Guide sensmart

Plug 417

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

	Plug417	Plug417R
Detector		
IR resolution	400×300	
Pixel size	17μm	
NETD	< 30mk/f1.0/25℃	
Spectral Range	8~14μm	
Lens		
Focal Length	7mm/f1.0, 19mm/f1.0	
Focus	Fixed/Manual/Electric	
Outputs		
Analog video	30Hz/60Hz (NTSC, 360×240, 320×240) 25Hz/50Hz (PAL, 384×288, 360×288)	
Digital video	8-bit or 16-bit serial LVDS 8-bit or 16-bit parallel CMOS 8-bit BT656 (Compatibility BT601, MSB/LSB)	
Operation&Control		
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) Digital Detail Enhancement (DDE) Active Contrast Enhancement (ACE) Information Based Histogram Equalization (IBHEQ)	
Camera Control	Manual via SDK&ICC (RS232)	
Signal Interface	CameraLink (Expansion Bus Accessory Module) Discrete I/0 Controls available RS-232 compatible (57,600&115200 baud) External sync input/output (master&slave) Power reduction switch (removes analog video) LVDS	
Calibration	≤1S	
Power		
Power supply	4.0V-6.0V , DC	
Primary Elctrical Connector	50-pin Hirose	
Power Dissipation	≤1.3W	≤1.5W
Time to image	≤10S	
Measurement		
Temperature range	/	-40℃-150℃, -40℃-550℃
Accuracy		±2℃ or ±2% (max, typical)
Environmental Parameters		
Operating temperature	-40℃-70℃	
Identification	ROHS	
Physical Characteristics		
Size	44.5mm×44.5mm×36.35mm	
Weight	≤90g	
Lens Interface	M34/0.5, hoop	
Mounting Interface	6 attach points in lens mount, M2×0.4 on 3 sides, 2 per side	