



At GoThermal, we understand these challenges. The N-Drive N302B Car Thermal Night Vision Camera is specifically designed to tackle these challenges. The camera's high-quality thermal imaging enhances visibility by cutting through dust, fog, rain, and snow, ensuring that drivers can see clearly in all conditions. This advanced technology not only removes the glare from oncoming vehicles but also highlights pedestrians, vehicles, and obstacles on the road, significantly enhancing the driver's environmental awareness and ensuring driving safety in the most demanding environments.

#### **Key Features**







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Working Band Lens Focal Length Field of View 8-14um 9.1mm/13.5mm 45° x 37° / 32° x 24° Frame Rate 50FPS

Output Resolution 640 x 512@12µm



Market Positioning Aftermarket auxiliary driving cameras/autonomous driving sensors

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# Enhanced Visibility in Dust and Low Light

 The thermal cameras penetrate dust and fog, ensuring drivers can see clearly in all conditions, reducing the risk of accidents.

## Protection Against Wildlife and Other Hazards

 Early detection of stray animals or unexpected obstacles allows drivers to react in time, enhancing safety.

#### Safety for Nighttime Operations

 Thermal imaging detects heat signatures of wildlife and obstacles, preventing collisions and safeguarding teams during night operations.

# Improved Productivity and Reduced Downtime

 Minimizing accidents and enhancing operational efficiency contribute to smoother workflows and less downtime.

#### **APPLICATIONS**

- Automotive Pre-Installation and Modifications: Ideal for upgrading vehicle safety systems.
- Low-Speed Unmanned Vehicles: Enhances safety and efficiency in autonomous operations.
- Public Safety and Emergency Response: Improves visibility and safety in challenging environments.
- Mining and Heavy Industry: Ensures safe operation of haul trucks and buses in dusty and lowvisibility conditions.
- Forestry and Agriculture: Protects vehicles and personnel in areas with poor visibility and varying terrain.

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# **INFRARED THERMAL IMAGING DISPLAY**

N-Driver P302B Car Thermal Night Vision Camera







## **TECHNICAL SPECIFICATION**

### **N-Driver P302B Car Thermal Night Vision Camera**



Infrared detectors		
Detector type	Vanadium oxide uncooled infrared focal plane	
Response band	detector 8~14µm	
NETD	≤40mk@25°C, F#1.0	
Detector area array	640×512	
Image display performance		
Focal length	9.1mm	13.5mm
Field of view (FOV)	45°× 37°	32°× 24°
Spatial resolution	1.32mrad	0.89mrad
Action distance	Pedestrian 150m/Vehicle	Pedestrian 200m/Vehicle 300m
Output frame frequency	200m 25HZ	
Video output interface	RCA Lotus head	
Video output format	Analog video CVBS	
Video output resolution	720 × 576 (PAL system)	
	720 × 480 (NTSC system)	
System characteristics		
Rated voltage	DC9~32V (typical 12V)	
	≤5W @(12V power supply, window heating not activated)	
Overall power consumption	≤8W @(12V power supply, window heating activated)	
Imaging start time	≤8.5s (normal temperature)	
Automatic heating function	When the window temperature is lower than 2°C±2°C, the intelligent heating	
	function will start automatically	
	When the window temperature is higher than 7°C±2°C, the heating function	
	will be turned off automatically	
Shutter	Automatic shutter compensation	
Image algorithm	3D noise reduction RAW	
	Image enhancement	
Camera size/weight	36×36×46.5mm / ≤120g	
Control box size/weight	100×80×24mm / ≤500g	
Physical properties		
Camera protection class	IP67	
Control box protection class	IP5k0	
Environmental parameters		
Operating temperature	-40 °C ~+85 °C	
Storage temperature	-40°C~+90°C	

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