oC -20oC to +50oC
Weight(including battery and bracket)	≤460g
Size	162×79×63mm (Length×Width×Height)
Range and accuracy of distance measurement	> 1000m ; < 1m



Integrated Thermal Imaging Scope

Guided by the modular integration design philosophy, this product integrates multiple sensors such as infrared imaging, image transmission, image storage, and eyepiece display and human-computer interaction modules into an integrated compact observation and aiming device. It supports functions such as power control, infrared image adjustment, and image transmission. When used with internationally standard FAST helmets, the display device connects to the square slot on the front of the FAST helmet via a bracket, forming a fixed connector for use.



Infrared imaging



Image transmission



Image storage



Eyepiece display



Human-computer interaction



Functional Features

- ◆ Extremely lightweight body design, flexible and easy to carry
- ◆ 12 μ m detector with NETD \leq 20mK, ultra-high thermal sensitivity
- ◆ Built-in high-precision laser rangefinder, maximum range over 1000 meters
- ◆ 1024 \times 768 OLED high-definition display, sharp image quality
- ◆ Supports 1x-8x smooth electronic zoom for precise target locking
- ◆ Multiple image false color modes, adaptable to complex scenarios around the clock

Indicator Name	Indicator Parameter
Product Name	PBH2450A
Detector	640×512@12μm
Objective Lens	50mm/F1.0
Frame Rate	50Hz
Optical Magnification	2.8×
Electronic Magnification	1× ~ 8×
Diopter Adjustment Range	-5SD ~ +5SD
Exit Pupil Distance	≥30mm
Image Polarity	White-hot, black-hot, red-hot, fusion
Operating Duration	≥8h
Power Supply	2×18650 lithium batteries
Display Resolution	1024×768@7.8um
Overall Dimensions	150×63×94(mm)
Operating Temperature	-20°C~+50°C
Storage Temperature	-50°C~+70°C



TUBE Series Thermal Imaging Scope



The TUBE Series Thermal Imaging Scope inherits the classic tubular design of traditional white-light optics. It can be directly mounted using standard scope rings, perfectly aligning with users' operating habits. Its greatest advantage lies in ultra-long battery life: the built-in battery supports continuous operation for ≥ 12 hours, and an external battery can provide an additional ≥ 5 hours of power, easily meeting the needs of all-night missions. The entire device features IP67 waterproof rating and adapts to harsh environments ranging from -20°C to $+55^{\circ}\text{C}$, making it an ideal equipment for professional hunting and long-term observation.



Easy to install



Long battery life



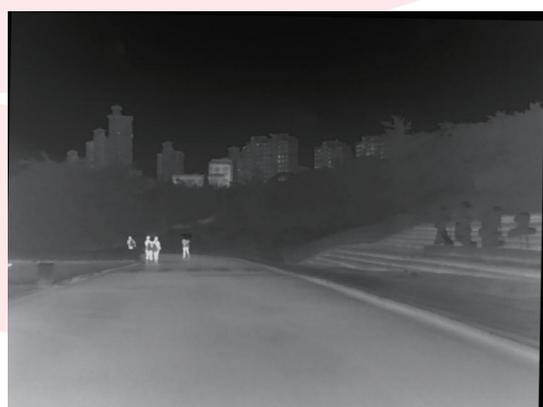
IP67 waterproof



>> Functional Features

- ◆ Image Functions: Image brightness, image contrast, picture-in-picture
- ◆ Image Polarity: White-hot, Black-hot
- ◆ Image Correction: Manual, Automatic
- ◆ Image Magnification: 1x, 2x, 4x, 8x
- ◆ Network Function: WiFi
- ◆ Photo & Video: Photo taking, Video recording
- ◆ Reticle: Style, Color
- ◆ Zeroing Function: Zeroing supported
- ◆ Other Functions: Time display, Recoil recording

