1550nm Near Infrared Low Cost Digital Camera (Economical Real-time Infrared Imaging Application Camera)

Product Description

This is a camera for affordable real-time infrared imaging applications. Using our existing technology, we developed the CAM-1550IR to optimize extreme high sensitivity at 1550nm, ideally suited for beam positioning/alignment in the communication band, transmitters, lasers, high-speed fiber or direct imaging via an attached lens. The Caml-Adapter is used to easily and economically adjust the camera for use at 1550nm.

Product features

Laser detection or direct imaging、 Lightweight design、 High sensitivity、 High performance、 Excellent for laboratory use

Part Number

MP-CAM-1550IR

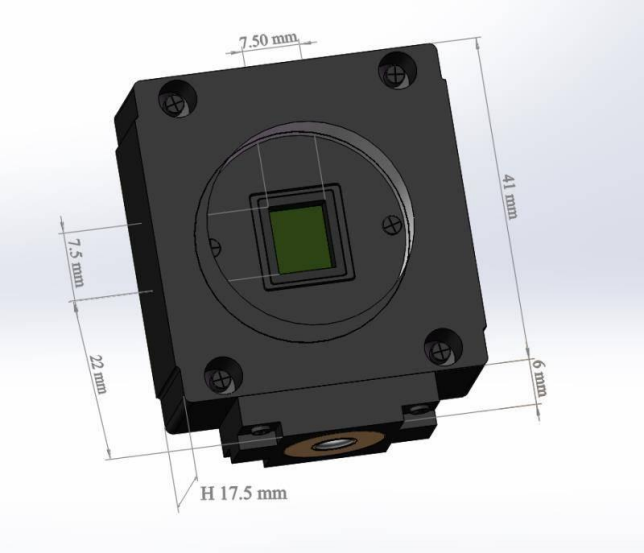
Application area

Laser beam profiling 、 Machine vision and general purpose infrared detection、 Telecom equipment manufacturing control、 Telecom testing and inspection、 Fiber optic inspection and spectroscopy、 Product quality monitoring

Core parameters

Maximum Resolution	Pixel Size
1296(H) x 964(V)	3.75um x 3.75um

Dimension Drawing



General Parameters

Parameter

Camera specifications	Digital CamIR1550 463125
Image sensor model	Sony progressive scan interface interline transfer ICX445 1/3" Exview HAD CCD™
Maximum resolution	1296 (H) x 964 (V)
Pixel size	3.75µm x 3.75µm
A/D converter	12-bit ADC analog-to-digital converter
Video data output	8, and 16-bit digital data
Digital interface	5-pin Mini B USB2.0 digital interface for camera control, video data transfer and power supply
Transfer rate	480 Mbit/s
Partial image mode	Pixel classification and region of interest mode based on format 7
Dynamic range	56.77dB

Gain control	Auto/Manual/Single push mode, software programmable, 0 dB to 24 dB, 0.04 increments
Switching speed	Auto/Manual/Single push mode, software programmable, 0.01 ms to >10 s
Voltage requirements	Voltage through Mini B USB 2.0 interface or JST 7-pin GPIO connector: 4.745 to 5.25 V
Power consumption	Power consumption at 5V2 W (max)
Dimensions	Dimensions 25.5mm x 41mm x 44mm (excluding optics)
Gross weight	Mass 37g (including tripod mount bracket)
Memory storage	3 memory channels for custom camera settings
Lens mount	CS-Mount (includes 5mm C-mount adapter)
Emissions	Complies with CE rules and FCC rules part 15 class B
Operating temperature	0°C to 45°C
Storage temperature	-30°C to 60°C
Warranty period	1 year
Spectral sensitivity	See graph
Peak sensitivity	See graph
Scene lighting	Spectral sensitivity 1000-1185nm
Frame rate	100 fps

Absorption sensitivity of camera sensor coatings