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Искробезопасные автомобильные инфракрасные приборы ночного видения серии IR-PILOT



Features of IR-PILOT 640-IS Intrinsically Safe Vehicle-mounted Infrared Night Vision Device

1. Intrinsically Safe Explosion-proof Design: Explosion-proof mark:

Ex ib IIB T4 Gb

2. All Weather Application: Vehicle-mounted thermal imaging can be applied in total darkness, low light, glare and other environments, and is suitable for severe weather such as dust and haze.

3. Automatic Defrost: Automatically turn on the heating function in an environment below 2°C to ensure the imaging quality.

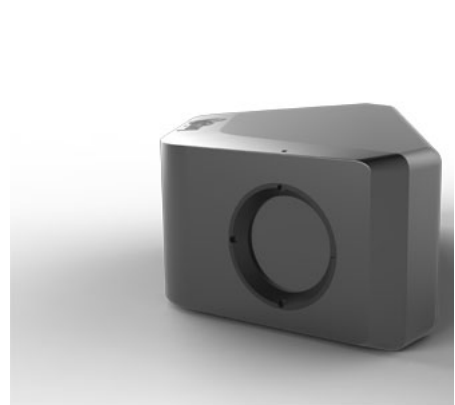
Applications of IR-PILOT 640-IS Intrinsically Safe Vehicle-mounted Infrared Night Vision Device



Technical Specifications		IR-PILOT 640-IS Intrinsically Safe Vehicle-mounted Infrared Night Vision Device
Infrared Camera Parameters	Detector Type	VOx uncooled infrared detector
	Spectral Band	8 ~ 14μm
	NETD	≤40mK@25°C,F#1.0
	Image Size	640×512
	Pixel	12μm
	Focal Length	6.9mm
	Focusing Mode	Prime lens
	FOV	62.9°x50°
	Identification Distance (theoretical calculation, vehicle/person)	110m/72m (target 12 pixels)
F Value	1.0	

	Spatial Resolution	1.74mrad
	Frame Rate	50Hz
	High Light Protection	Supported
	Scene-based Correction	Supported
	Window Defrost	Supported
	Palette	White hot
Size and Weight	Infrared Camera Size	52mm × 55mm × 85mm
	Infrared Camera Weight	≈350g
Environment	Ingress Protection	IP67
	Operating Environment	-20°C ~ +60°C
	Explosion-proof Mark	Ex ib IIB T4 Gb
Interface	Infrared Camera Interface	FAKRA
	Infrared Camera Protocol	GMSL
	Infrared Camera Communication	I2C
	Data format	8-bit DRC data
	Infrared Camera External Synchronization	Supported
Physical Characteristics	Power Supply	12 VDC
	Power Consumption	≤2W, and ≤5W in case of automatic defrost activated

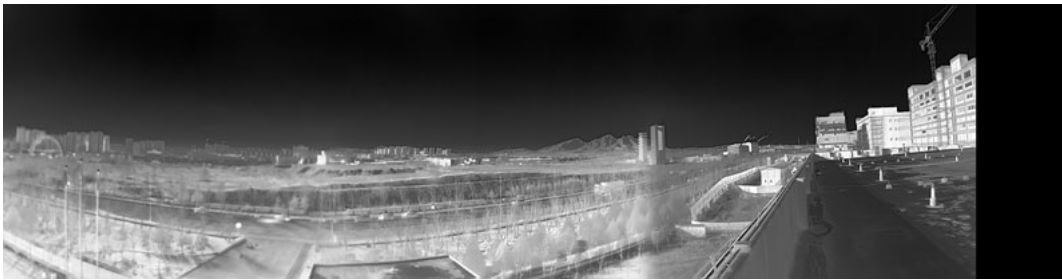
IR PILOT 180P Infrared-only 180° Vehicle Night Vision Device



Features of IR-PILOT 180P Infrared-only 180° Vehicle Night Vision Device

1. 180° Horizontal FOV : Eliminate blind spots
2. All-day and All-weather: Applicable in total darkness, low light, glare and other environments, suitable for severe weather such as dust and haze
3. Auto Defrost: Below 2°C, heating function is enabled to ensure the image quality

Applications of IR-PILOT 180P Infrared-only 180° Vehicle Night Vision Device



Specifications		IR-PILOT 180P Infrared-only 180° Vehicle Night Vision Device
Thermal Camera Parameters	Detector Type	VOx uncooled infrared detector
	Spectral Band	8 ~ 14μm
	NETD	≤40mK@25°C,F#1.0
	Image Size	720P or 1080P
	Pixel Pitch	12μm

