

Automotive Thermal Imaging Obstacle Avoidance System

Thermal vision enhancement technology



Long-distance vision

Clearly imaging within 300 meters, 1.5 times of the distance of the headlight, greatly improving the vehicle sensing distance.

All-day sensing

Assisting drivers to view the latest road conditions with clear images despite the darkness at night, rainy days, glare, light change when driving through a tunnel, etc.

Intelligent identification

Alerting drivers to vehicles and pedestrians identified through thermal radiation difference and AI algorithms.

Anti-photoelectric interference

Infrared has stronger anti photoelectric interference ability. An infrared thermal imaging sensor can promote the reliability of a driving system.

All-weather application

Clearly imaging in harsh weathers, such as sand dust, haze, etc.

Professional grade quality

Endorsed by the world-class manufacturer of infrared thermal imaging cameras and certified by IATF 16949.

Specifications

N-DIRVER 384

Detector	
IR detector	384x288@17 um
Spectral range	8 to 14 um
Optics	
Focal length	9.7 mm
Field of view (FOV)	37°x28°
Image Presentation	
Image frequency	25 Hz (PAL)
Output resolution	768x576 (PAL)
Start-up time	≤8s at normal temperature
Compensation algorithm	Auto shutter compensation
Image algorithm	Automatic brightness & contrast/image enhancement
Identification algorithm	/
External Interface	
Power input	DC9-32V
Communication port	RS232 (Baud Rate 9600)/CAN bus (optional)
Video output	CVBS single-ended/difference
Audio port	/
Power Supply	
Regulated voltage	DC 12V/24V
Power consumption	≤3.5W (@24V, without window heating) ≤9W (@24V, with window heating)
Environmental Compatibility	
Operating temperature range	-45°C to 85°C
Storage temperature range	-45°C to 90°C
Automatic heater	Automatic heater will start on its own when the window temperature is below 2°C ±2°C and closed when it is above 7°C±2°C
Salt spray	GB/T2423.17-2008 LC1
Sand and dust	GB/T2423.37-2006 LC1
Shock	GB/T2423.5-1995 LC1
Vibration	GB/T2423.10-2008 LC1
Encapsulation	Enclosed casing, IP67&IP69K
Range Performances	
Detection range	Human (1.8x0.5m)≥150m, Mid-Size Car (2.3x2.3m)≥300m
Recognition Range	/
Physical Characteristics	
Dimension	≤40mmx36mmx58mm (without cables)
Weight	≤150g (without cables)
Certification	
EMC	EMC testing (ISO10605, ISO11452-4, ISO11452-2, ISO7637-2)



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*Technical parameters are subject to change without notice. For the latest information, please visit our website:
www.guideir.com