Indicator Name	Indicator Parameter			
Product Name	PC2135A	PC2150A	PC2135B	PC2150B
Detector	384×288@12 μm		640×512@12 μm	
Frame rate	50Hz			
NETD	≤40 mk			
Display resolution	1024×768			
Lens	35mm/F1.0	50mm/F1.0	35mm/F1.0	50mm/F1.0
FOV (±0.3°)	7.5°×5.6°	5.2°×3.9°	12.5°×10°	8.7°×7°
Exit pupil diameter	≥5 mm			
Distance of exit pupil	≥60 mm			
Visibility adjustment range	-5SD ~ +5SD			
Dividing adjustment range(Up, down, left and right)	≥15 mil			
Adjustment amount of each division	0.123mil	0.205mil	0.123mil	0.143mil
Built-in battery life (fully charged at room temperature without plug-in)	≥10 h			
Waterproof	IP67			
Operating temperature	-20°C ~ +50°C			
Storage temperature	-20°C ~ +70°C			
Total length (adjustable according to the actual situation)	≤430 mm			
Weight (adjustable according to the actual situation)	≤1,100 g			



Handheld Thermal Imager

This portable handheld thermal imager features a compact size, specifically designed for flexible outdoor observation and search-and-rescue operations. It is equipped with a 384×288/12μm detector and a 15mm F1.0 lens, boasting a wide field of view of 17° ×13°—ideal for rapid large-scale target searching. The device is fitted with a 1024×768 OLED high-definition screen, supports 1x-4x electronic zoom, and delivers delicate image quality. It uses universal 18650 lithium batteries, providing 6 hours of battery life with easy replacement. With an IP67 waterproof rating and the ability to operate in a wide temperature range from -20°C to +50°C, it can withstand the challenges of harsh environments.



Small volume



Wide angle



High-definition display



Electronic zoom



IP67 waterproof



Functional Features

- ◆ 384×288 high-definition thermal imaging detection, clearly presenting details in the dark.
- ◆ 1024×768 OLED high-definition screen, with high image contrast for bright-as-day observation in dark environments.
- ◆ 15mm/F1.0 large-aperture lens, combined with a wide 17°×13° field of view.
- ◆ Lightweight and portable design, easy to hold with one hand, enabling agile movement like a shadow during field reconnaissance.
- ◆ A single 18650 battery provides 6 hours of battery life, supporting uninterrupted long-term exploration without power concerns.

Indicator Name	Indicator Parameter
Product Name	PCH2425F
Electronic Zoom	1x-4x
Detector Resolution	384×288/12um
OLED Screen Resolution	1024×768
Objective Lens	15mm/F1.0
Field of View	17°×13°
Recognition Distance (for Human)	350m
Recognition Distance (for Vehicle)	960m
Exit Pupil Diameter	6mm
Exit Pupil Distance	15mm
Diopter Adjustment Range	-4SD ~ +4SD
Battery	1×18650 lithium battery
Operating Duration	6h
Waterproof Rating / Protection Class	IP67
Operating Temperature	-20°C~+50°C
Storage Temperature	-40°C~+70°C



Fusion Telescope

This innovative telescope adopts dual-channel fusion technology of infrared and low-light, combining the strong detection capability of thermal imaging and the high-detail restoration advantage of low-light night vision. It can accurately identify targets even in completely dark environments. The device is equipped with a 0.49-inch OLED display, supports 1x-4x electronic zoom, and has a wide field of view of $12.5^{\circ} \times 10^{\circ}$. Powered by 2 18650 batteries, it offers a battery life of ≥ 4 hours. With a total weight of approximately 0.9kg and an IP66 protection rating, it is an ideal equipment for all-weather tactical reconnaissance and search-and-rescue missions.



Accurate identification



Wide angle



High-definition display



Electronic zoom



IP66 waterproof



>> Functional Features

- ◆ 640x512 thermal imaging and 800x600 low-light dual detectors work in synergy, enabling seamless day-and-night switching.
- ◆ $12.5^{\circ} \times 10^{\circ}$ wide field of view, capturing the entire environmental situation without observation blind spots.
- ◆ 0.49-inch OLED high-definition screen, with distinct image contrast and sharp detail presentation like in daylight.
- ◆ Flexible diopter adjustment from -4 to +4, adapting to both eyes in seconds for comfortable and precise observation.
- ◆ Dual 18650 batteries provide ≥ 4 hours of battery life, supporting long-lasting power supply for field exploration.