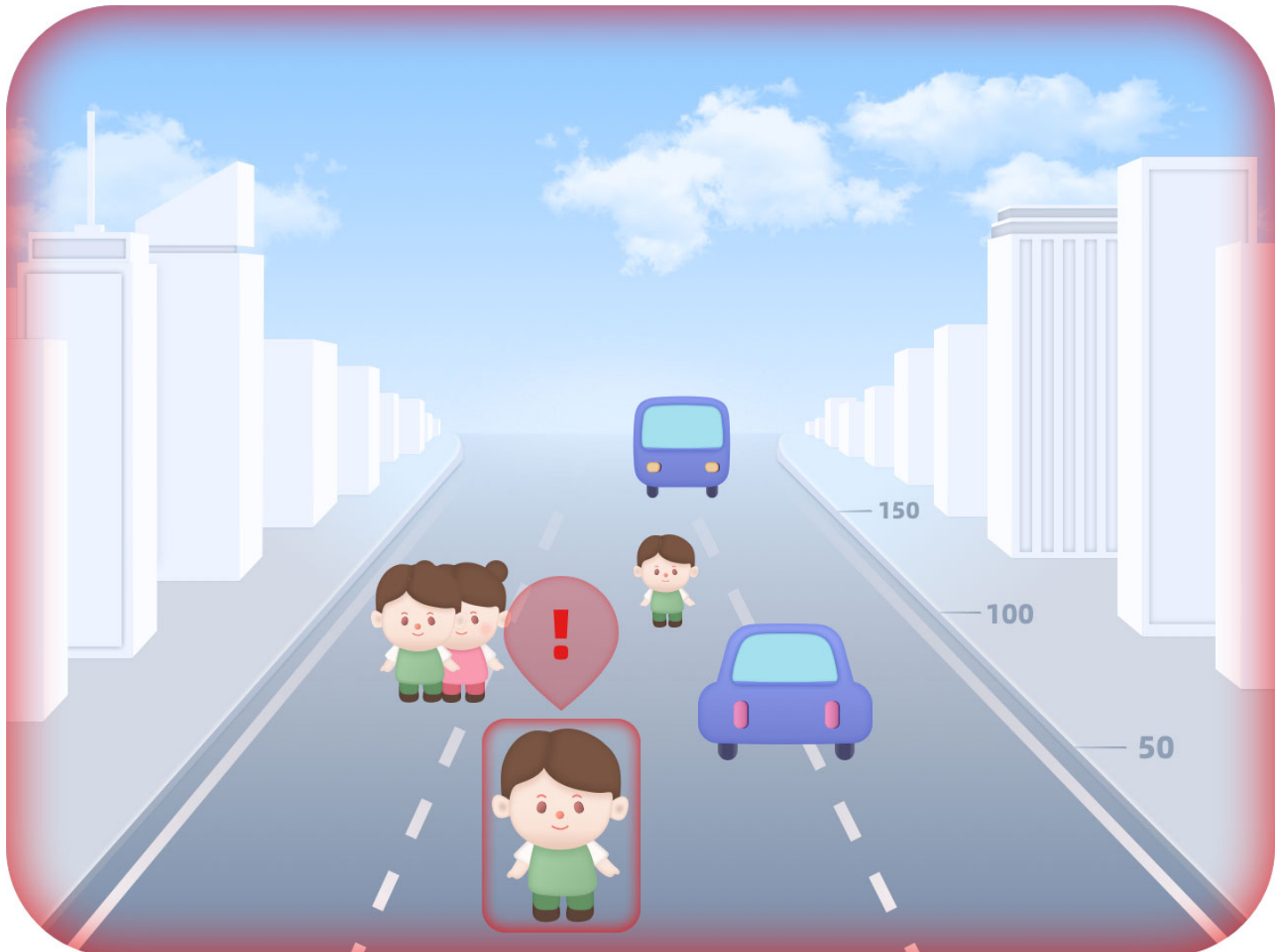
	Focal Length	6.9mm	
	Focusing Mode	Fixed focus lens	
	FOV	180°x50°	
	Recognition Distance	110m/72m (Target: 12 pixels)	
	F#	1.0	
	Spatial Resolution	1.74mrad	
	Frame Rate	50Hz	
	Strong Light Protection	Supported	
	Scene-based Correction	Supported	
	Window Defrost	Supported	
	Color Palette	White hot	
Size and Weight	Thermal Camera Size	180mm × 90mm × 58mm	
	Thermal Camera Weight	≈1200g	
Environment	Ingress Protection	IP67	
	Operating Temperature	-40°C to +85°C (-40°F to +185°F)	
Interface	Thermal Camera Interface	Aviation	FAKRA
	Thermal Camera Protocol	TVI or AHD	GMSL
	Thermal Camera Communication	RS232	I2C
	Data Format	720P 50HZ or 1080P 50HZ	8-bit DCR data
	Thermal Camera External Synchronization	Supported (/contact	
Physical Characteristics	Power Supply	12 VDC	
	Power Consumption	≤8W, and ≤17W when automatic defrost is on	

