



# Plug 617

## ASIC Based Uncooled Thermal Module



### Introduce

Plug series is an ASIC based uncooled thermal module featuring with large array, high resolution, high shock and vibration resistance, and strong extensibility. Providing multiple standard interfaces and open protocol, it is particularly suitable for OEM customers to carry out secondary development. This professional standardized thermal imaging solution can be applied in power monitoring systems, industrial automation, video surveillance, thermal imaging scopes, etc.

### Application

Industrial Temperature Measurement / Security Monitoring / Law Enforcement / Search and Rescue / Intelligent Traffic System / UAV Payload / ADAS

### Features and Benefits

- Switchable frame rate to ensure smooth video and good view experience
- Ultra-low-power: long battery life, energy conservation and environmental protection
- Standard interface: standard 50pin (DF12-50DS-0.5V (86)) , a variety of optional expansion boards
- Various lenses: a series of lenses with standard or customized optical interface
- Secondary development: complete SDK development library for continuous iteration and optimization
- Professional infrared module with algorithms well-matched with GUIDE internally-developed detectors

# Specifications

	Plug617	Plug617R
<b>Detector</b>		
IR resolution	640×512	
Pixel size	17μm	
NETD	< 40mk/f1.0/25°C	
Spectral Range	8~14μm	
<b>Lens</b>		
Focal Length	7.5mm/f1.2, 13mm/f1.1, 19mm/f1.1, 25mm/f1.0, 35mm/f1.1, 50mm/f1.2, 60mm/f1.2, 100mm/f1.4	
Focus	Fixed	
<b>Outputs</b>		
Analog video	30Hz/60Hz (NTSC, 640×480) 25Hz/50Hz (PAL, 640×512) <9Hz option for export USA	
Digital video	8-bit or 14-bit serial LVDS 8-bit or 14-bit parallel CMOS 8-bit BT656 (Support BT601, MSB/LSB)	
<b>Operation&amp;Control</b>		
Image Control	Invert revert: X, Y, XY Continuous digital zoom : 1.125× Dynamic zoom&pan: 1×, 2×, 4× Digital zoom presets Polarity False color(9 kinds) or monochrome Isotherms Auto Gain Control (AGC) Image Detail Enhancement (IDE) Active Contrast Enhancement (ACE) Information Based Histogram Equalization (IBHEQ)	
Camera Control	Manual via SDK&GUI (RS232)	
Signal Interface	CameraLink (Expansion Bus Accessory Module) Discrete I/O Controls available RS-232 compatible (57,600&115200 baud) External sync input/output (master&slave) Power reduction switch (removes analog video) LVDS	
Calibration	NUC < 0.5 sec	
<b>Power</b>		
Power supply	4.0V-6.0V , DC	
Primary Elctrical Connector	50-pin Hirose	
Power Dissipation	≤1.8W	
Time to image	≤15S	
<b>Measurement</b>		
Temperature range	/	-40°C-150°C , -40°C-550°C
Accuracy		±2°C or ±2% ( max, typical )
<b>Environmental Parameters</b>		
Operating temperature	-40°C-70°C	
Identification	ROHS	
<b>Physical Characteristics</b>		
Size	44.5mm×44.5mm×37.2mm	
Weight	≤90g	
Lens Interface	M34/0.5	
Mounting Interface	6 attach points in lens mount, M2×0.4 on 3 sides, 2 per side	

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