

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



IR-PILOT 180P is a vehicle-mounted infrared night vision device with wide FOV developed for the automotive market.

It provides GSML and AHD interface with a horizontal FOV of 180°.

It can be used in ADAS and auto-piloting.



IR-PILOT 180P (Infrared-only)

180° Vehicle Night Vision Device

1. 180° horizontal field of view

Eliminate blind spots in vision.

2. All-weather application

Vehicle-mounted thermal imaging can be applied to environments such as total darkness, weak light, and glare, and is also suitable for severe weather such as dusty days and foggy days.

3. Automatic defrosting

Automatically turn on the heating function in an environment below 2°C to ensure the image quality.

Video output: AHD/TVI/GMSL

Communication Interface: I2C/RS232

Dimensions: 180*90*58mm Weight: 1200g

Ingress class : IP67

Operation temperature : -40°C ~ +85°C



Integration



EIS

Thermal: 640*512
Type: 12μm @ LWIR
FOV: 180°*50°



Lens	DD (Vehicle)	DD (Human)	ID (Vehicle)	ID (Human)
	-	-	110m	72m

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Specifications		IR-PILOT 180P Infrared-only180° 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	
Physical Characteristics	Power Supply	12 VDC	
	Power Consumption	≤8W, and ≤17W when automatic defrost is on	