Indicator Name	Indicator Parameter
Product Name	PCR2435A
Infrared	640x512
Low-Light	800x600
Field of View	12.5°x 10°
Focus	Manual
Detection Distance	Human (1.7×0.5m): 1200m
Recognition Distance	Human (1.7×0.5m): 400m
Memory Card	32G
Display Screen	0.49"OLED
Zoom	Electronic zoom 1x ~4x
Diopter Adjustment Range	-4 ~ +4 diopters
Battery	2×18650 lithium batteries
Continuous Operating Time	≥4h
Operating Temperature	-20°C~+50°C
Storage Temperature	-40°C~+60°C
Protection Level	IP66
Weight	≤0.9kg
Dimensions	≤ 168mm×140mm×65mm



Multi Functional Thermal Imager



Capable of working continuously day and night, with the ability to penetrate particles such as fog, smoke, and dust, and complete actions such as search, reconnaissance, aiming, and shooting. Mainly applicable to counter-terrorism, law enforcement, Hunting and other fields.



High penetration



Long battery life



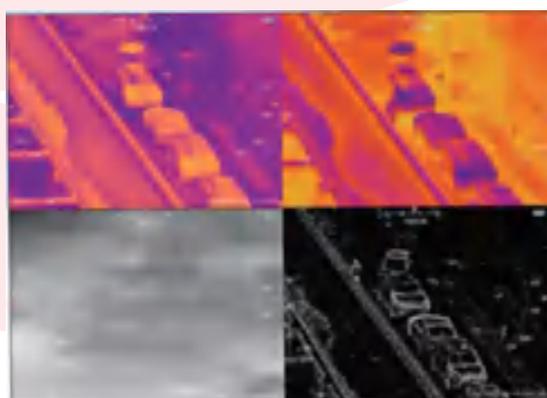
Multitasking



>> Functional Features

- ◆ Multiple colors to choose from
- ◆ Automatic color adjustment for dividing
- ◆ Handheld/fully automatic image enhancement mode
- ◆ High precision laser ranging function
- ◆ Laser red dot indication

Detector	Indicator Parameter
Product Name	PCH5835A
Recognition distance	Target and background temperature difference $\leq 6K$, visibility $\geq 8km$, recognition of upright pedestrians $\geq 1500m$
Magnification	1 × 、 2 × 、 4 × (Electronic magnification)
FOV	10.7°×8°
Exit pupil distance	50mm
Focal length	35mm optional(50/35/25/19)
Diopter	-5SD~ +3SD
Detector resolution	640×480
Display resolution	1024×768
Operating Duration	-40°C~ +50°C
Waterproof	Ip67
Power	cR123A battery
Video output	RS170 CCIR / PAL composite video
Working time	$\geq 6h$ (Normal temperature)
Weight	$\leq 480g$
Size	208mm×57mm×58mm



Monocular Night Vision Goggle

Monocular nightvision goggles, as a head mounted observation device, assist users in observing and identifying targets at night or in low light environments . Mainly used in fields such as security, wilderness exploration , hunting , etc.



Wearable



Small and lightweight



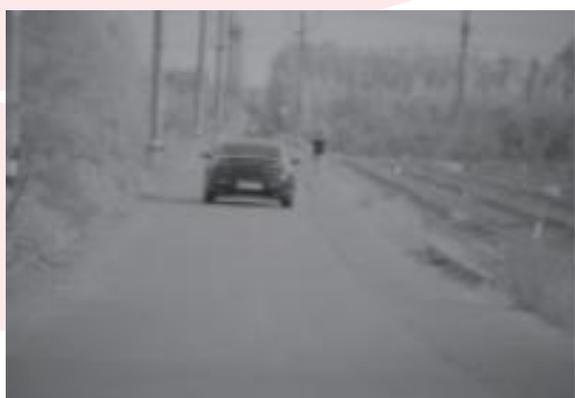
Multitasking



>> Functional Features

- ◆ small size、lightweight
- ◆ Handheld/helmet link
- ◆ Infrared assisted lighting in infrared mode under voltage indication
- ◆ swap left and right eyepieces for observation
- ◆ Battery reverse connection protection

