



D-BLUE1

Scientific SWIR Camera

The D-BLUE1 scientific SWIR camera is designed with an InGaAs detector with a built-in 3-stage thermoelectric cooler (TEC), capable of cooling to -50°C . It supports Ethernet or CameraLink interfaces and provides SDK for secondary development. It can be widely applied in semiconductor failure analysis, in vivo biological imaging, astronomical observation, etc.



Cooling -50°C

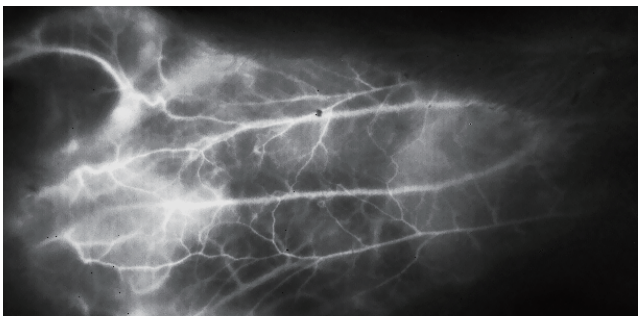


Low Noise

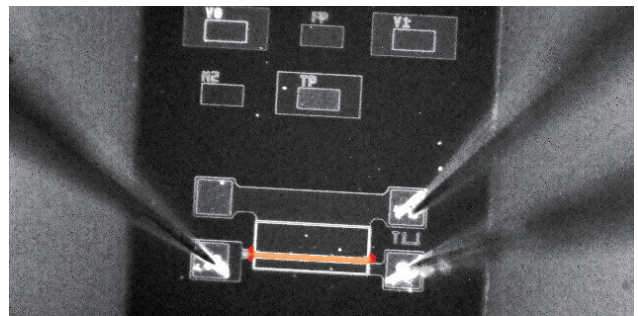


SDK Provided

Product Imaging



In VIVO Imaging



EMMI

Specifications

Technical Specifications	D-BLUE1
Sensor Type	InGaAs Photodiode
Active Pixels	640×512
Pixel Size	15μm
Optical Fill Factor	100%
Spectral Response Range	0.9~1.7μm @RT
Pixel Operability	≥99.8%
Max Frame Rate	50Hz
Integration Time	≤1us-1min
Mean Pixel Dark Current	≤700e/s/pixel@-50°C(air cooling)
Dark Noise (RMS)	≤15e(hg)
Digital Output	14 bit
Output Interface	CameraLink or Ethernet
Power Supply	DC 12V
Power Dissipation	≤36W
Lens Mount	C-mount
Weight	<2kg
Dimensions	148mm×98mm×116.5mm
Operating Temperature	-0°C~+30°C

■ This information is for reference only. Images and technical specifications are subject to change without notice.

Application Scenarios



Semiconductor Inspection



Biomedical Research



Astronomical Observation

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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