

USB 3.0 GenICam® Cameras

HC-CA020-10UM/HC-CA020-10UC

High quality sensors

New SONY Pregius CMOS Global shutter sensors provide high quality images.

USB3 Vision® protocol & GenICam® standard

Standard vision SDK platform for easy integration in existing software.

Full GenICam® compliant: easy to integrate

GenICam® compliant SDK package provides more flexibility to Vision Systems®.

USB 3.0 connectivity

Easy connectivity to most new computers with 5gbps bandwidth.



USB
VISION

GEN<i>CAM

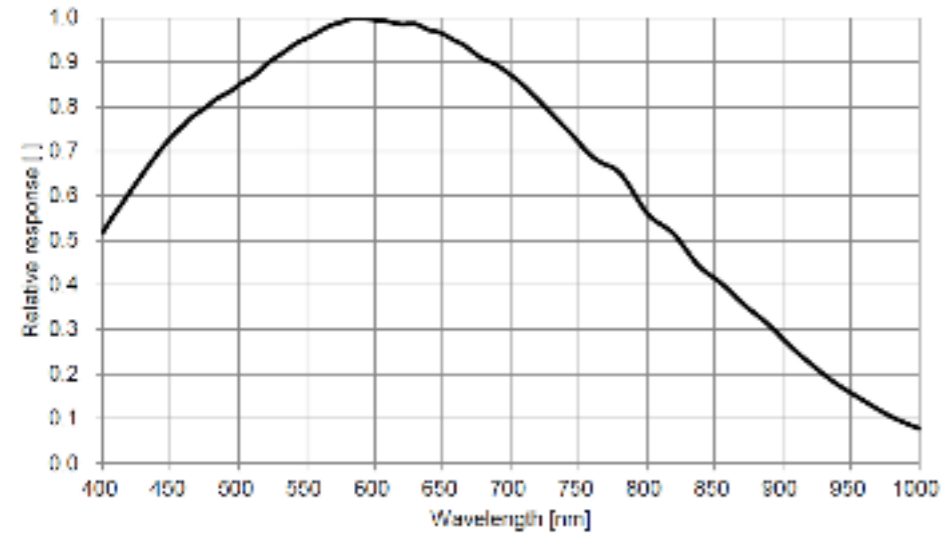
Specifications

Model	Sensor	Sensor Type	Shutter	Resolution	Frame rate (fps)	Bit depth	Interface	Mono/ Color	Pixel size (μm)	Sensor size
HC-CA020-10UM	Sony® IMX430	CMOS	Global	1624 × 1240	89.1	12	USB 3.0	Mono	4.5 x 4.5	1/1.7"
HC-CA020-10UC	Sony® IMX430	CMOS	Global	1624 × 1240	89.1	12	USB 3.0	Color	4.5 x 4.5	1/1.7"

