

TC490|TC790G

Smallest Thermal Imaging Cores

TC490|TC790G 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 35g

Energy-saving design, lowest power
consumption(less than0.75W/1.0W)

Shutterless NUC technologies to
ensure fine image

IVE(Intelligent View
Enhancement)technologies and
intelligent dimming algorithm

Isolated metal frame for radiating

Applications

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

Electro-optical system for UAV&aircraft



Technical Specifications

Item	TC490	TC790G
Detector Data		
Material	aSi	
IR resolution	384×288	640×480
Pixel pitch	17μm	
Spectral range	7.5~14μm	
NETD/Sensitivity	≤60mK	≤50mK
Lens Data		
Lens(optional)	9mm/13mm/19mm/25mm/35mm athermal lens	
Image Performance		
NUC	Shutterless technology	
Image enhancement	IVE image enhancement algorithm	
Frequency	50Hz	
Amplification	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	RS232	
Analog video output	PAL	
Digital video output	Cameralink、LVCMOS、8-Bit BT656	
Keypad	5 button keyboard	
Power System		
Working voltage	DC: +2.5V~+5.5V(standard: 3.7V)	
Power consumption	0.75W	1W
Reverse polarity protection	Yes	
Over&Under voltage	Yes	
Environment Parameters		
Operating temperature	-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×21mm (From FPA to back)	
Weight	≤35g(without lens)	
Mounting	M2×0.4	
Packing		
Standard	Thermal imaging core, interface cable, user manual of CD, warranty card, calibration certificate	