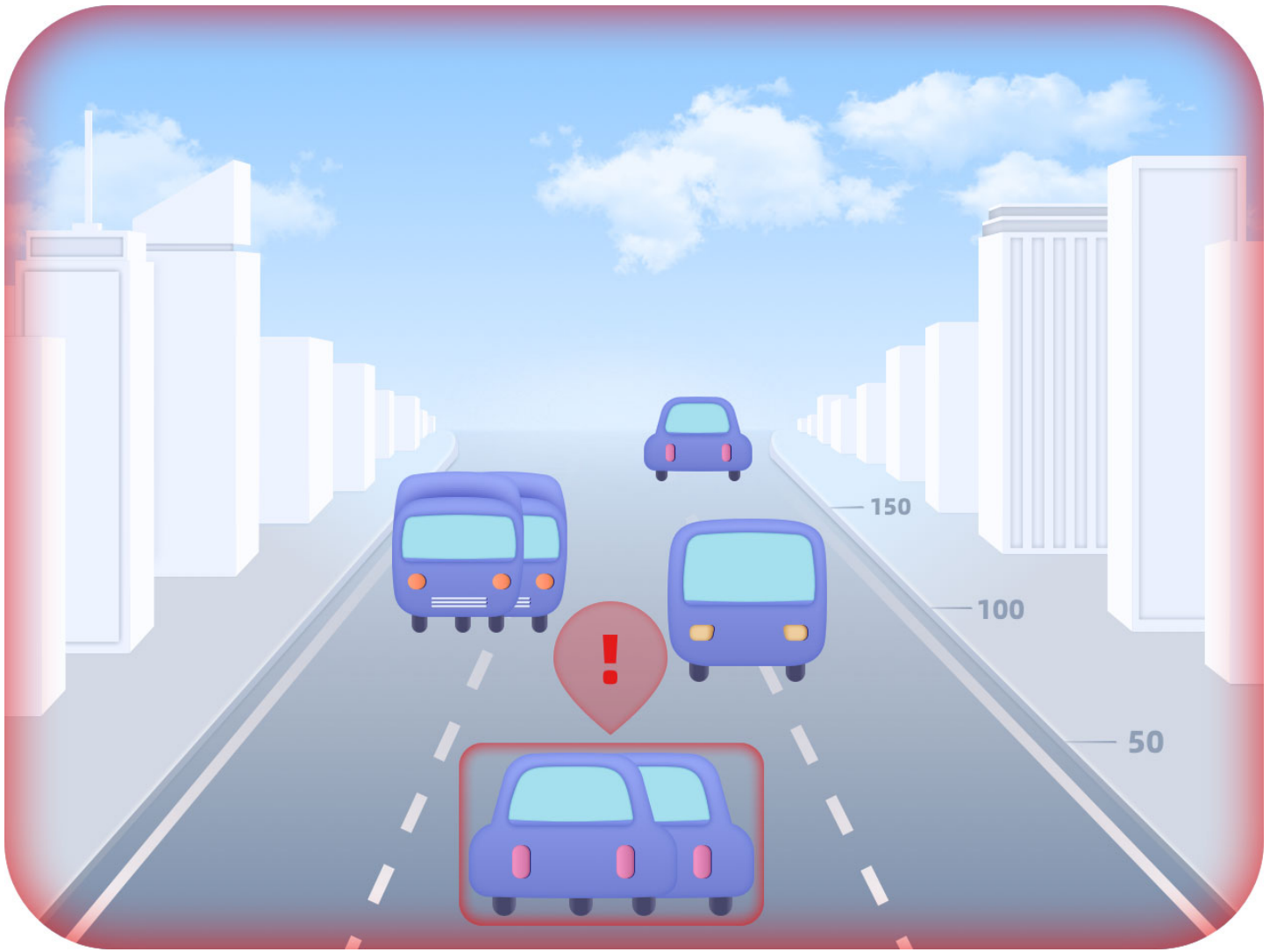
IR-Pilot 256MS Infrared AI Collision Avoidance System



