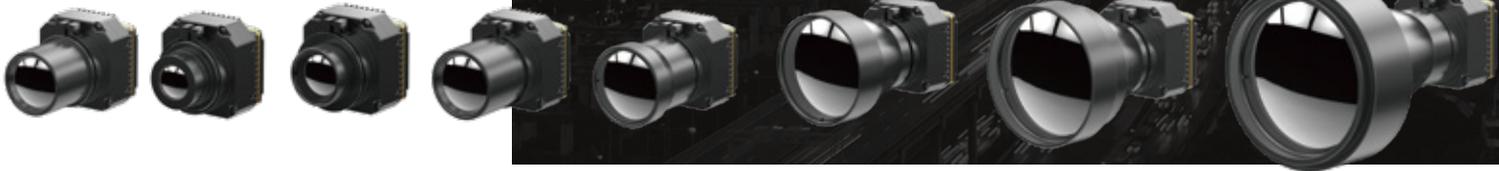


PLUG Series Uncooled Thermal Modules (Imaging Only)

Plug and Play
Stable and Reliable



Description

The PLUG Series uncooled thermal modules integrate GST metal package infrared detector, unique image processing algorithm and professional hardware platform. With high performance IR detector, the thermal module can provide superior performance, clear images, edge sharpening and enhanced details at any harsh environments. The PLUG series thermal modules are equipped with various common industrial interfaces and optical lenses, which cater for all specific integration requirements.

Plug & Play for Easy Integration

- DVP/LVDS multiple image output interfaces
- Standard optical interface; a full set of lenses

Good Stability

- Adapt to various harsh environments

Clear Images & Rich Details

- High thermal sensitivity, NETD < 30mK
- IDE/AGC intelligent algorithm

Various Expansion Components

- USB3.0/VPC/Cameralink/HDMI/Gig-E network port

Model	PLUG1212	PLUG612	PLUG617	PLUG417
IR Detector Performance				
Resolution	1280×1024	640×512	640×512	384×288
Pixel Size	12μm		17μm	
Spectral Range	8~14μm			
Typical NETD	<50mK	<40mK	<30mK	
Image Processing				
Frame Rate	25Hz	9Hz/25Hz/30Hz/50Hz	9Hz/25Hz/30Hz/50Hz	9Hz/25Hz/30Hz/50Hz/60Hz
Start-up Time	25s	10s	10s	
Analog Video	/	PAL/NTSC	PAL/NTSC	
Digital Video	RAW/YUV/BT1120	RAW/YUV/BT656/LVDS	RAW/YUV/BT656/LVDS	
Extension Component	USB/Camerlink/HDMI	USB/VPC/Cameralink/Gig-E	USB/VPC/Cameralink/Gig-E	
Dimming Mode	Linear/Histogram/Mixed			
Digital Zoom	1~8X Continual Zoom, Step Size 1/8			
Image Display	Black Hot/White Hot/Pseudo Color			
Image Direction	Horizontally/Vertically/Diagonally Flip			
Image Algorithm	Non-uniformity Correction (NUC) Auto Gain Control (AGC) Image Detail Enhancement (IDE)			
Electrical Specification				
Standard External Interface	50pin_HRS			
Communication Mode	RS232-TTL, 115200bps			
Supply Voltage	5±0.3V	4~6V	4~6V	4.5~6V
Typical Power Consumption	2.0W	1.4W	1.4W	1.4W
Physical Characteristics				
Size (mm)	56×56×44	44.5×44.5×36.6	44.5×45.95×37.3	44.5×44.5×36.6
Weight	220g±5g	85g±3g	90g±3g	85g±3g
Environmental Adaptability				
Operating Temperature	-40°C ~ +70°C			
Storage Temperature	-45°C ~ +85°C			
Humidity	5%~95%, Non-condensing			
Vibration	Random Vibration 5.35grms, 3-axis			
Shock	Half-sine Wave, 40g/11ms, 3-axis 6-direction			
Optics				
Optional Lens	Fixed Focus Athermal: 14mm/19mm/25mm Continuous Zoom: 30-90mm, 30-180mm	Fixed Focus Athermal: 19mm/24mm	Fixed Focus Athermal: 7.5mm/13mm/19mm/25mm/ 35mm/50mm/60mm/100mm Motorized Lens: 75mm/100mm/150mm Continuous Zoom: 30-150mm	Fixed Focus Athermal: 7.5mm/13mm/19mm/ 25mm/35mm/50mm/ 60mm/100mm