

# TC640SMW

## Small Mid-wave Cooled Thermal Imaging Core

**TC640SMW** is a small sized mid-wave cooled thermal imaging core with high-resolution detector which can be easily integrated into infrared systems that require extremely long distance detection and adaption to any harsh environment.

### Features

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HgCdTe detector

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Continuous zoom, triple views, dual views lenses and no lens are optional

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Formidable image processing ability

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Multiple interfaces, easy integration

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Compact design, low power consumption

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### Applications

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Border and coastal surveillance

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Fire control system of armed vehicles

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Airborne infrared warning system

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Airborne electro-optical pod

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Shipborne electro-optical pod

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ULIRVISION

## Technical Specifications

Item	TC640SMW
Cooler	Stirling
<b>Detector Data</b>	
Type	MCT
IR resolution	640×512
Pixel pitch	15μm
Spectral range	3~5μm
F.no	f4 / f5.5
NETD/Sensitivity	≤25mK
<b>Lens Data</b>	
Focal distance	19mm~275mm continuous zoom lens(typical)
FOV	28°×21°~2.05°×1.5°
F/#	5.5
Lens(optional)	15mm~330mm f4 continuous zoom、18mm~430mm f5.5 continuous zoom、30mm~600mm f5.5 continuous zoom and other continuous zoom or triple views, dual views lenses are optional
<b>Image Performance</b>	
Correction	Manual correction, background correction
Image enhancement	Auto Image Filtering, DDE
Imaging mirroring	Vertical, horizontal
Frequency	50Hz
Amplification	2X, 4X
Polarity/LUT mode	Black hot/White hot
Cross cursor	Yes
<b>Interface</b>	
Control	RS232/RS422
Analog video output	PAL
Digital video output	CameraLink/HD-SDI
<b>Power System</b>	
Working voltage	+24V~+32V(power protection)
Power consumption	<12W@25°C(standard)
	<24W@25°C(max)
Cooling time	≤6min(normal temperature)
<b>Environment Parameters</b>	
Operating temperature range	-40°C~+60°C
Storage temperature range	-40°C~+70°C
Humidity	5%~95% (non-condense)
Shock	1/2 Sine, 30g, 11ms, 3 shocks per axis
Vibration	3 axes, 30min/axis, 2.1g rms, 10-500Hz
<b>Physical data</b>	
Size	124mm×108.6mm×74.5mm(without lens)
Weight	680g(without lens)