

MIC-F001-SA01 Front Camera

Achieving a 100° x 40° field of view (FOV) with dual thermal cameras



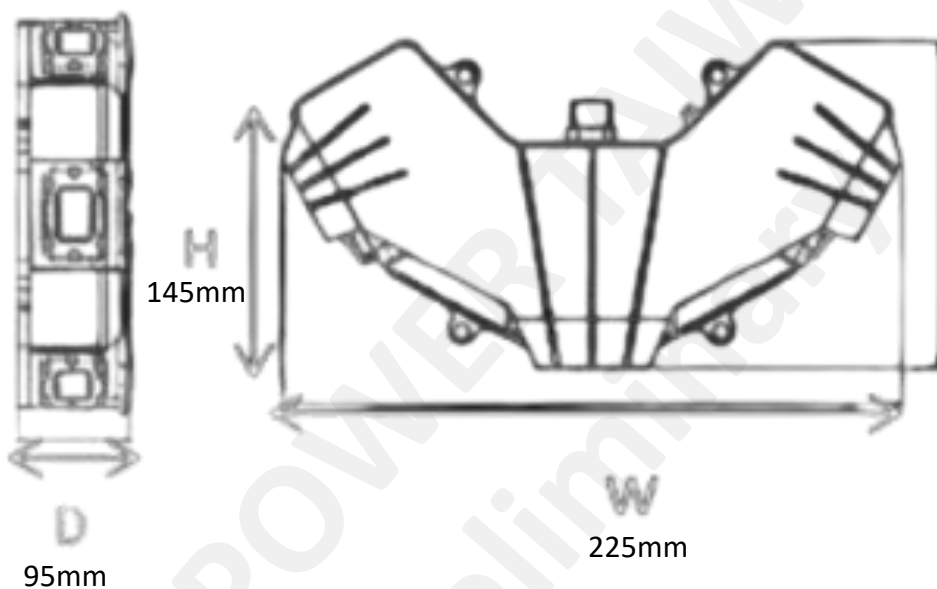
Feature

- Dual thermal cameras for image stitching
- FOV H: 100 Degrees, V: 40 Degrees
- Optimized Day & Night (Low-Light performance)
- H.265 & H.264 triple-stream encoding
- Fog penetration capability
- Noise reduction
- Support image mirroring
- Ruggedized design for military vehicle application
- IP67 rated for dust and waterproofing in harsh environment
- PoE for streamlined installation
- Meet MIL-STD-810G compliance
- EMI/EMC compliance, fully adheres to MIL-STD-461G

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Appearance





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Revision Table

Date	Revision	Content	By
2025/3/3	0.1	First draft	Devin
2025/3/5	0.2	Second draft	Zoe

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Specification

Camera	Thermal 1 & Thermal 2	Visible
Image Sensor	8mm Lens	CCD
Resolution	640x512	3840x2160
Spectral Range	8 to 14μm	
NETD	≤ 35mK	
Frame rate	50Hz	
Signal-to-noise ratio	56dB	
Non-uniformity correction	Automatic/manual correction	
Field of View (FOV)	Single Thermal camera: H: 51.2°, V: 42° Thermal stitched image H: 100°, V: 40°	H: 100°, V: 40°
Digital zoom		
View Modes	1~4 times	Day & Night (0.001 Lux)
Fog Penetration	Support	Support
Image Mirroring		Support
Noise Reduction	Support	Support
Image Processing	Digital Image Detail Enhancement (DDE).	Digital Image Detail Enhancement (DDE).
Network Interface	Ethernet (10/100 Base-T) RJ-45 Connector	
Power Supply	PoE Support	
Power Consumption	~ 25 W	
Operating Temperature	-40°C ~ +55°C	
Storage Temperature	-50°C ~ +60°C	
Humidity	Less than 90% RH	
Environment	MIL-STD-810G	
EMI / EMC	MIL-STD-461G	
Ingress Protection	IP67	
Dimension	225 x 145 x 95 (mm)	
Weight	1.2Kg	

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Environment Compliance

Operating Temp.	-40°C to +55°C
Storage Temp.	-50°C to +60°C
Humidity	Less than 90% RH
Shock	Design to meet MIL-STD-810G
Vibration	Design to meet MIL-STD-810G
EMI/EMC	Design to meet MIL-STD-461G

Environmental performance may vary according to the integration method or final integration scenario.

Deliverables

1	Dual thermal cameras
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Ordering Information

Model Name	Description	Unit
MIC-F001-SA01	Achieving a 100° x 40° field of view (FOV) with dual thermal cameras	1