Detector	Indicator Parameter
Product Name	PEL5825A
Recognition distance	No moon, identify pedestrians $\geq 100\text{m}$
Magnificationrate	1 \times
FOV	$\geq 25^{\circ} \times 18^{\circ}$
Focusing range	250mm ~ ∞
Diopter	-5SD ~ +3SD
Sensor resolution	800 \times 600
Display resolution	1024 \times 768
Battery type	18650 or 18500 battery
Continuous working time	$\geq 6\text{h}$ (Normal temperature)
Waterproof	IP67
Working temperature	-40 $^{\circ}\text{C}$ ~ +55 $^{\circ}\text{C}$
Storage temperature	-55 $^{\circ}\text{C}$ ~ +70 $^{\circ}\text{C}$
Weight	$\leq 180\text{g}$ (including battery)
Size	57mm \times 87mm \times 48mm



Binocular Fusion Night Vision Goggles (Digital)



The product is an advanced observation equipment specially designed for night or low-light environments. The product adopts binocular vision and image fusion technology to provide clear image. The product is mainly used for hunting, exploration, law enforcement and security.



Small volume



Binocular observation



Clear image



>> Functional Features

- ◆ Binocular vision
- ◆ Image fusion
- ◆ High-sensitivity detector, contour tracing
- ◆ Stroke, light weight, comfortable to wear, Waterproof & Dustproof

Detector	Indicator Parameter
Product Name	PER5825B
Recognition distance	No moon ,Low-light>120m ;IR>200m Fusion>200m(forperson)
Magnificationrate	1 ^x
FOV	Low light>50°;IR≥24°x18
Focusing range	250mm ~ ∞
Diopter	-5SD ~ +3SD
IR resolution	640X480
CMOS resolution	800×600
OLED resolution	800×600
Power	18650 battery
Continuous working time	≥ 6h (Normal temperature)
Waterproof	IP67
Work temperature	-40°C~ +55°C
Save temperature	-55°C~ +70°C
Weight	≤ 180g
Size	120mm×185mm×70mm



New Image Fusion Telescope



This product offers multiple observation modes including low-light, infrared, and dual-spectrum fusion. It can be used for handheld or tripod-mounted day and night observation, with the capabilities of range measurement. The device is compact, lightweight.



Small volume



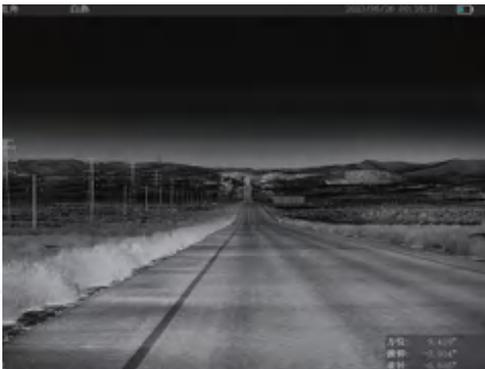
Light weight



Multiple modes



High-precision ranging



» Functional Features

- ◆ Low-light/Infrared/Fusion imaging
- ◆ Handheld/Tripod mount
- ◆ Distance measure/Target memory
- ◆ Picture/Video/Video output
- ◆ Voltage indication
- ◆ HighLight the target

