

PLUG Series Uncooled Thermal Modules (Thermography)

Accurate Measurement, Professional Inspection



The Plug-R series come with additional temperature measurement function based on the basic Plug series imaging modules. It provides radiometric temperature data for each pixel, which ensures the accurate temperature measurement and professional thermographic inspections. With the powerful SDK database, you can design your own thermographic IR camera just with a housing for the Plug-R series.



“Plug and play for easy integration”

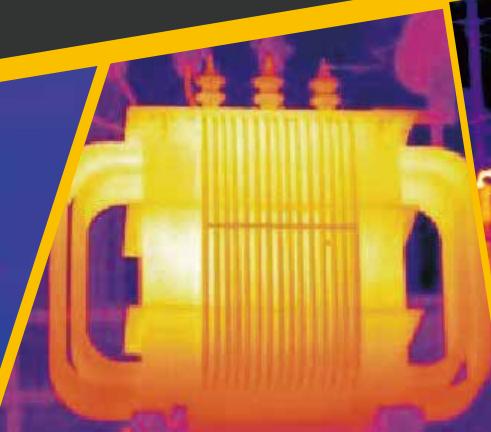
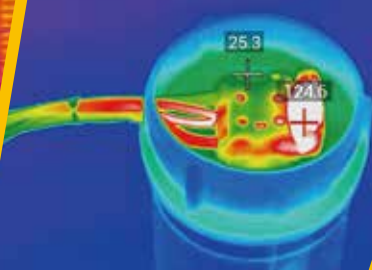


- Standard 50pin interface, multiple expansion board options.
- Standard optical interface, complete lens options.
- Perfect SDK database, ongoing update and optimization.

“Meet the specific requirements of industrial thermography”



- High sensitivity, NETD < 30mK.
- Temperature measurement available, temperature range customizable.



Model	PLUG617R	PLUG417R	PLUG1212R	PLUG612R	PLUG412R
IR Detector Performance					
Resolution	640×512	400×300	1280×1024	640×512	400×300
Pixel Pitch	17μm		12μm		
Spectral Range	8~14μm				
NETD	< 30mK				
Image Processing					
Frame Rate	9Hz/25Hz/30Hz/50Hz/60Hz				
Start-up Time	<10s		<25s	<10s	
Analog Video	PAL/NTSC		/	PAL/NTSC	
Digital Video	Y16/YUV/BT656/LVDS		HDMI/Y16/YUV/BT1120	Y16/YUV/BT656/LVDS	
Extension Component	USB/Camerlink				
Dimming	Linear/Histogram/Mixed three modes				
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);Intelligent Detail Enhancement (IDE)				
Electrical Specification					
Standard External Interface	50pin_HRS interface				
Communication Mode	RS232-TTL, 115200bps				
Supply Voltage	4~6V				
Temperature Measurement					
Operating Temperature Range	-10°C~50°C				
Temperature Range	-20°C~150°C, 100°C~550°C				
Temperature Accuracy	±2°C or ±2%				
SDK	ARM/Windows SDK, full screen thermography				
Physical Characteristic					
Dimension(mm)	44.5×44.5×36.6		56×56×40.2	44.5×44.5×36.6	
Weight	<90g		<120g	<90g	
Environmental					
Operation 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: 7.5mm/13mm/19mm/25mm/35mm/50mm/60mm/100mm Motorized lens: 75mm/100mm/150mm		Fixed focus athermal: 19mm/25mm	Fixed focus athermal: 13mm/19mm/24mm	

Specifications are subject to change without notice.