

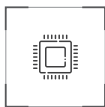
RTDS123C

High-Performance Ceramic Packaged LWIR Sensor

RTDS123C is a ceramic-packaged LWIR sensor (1280×1024, 12μm) based on vanadium oxide (VOx) microbolometer with an 8-14 μm wavelength range, high-quality images with high performance and high sensitivity. RTDS123C applies to multiple scenarios, e.g. industrial temperature measurement, outdoor night vision, etc.



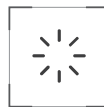
Resolution
1280×1024



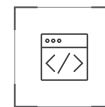
Pixel Size
12μm



NETD
<40mk



High
Sensitivity

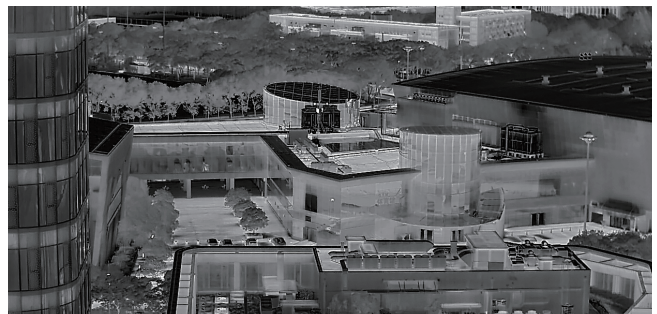


High-
Performance



High-Quality
Image

Product Imaging



Specifications

Model	RTDS123C
Sensor Technology	VOx microbolometer
Spectral Range	8-14μm
Pixel Pitch	12μm
Array Format	1280×1024
Output Forma	14bits(25/30Hz) 13bits(50Hz)
Read Mode	Rolling shutter mode
Mirroring	X-mirroring, Y- mirroring
Operability	≥99.5%
Non-uniformity Correction	Non-uniformity correction
Frame Rate	25/30/50 Hz
Operating Temperature Range	-40~+85°C
Thermal Time Constant	<15 ms
NETD	<40 mK(f/1.0, 30Hz, 300K)
Power Consumption	<300 mW(30Hz, 25°C)
Package Type	56-Pin Ceramic
Size	27×27×4.6 mm ³
Weight	≤10 g

Application Scenarios



Outdoor Night Vision



Handheld Devices



Safety Monitoring



Fire Prevention

Company Profile

Raytron Microelectronics Co., Ltd. is a wholly-owned subsidiary of Raytron Technology Co., Ltd., providing global customers with infrared detectors, core modules, and industry solutions.

Our products are widely used in various fields, including infrared temperature measurement, night vision observation, machine vision, intelligent driving, Commercial Drone, smart industry, security monitoring, Internet of Things, medical epidemic prevention and gas detection.

With the mission of "to create incremental value for customers with technological advancements", we are committed to leaving a name in the history of constantly expanding human perception capabilities.



Official Website



LinkedIn Official Account

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