GSTiR

GAS Series Thermal Modules (For Optical Gas Imaging)

Gas can Leak but can't Escape

Description

With high performance signal processing circuit and advanced image processing algorithm, GAS330 series for gas leak detection is developed on the basis of HgCdTe mid-wave cooled infrared detector. By using thermal imaging technology, GAS330 series visualize VOCs gas (volatile organic compounds) that can't be seen by naked eyes. It is effective to detect VOCs leakage in the production and transportation process of petrochemical enterprises, and has great application value in safety production, environmental protection supervision, cost saving.

High Sensitivity

- High sensitive cooled infrared detector, NETD≤15mK
- Quite efficient in application of low gas concentration and slow gas flow
- Effective leak detection includes Alkanes, Alkenes, Alcohols, Benzenes, Ketones and other gases

Easy Integration

- Long range non-contact temperature measurement: range of -20℃~400℃
- Support point and regional analysis, high temperature alarm, hot spot tracking and other temperature algorithms
- Cameralink/DVP/USB/Gig-E image output interfaces, compatible with a variety of development environments
- Multiple lens configurations, more optional fields of view, more scenes available

Explosion-proof (GAS330^{G2})

- Obtain the explosion-proof certificate (Ex ic IIC T4 Gc)

Specifications

Model	GAS330	GAS330 G2
Performance		
Type	MWIR Cooled Thermal Module	
Resolution	320×256	
Pixel Size	30μm	
Cryocooler	Stirling Cooler RS058	Stirling Cooler RS058I
Spectral Range	3.2μm±0.1μm~3.5μm±0.1μm	
Cooling Time (20℃)	⩽8min@25±3℃	
Typical NETD	⩽15mK@25±3℃	
Frame Rate	30Hz	
Gas Detection Type	Methane, Ethane, Propane, Butane, Pentane, Hexane, Heptane, Octane, Ethylene, Propylene, Isoprene, Methanol, Ethanol, Butanone, Benzene, Toluene, Xylene, Ethylbenzene etc.	
Image Processing		
Imaging Control	Image Direction: Horizontally/Vertically/Diagonally Flip Digital Zoom: 1~10X Continual Zoom Pseudo Color: ≥8 Types Non-uniformity Correction Gas-enhanced Image Algorithm Image Noise Reduction Image Detail Enhancement Dynamic Range Compression	
Electrical Specifications		
Electrical Port	Serial LVDS Port (Standard CameraLink Protocol) Serial Communication Port (RS422) External Sync Port (RS422) Server Port (RS422) Power Supply	
Analog Video	PAL	
Digital Video	16 bit CameraLink (Cameralink Base Mode) 16bit DVP Output/USB (Optional)/Gig-E (Optional)	
Control	RS422, Baud Rate 115200	
Power Supply	24V DC	12±1 V
Stable Power Consumption	12W	
Temperature Measurement		
Temperature Measurement Range	/	--20℃~400℃
Temperature Measurement Accuracy	/	±1℃ (0~100℃), ±2% (>100℃)
Physical Characteristics		
Size (mm)	155×67×80 (Without Lens & Accessories)	
Weight	⩽900g (Without Lens & Accessories)	
Operating Temperature	-40°C ~ +60°C	-20℃ ~ +50℃ (Imaging) -40℃ ~ +60℃ (Thermography)
Explosion-proof Certification		
Explosion-proof Level	/	Ex ic IIC T4 Gc
Optics		
Optional Lens	Fixed Zoom: 23mm/F1.5 (FOV 23.58°×18.96°) 55mm/F1.5 (FOV 9.97°×7.99°)	

Specifications are subject to change without prior notice.

Wuhan Global Sensor Technology Co., Ltd

+86 27 81298493 marketing@gst-ir.com

www.gst-ir.net No. 6 Huanglongshan South Rd, Wuhan 430205, P.R.China