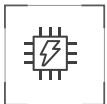




# Horus640-B

## Automotive LWIR Thermal Imaging Module

Horus640-B is an uncooled infrared thermal imaging module featured with a compact size, lightweight and low power consumption. It integrates the self-developed infrared detector and the new infrared image processing chip(Falcon series). It can identify potential dangers and detect pedestrians, animals, or other obstacles in advance at night or in harsh weather, such as glare, poor light conditions, fog, smoke, light rain, snow, and haze, providing additional safety guarantees for drivers and enhancing driving safety. Horus640-B applies to multiple scenarios, e.g. automotive night vision, advanced driver-assistance systems(ADAS), autonomous driving, etc.



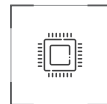
Low Power Consumption



Small Size



Light Weight



Leading Image Processing Algorithms



High-quality Image



Autonomous and Controllable Supply Chain

### Product imaging



## Specifications

Technical specifications		Horus640-B	
Main Parameters			
Detector type	Uncooled VOx infrared detector		
Resolution	640×512		
Frame rate	30Hz		
Pixel pitch	12 μm		
Spectral range	8~14 μm		
NETD	≤40mK@25°C,F#1.0		
Protection Against Sunburn	Supported		
Image Algorithm	Shutter-less algorithm / TECless algorithm		
Physical Characteristics			
Weight	<70g(f9.1mm F1.1镜头)		
Dimensions	32mm×32mm×53.3mm (with Fakra connector) (f9.1mm F1.1 lens)		
IP Grade	IP69K(forward direction), IP67(other direction)		
Defrosting	Threshold +2°C/+7°C (enabled below 2°C; disabled above 7°C)		
Operating Temperature	-40°C~+85°C		
Storage Temperature	-40°C~+95°C		
Electrical parameters			
Service Voltage	DC 12V		
Typical Power Consumption @25°C	1.2W(without shutter & heater)MAX 6W		
Video Protocol	LVDS		
Data Interface	MIPI/DVP YUV422 8bit		
Physical Interface	Fakra		
Communication Interface	I2C		
Optical Properties (Fixed focus, athermalized Lens)			
Horizontal FOV/Focal Length	33°(H) × 26°(V)/f13.5mm    48°(H) × 37°(V)/f9.1mm		

## Applications



Automotive Night Vision



ADAS



Autonomous Driving

## Company Profile

Raytron Microelectronics Co., Ltd., a subsidiary of Raytron Technology Co., Ltd., has the most comprehensive understanding of infrared thermal sensing technology worldwide.

Raytron has decades of in-house research, development and manufacturing experience in thermal sensors and camera modules.

Together with our global customers and partners, Raytron provides a better future and life for the world.

## Get in Touch

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