

# Intelligent detection and multi-scenario applications

The N-Driver P series are professional vehicle-mounted infrared sensors developed for the automobile market and customers in the industry. The product is applicable to such markets as special decoration, refitting, low-speed unmanned driving and automatic drive of vehicles, with the lenses covering multiple resolutions and focal lengths, fully meeting the needs of customers for customization and different scene applications.



### Full resolution

Multiple resolutions, i.e. 100,000-300,000 pixels,are able to meet the requirements under multiple pixels



### Full scene coverage

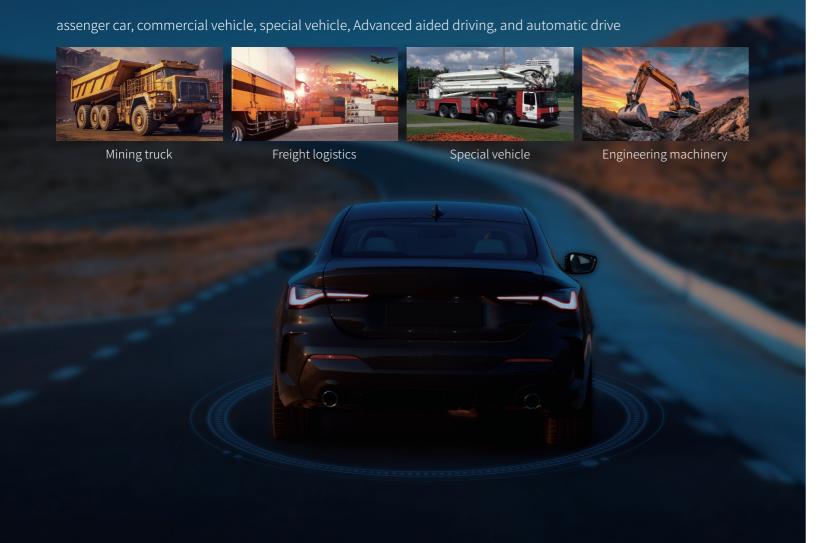
Applicable to various scenarios, such as special decoration, refitting, automatic drive, and low-speed unmanned driving of vehicles



## High cost performance

Obvious superiority of product cost performance

# Application field



## Product parameters

Droduct pivol	100 000 pivels		200 000 pivols	
Product pixel	100,000 pixels		300,000 pixels	
Product model	N-Driver P101B	N-Driver P102	N-Driver P301	N-Driver P302B
Product appearance				
Infrared detector	Uncooled infrared focal plane detector of oxidizing machine			
Operating waveband	8-14um			
Focal length	9.1mm		9.1mm/13.5mm	
Field of view	28° X 21°	42°x 32°	48.3°× 38.6°	45°x 37°/ 32°x 24°
Frame rate	≥25FPS			
Output resolution	384 x 288@12μm	384 x 288@17μm 640X51		2@12μm
Starting time	≤8.5s (ambient temperature)	≤3.5s (ambient temperature)		≤8.5s (ambient temperature)
Compensation algorithm	Automatic shutter compensation			
Image algorithms	Automatic brightness, contrast/image enhancement, 3D noise reduction, RAW, and NUC			
Recognition algorithm	Combined with the algorithm box to achieve the pedestrian, vehicle and animal recognition and collision warning (sound and image processing)	/		Combined with the algorithm box to achieve the pedestrian, vehicle and animal recognition and collision warning (sound and image processing)
Power interface	DC 9-16V (P0C power supply)	DC9-32V (P0C power supply)		DC 9-16V (P0C power supply)
Communication interface	U5B (Type C)	RS232		U5B (Type C)
Video interface	CVB5 (RCA)			
Audio interface	Support PWM output. The drive is equipped with an external buzzer	1		Support PWM output. The drive is equipped with an external buzzer
Rated voltage	DC 9-16V	TYP 12V (DC 9V -32V )		DC 9-16V
Power consumption	≤2W (@12Vno starting of window heating) ≤6W (@12V starting of window heating)	≤1W@(@12V no starting of window heating) ≤5W@(@12V starting of window heating)		≤2W (@12Vno starting of window heating) ≤6W (@12V starting of window heating)
Operating temperature	-40°C∼+85 °C	-20°C~+70°C		-40°C∼+85°C
Storage temperature	-40°C∼+95°C	-40°C ~ +80°C		-40°C∼+95°C
Automatic heater	The heating function is enabled when the window temperature is below 2°C+2°C  The heating function is disabled when the window temperature is higher than 7°C+2°C			
Salt mist	GB/T 28046, GB/T 43249-2023, and standards of auto factory			
Sand and				
Impact				
Vibration				
Packaging	Sealed case 1P67&1P69K			
Detection distance	Person (1.75mX0.5m) ≥150m	Vehicle (1.75mX1.75m) ≥350m	Person (1.75mX0.5m) ≥200m	Vehicle (1.75mX1.75m) ≥400m
Detection distance	Person (1.75mX0.5m) ≥80m Vehicle (1.75mX1.75m) ≥100m	/		Person (1.75mX0.5m) ≥90m Vehicle (1.75mX1.75m) ≥120m
Size	≤36mm×36mm×46.5mm	≤28mm×28mm×50mm	≤28mm×28mm×60mm	≤36mm×36mm×46.5mm
Weight	≤120g			
EMC	Certified in EMC test together with the algorithm box (15010605, 15011452-4, 15011452-2, and 1507637-2)	CE certified		Certified in EMC test together with the algorithm box (15010605, 15011452-4, 15011452-2, and 1507637-2)