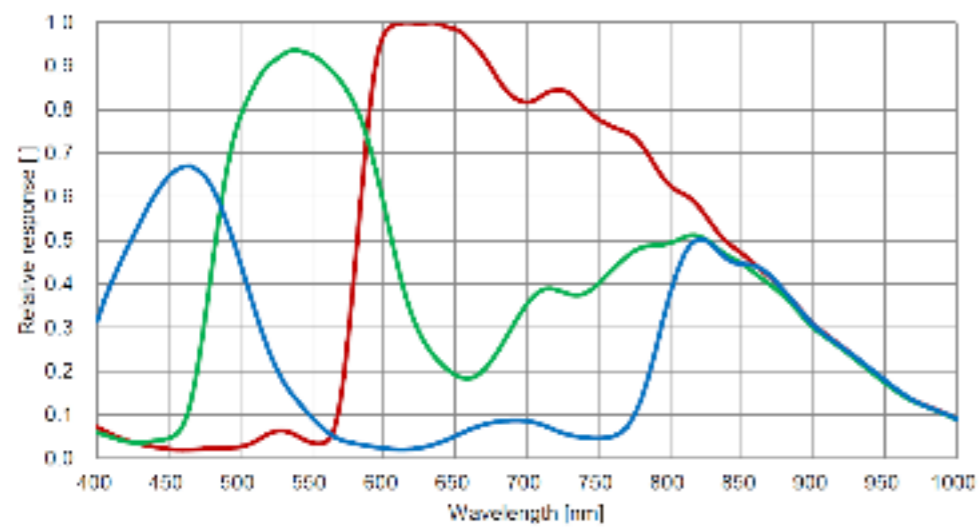
Model	HC-CA020-10UM	HC-CA020-10UC
Effective Pixels	2.0MP	
SNR	40 dB	
Dynamic Range	75.4 dB	
GPIO	6-pin Hirose connector provides power and I/O, including opto-isolated input × 1 (Line 0), opto-isolated output × 1 (Line 1), and bi-directional non-isolated I/O × 1 (Line 2)	
Image Format	Mono 8/10/10p/12/12p	Mono 8/10/12, Bayer RG 8/10/10p/12/12p, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
Binning	Not Support	
Decimation	Supports 1 × 1, 2 × 2	
Gain	0 dB to 24 dB	
Reverse image	Supports horizontal and vertical reverse image output	
Exposure Time	1 μs to 10 sec	
Trigger Mode	Software trigger/Hardware trigger/Free run mode	
Image Buffer	128MB	
User Setting	Support two sets of user-defined configurations	
Dimensions	29mm*29mm*30mm	
Weight	Approx. 80 g (0.2 lb.)	
Power Supply	Power supply via USB connector	
Power Consumption	Typ. 3.2 W@5 VDC	Typ. 3.9 W@5 VDC
Lens Mount	C-mount	
Temperature	Storage temperature: -30° C~ + 70° C; Operation temperature: 0° C~+50° C	
Compatibility	USB3 Vision, GenICam	

Spectral Characteristics

Spectral Sensitivity - HC-CA020-10UM

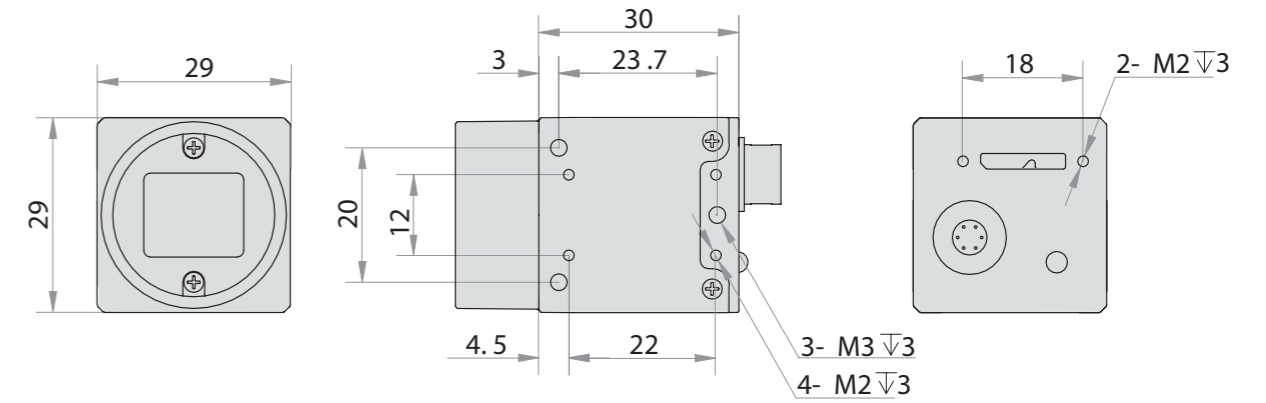


Spectral Sensitivity - HC-CA020-10UC



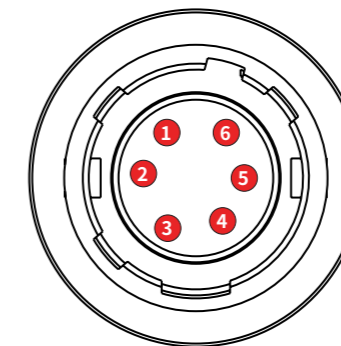
Dimensional Diagrams

HC-CA020-10UM/UC (Unit:mm)



I/O Connector

6pin power & I/O port



Pin	Signal	Description
1	DC_PWR	Camera Power
2	Line0+	Opto-isolated input
3	Line2+	GPIO (Configurable IO input/output)
4	Line1+	Opto-isolated output
5	Line0/1-	Opto-isolated ground
6	Line2-	Camera power ground



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