

MS-7C640DS

Dual-Spectrum Vehicle-Mounted Thermal Camera

- AI Dual-Spectrum Fusion
- RJ45 and TCP/IP
- Safety-Certified Design



The MS-7640DS is an intelligent dual-spectrum vehicle-mounted thermal camera developed for special vehicles. The product integrates intelligent recognition, dual-spectrum fusion, and AI early warning. It is highly adaptive to complex and rapidly changing scenes, and suitable for target recognition and early warning in adverse environments at night, in darkness, or with high light (blinding upper beams), dusty, hazy, rainy, or snowy weather.

Based on the standard TCP/IP protocol, through the RTSP video interface, it can output video streams in multiple modes such as infrared, visible light, and dual-spectrum fusion, as well as simultaneous AI-based target recognition results and estimated distances.



Safety-Certified Design



AI-Based Intelligent Collision Warning



Shutterless Correction Avoid Image Freeze



IP66



-40°C~+70°C Operating Temperature

Applications Special vehicles (for underground mines, strip mines), smart ports, and V2X



Specifications

Model		Infrared	Visible Light
Basic Parameters	Sensor Type	VOx uncooled infrared focal plane detector	CMOS
	Spectral Band	8-14μm	400~1000nm
	Resolution	640×512 (optional 1280×1024, 384×288, with FOV customizable)	720P (up to 2688×1520)
	Pixel Pitch	12μm	2.9μm
	Focal Length	9.1mm	4mm
	FOV (H×V)	48°×38°	90°×48°
	Identification Distance (theoretical calculation, vehicle/person)	126m/107m	
	Frame Rate	25Hz	30Hz
	Image Mode	The output video size of modes one and two is 1280×720, and the output fusion video size of mode three is 640×512	
	Scene-Based Correction	Supported	
	Window Defrost	Supported	
	Intelligent Recognition	Human/vehicle/animal recognition supported	
Physical	Dimensions (Excluding Connectors)	76×67×46mm	
	Weight	<550g	
Environment Adaptability	Ingress Protection	IP66	
	Operating Temperature	-40°C to +70°C	
Interface	Interface	RJ45	
	Protocol	RTSP	
	Communication	TCP/IP	
Power	Power Supply	12VDC (PoE powered)	
	Power Consumption	≤5W. No more than 11W with automatic defrost enabled	

■ The information is for illustrative purposes only. The pictures and technical specifications are subject to changes without notice.

Note: The actual weight may vary depending on the configuration, manufacturing process, and measurement method.