

TC490|TC790

Thermal Imaging Cores

TC490|TC790 are the latest generation of shutterless thermal imaging camera cores, featuring the smallest size, lightest weight, ultimate IR resolution and lowest power consumption on the market. They can be used in any integrations that have most demanding requirements.

Features

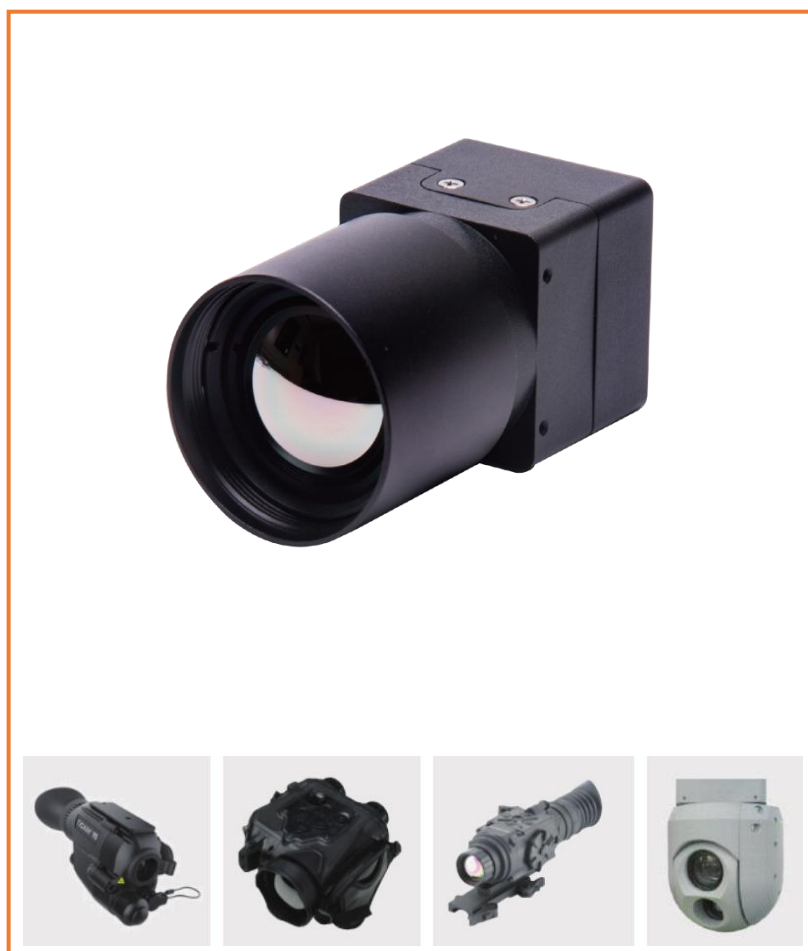
Compact design and tiny size,
28mmx28mm(w/o lens), ultra-light
weight 32g

Energy-saving design, lowest power
consumption(less than0.65W/0.85W)

Shutterless and IVE(Intelligent View
Enhancement)technologies ensure
fine image

Isolated metal frame for radiating

Multi-lens for option, digital zoom up to
4X



Applications

Thermal imaging integration(helmet,
telescope, weapon sight, etc)

Electro-optical system for UAV&aircraft

Technical Specifications

Item	TC490	TC790
Detector Data		
Material	aSi	
IR resolution	384 × 288	640 × 480
Pixel pitch	17μm	
Spectral range	7.5~14μm	
NETD/Sensitivity	60mK	
Lens Data		
Lens(Optional)	9mm/13mm./19mm./25mm athermal lens	
Image Performance		
NUC	Shutterless technology	
Image enhancement	IVE image enhancement algorithm	
Frequency	50Hz/60Hz	
Zoom	2x、4x	
Polarity/LUT mode	Black hot/White hot	
Startup time	3s	
Image gain	Auto/Manual	
Cross cursor	ON/OFF	
Interface		
Primary electrical connector	40pin	
Control port	RS232	
Analog video output	BNC(75Ω); CCIR/PAL	
Digital video output	16-Bit original data, 8-Bit BT656(customizable)	
Keypad	5 button keyboard	
Power System		
Working voltage	DC: +2.5V~+5.5V(standard: 3.7V)	
Power consumption	0.65W (BT656<1.0W)	0.85W (BT656<1.3W)
Reverse polarity protection	Yes	
Over voltage protection	Yes	
Environmental Parameters		
Operating temperature range	-40 ℃~+60℃	
Storage temperature range	-50 ℃~+70℃	
Humidity	5%~95% (non-condense)	
Shock	GJB150-16 2.3.1, 100g: 6msec	
Vibration	GJB150-16 2.3.1, 4.3g 3 axes, 8h	
Physical Data		
Size	28mm×28mm×26.2mm	
Weight	≤32g(without lens)	
Mounting 安装接口	M2×0.4	
Packing		
Standard	Thermal imaging core, integrated cable, user manual of CD, warranty card, calibration certificate, button keyboard	