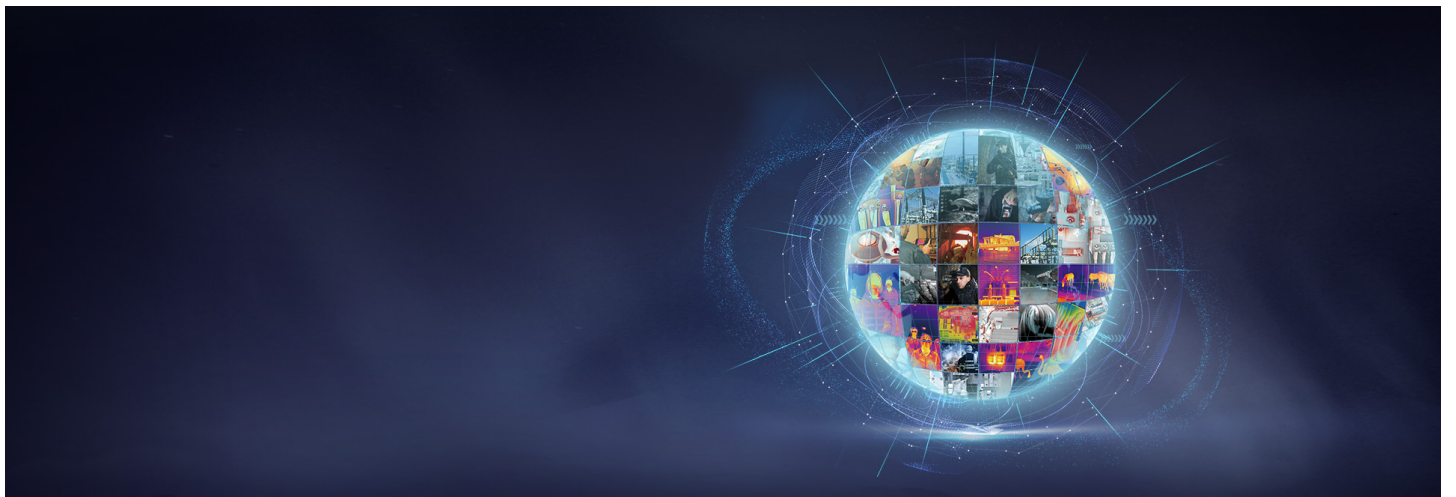
Features of IR-Pilot 256MS Infrared AI Collision Avoidance System

1. All Weather Perception: Adopt infrared thermal image sensing unit, able to perform normal recognition under bad conditions such as direct light, back light and haze
2. AI Algorithm: Target detection, classification, lane line detection, distance and speed calculation
3. Intelligent Audible and Visual Alarm: With the intelligent alarm strategy, it provides all-round danger alert through the display unit and voice reminder in case a dangerous situation is detected, and presents the warning information without looking at the screen









Model	IR-Pilot256MS	IR-Pilot256DMS
Product Name	Infrared AI Collision Avoidance System	
Product Name		

Detector Type	VOx	
Resolution	256×192	256×192 (infrared)/1920×1080 (visible light)
Pixel Pitch (Infrared)	12μm	
Operating Band (infrared)	8-14μm	
Focal Length	4.3mm	4.3mm (infrared)/5.1mm (visible light)
FOV	40°	40° (infrared)/120° (visible light)
System Performance		
Frame Rate	25fps	
Power Supply	DC 12V (vehicle power supply)	
Power Consumption	≤3.5W	
	≤8.5W (vehicle power supply)	
Intelligent Recognition	Supported	
Interface		
Video Interface	GMSL/GMSL2	
Physical Interface	FAKRA	
Communication Interface	I2C	
Memory	Micro SD card (16~128G)	
Environmental Parameters		
Operating Temperature	-20°C~+70°C	
Waterproof Rating	IP67 (camera terminal), IP54 (in-vehicle prompt terminal)	
Lens Window	High-impact Protective Window	(/contact)
Automatic Defrost	Available	
Physical Characteristics		
Size	W: 88mm, L: 59mm, H: 72mm (in-vehicle prompt terminal) W: 33mm, L: 25mm, H: 27mm (camera terminal)	
Weight	<200g	

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