Detector	Indicator Parameter
Product Name	PCR5850A
Recognition distance	No moon, identify vehicles: lowlight \geq 500m, infrared \geq 1200m
Magnification rate	Optics:2.2 \times ; Digital:1~4 \times
FOV	\geq 16 $^{\circ}$ x12 $^{\circ}$
Diopter	-4SD ~+4SD
Sensor resolution	Infrared:1024x768 ; Low-light: 800 x600
Display resolution	1024 \times 768
Distance measure	min \leq 20m; max $>$ 6km; accuracy \leq 2m
Angle range	-15 $^{\circ}$ ~ +15 $^{\circ}$
Record video	AVI, video refresh rate \geq 24Hz
Picture format	BMP, picture count \geq 10000
Battery type	18650 battery
Working time	\geq 12h (Normal temperature)
Waterproof	IP67
Work temperature	-40 $^{\circ}$ C~ +55 $^{\circ}$ C
Weight	\leq 1kg (Including battery)
Size	150mmx157mmx95mm



Multifunctional Night vision Device



The product can fuse image and present high-quality image in day and night by the camera of visible light, low light and IR. The product has the function of ranging and positioning, which can accurately calculate the target position. The product is mainly used for hunting, exploration, law enforcement and security.



Multiple modes



Clear image



High-precision ranging



Positioning orientation



» Functional Features

- ◆ High-resolution
- ◆ Digital Magnification
- ◆ Image fusion
- ◆ Photo & video
- ◆ WIFI
- ◆ Waterproof & dustproof

Detector	Indicator Parameter
Product Name	PCR5880B
Recognition distance	Identify vehicles,Low light $\geq 500\text{m}$; IR $\geq 1000\text{m}$ Fusion $\geq 1200\text{m}$; Visible $\geq 1200\text{m}$
Magnificationrate	Low light, IR、 Fusion: 2.5 \times ;Visble:5.8 \times ; Digital magnification:1 \times ,2 \times
FOV	Low light:11.2 $^{\circ}$ x8.4 $^{\circ}$;IR:11 $^{\circ}$ x 8 $^{\circ}$; Visble:8.4 $^{\circ}$ x6.3 $^{\circ}$
Focus adjustment	Low light, IR: motor drive;Visble: NO
Objective lens	F98mm,F/1.45;IR:F80mm,F/1.05;F35mm,F/5.6
Image resolution	Low light:1920x1200; IR1280x1024;Visble2560 x1920
Photo resolution	Low light, IR:1920x1200@25fps; Visble:1920x1440 @ 25fps
OLED resolution	1600X1200
Measure distance	Vehicle $\geq 4\text{km}$
Position	Beidou:GPS
Power	18650 battery
Working time	$\geq 6\text{h}$ (Normal temperature)
Waterproof	IP65
Work temperature	-40 $^{\circ}\text{C}$ ~ +55 $^{\circ}\text{C}$
Weight	$\leq 2000\text{g}$ (Including battery)
Size	260mmx215mmx110mm



Dual-light Micro pod



The dual-light micro pod is integrated with visible light camera, infrared thermal imager and other sensors, which are mainly used to observe, identify, capture and track the targets of ground aircraft and vehicles, and report the image and coordinate information of the targets.



Small volume



Multiple modes



Multitasking



Day/night imaging



Functional Features

- ◆ Day and night imaging
- ◆ Auto tracking
- ◆ Strong impact resistance
- ◆ Gyrostabilization
- ◆ Small size and low power consumption

Detector	Indicator Parameter
Product Name	PDR5835A
IR Resolution	640x512
IR FOV	24°x18°
IR Recognition distance	No moon, identify vehicles≥1000m
Visible-light Resolution	1920x1080
Visible-light FOV	26°x 14°
Visible-light Recognition distance	No moon, identify vehicles≥1000m
Working range	Yaw:-150°~1509 Pitch:-110°~ 10°
Angle accuracy	≤ 0.3°
Electrical interface	Network video interface & RS442 asynchronous serial port
Recognition ability	Identify vehicles ≥ 8, Recognition accuracy rate≥85%
Battery type	14V DC~28V DC
Waterproof	IP67
Work temperature	-20°C~ +55°C
Weight	≤280g
Size	≤Φ64mmx85mm

