



Thermal Imaging Cores **TC390 / TC690G**

High end thermal cores for system integration:

The **TC390 & TC690G** thermal imaging cores are shutterless with high image quality for a wide range of applications, eg. UAV/UAS integration, automation and robotic machine vision configurations, defense and law enforcement imaging, thermal weapon sights, night vision thermal imaging, situational awareness, etc.

Features:

- Compact design, 38mmx38mm, 55grams
- Low power consumption: <0.75W / 1W
- Shutterless
- IVE(Intelligent View Enhancement)
- Isolated metal frame (shielded)
- Digital zoom up to 4X



Specifications:

	TC390	TC690G
Detector material	a-Si	a-Si
Detector resolution	384 x 288 pixels	640 x 480 pixels
Pixel pitch	17µm	
Spectral range	7.5 - 14µm (LWIR)	
Non-Uniformity Correction	Shutterless technology	
Image enhancement	IVE image enhancement algorithm	
Image gain	Auto / Manual	
Frame rate	50Hz	
Digital zoom	2X, 4X	
Polarity	White hot / Black hot	
Thermal sensitivity (NETD)	≤ 60mK	≤ 50mK
Start up time:	3 seconds	
Available lenses	Athermalized 35, 50, 75, 100mm Motorized lens: 150mm Zoom lenses 25-100, 30-150, 25-225mm Dual FoV lens 60-150mm	
Spot measurement	On / Off	



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Specifications (cont'd):

	TC390	TC690G
Power connector		40pins
Control		RS232
Analog video output		PAL
Digital video output		CameraLink, LVCMOS, BT656 (8-bit)
Keypad		5 button keypad
Power		DC +2,5V~+5.5V (standard 3.7V)
Power consumption	0.75W	1W
Reverse polarity protection		Yes
Over-/Under voltage protection		Yes
Operating temperature		-40°C~+60°C
Storage temperature		-50°C~+70°C
Humidity		5%~95% RH (non condensing)
Shock resistance		GJB150-16-2.3.1, 100g, 6msec
Vibration resistance		GJB150-16 2.3.1, 4.3g 3 axes, 8h
Physical data:	Dimensions	38 x 38 x 21mm
	Weight	≤ 55g (without lens)
	Mount	M2 x 0.4
Standard accessories	Thermal imaging core, interface cable, USB flash drive, warranty card, standard calibration certificate	

