

ICMOS USB-Kamera

Die ICMOS ist eine für die technische Industrie entwickelte CMOS-Kamera zur Verwendung anstelle eines Okulars oder auf Mikroskopen mit C-Mount Anschluss. Sie beinhaltet einen Hochleistungs-CMOS Sensor zur Bildaufnahme. Der USB2.0 -Anschluss dient für Bildübertragung und zur Energieversorgung, welche aufgrund des sehr geringen Strombedarfs sehr niedrig ist und für übliche USB 2.0 PC-Anschlüsse passt
Abmessungen: 29x29x29 mm ohne Linsenhalter, ohne Optiken.

Verbunden mit passenden optischen Adaptern kann diese kleine Kamera auch auf Handmikroskopen wie PEAK 2034/2054/2065 oder Metocheck 7504 -Serie anstelle des Okulars verwendet werden.

Die ICMOS wird mit einer einfach zu bedienenden Software zur Bildbearbeitung geliefert. Hiermit sind auch Messungen von Längen, Kreisen, Flächen, Winkeln usw. möglich, ebenso wie das Speichern von Einzelbildern und Filmen.

Die ICMOS kann vielseitig zur Inspektion und Überwachung in Maschinen und auf Mikroskopen verwendet werden.

Basisdaten:

- C-Mount Kamera mit Aptina oder OnSemi CMOS Sensor;
- Abmessungen: 29x29x29 mm exkl. Linsenhalter, ohne Optiken;
- 8-pin Hirose HR25-7TR-8PA GPIO Anschluss für Trigger, Strobe (Optional);
- USB 2.0 Interface mit Schraubsicherung zur Kamerasteuerung, Datenübertragung und Stromversorgung.
- Mit umfangreicher Software (auch deutsche Menüsprache)
- Passende Betriebssysteme: Windows/Linux/Mac OS, SDK;
- Native C/C++, C#/VB.NET, DirectShow, TwainControl API;



Order Code	Sensor & Size(mm)	Pixel(μm)	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure(ms)
ICMOS03100KPA IP603100A	3.1M/MT9T001(C) 1/2" (6.55x4.92)	3.2x3.2	1.0 V/lux-sec 61dB 43dB	12@2048x1536 43@1024x768 83@680x510	1x1	0.128ms-2000ms
ICMOS01300KMA IM601300A	1.3M/MT9M001(M) 1/2" (6.66x5.32)	5.2x5.2	2.1 V/lux-sec 68.2dB 45dB	30@1280x1024	1x1	0.64ms-1035.62ms
ICMOS10000KPA IP610000A	10M/MT9J003(C) 1/2.3" (6.44x4.616)	1.67x1.67	0.31v/lux-sec 65.2dB 34dB	3.7@3584x2748 13@1792x1374 35@896 x684	1x1, 2x2, 4x4	0.4ms-2000ms
ICMOS14000KPA IP614000A	14M/MT9F002(C) 1/2.3"(6.451x4.603)	1.4x1.4	0.724v/lux-sec 65.3dB 35.5dB	2.7@4096x3288 10@2048x1644 35@1024 x822	1x1, 2x2, 4x4	0.4ms-2000ms

C: Color; M: Monochrome;

Other Specification for ICMOS Camera

Spectral Range	380-650nm (with IR-cut Filter)
White Balance	ROI White Balance/ Manual Temp Tint Adjustment/NA for Monochromatic Sensor
Color Technique	Ultra-Fine™ Color Engine/NA for Monochromatic Sensor
Capture/Control API	Native C/C++, C#/VB.NET, DirectShow, Twain and Labview
Recording System	Still Picture and Movie
Cooling System*	Natural
Cable Connection	Include Locking Screws
User IO	IO with Optocoupler Isolation(Trigger and Flash)

Operating Modes

Continuous Capture Mode	Video Mode
Single Capture Mode	Hard Trigger or Soft Trigger

Operating Environment

Operating Temperature(in Centidegree)	-10~ 50
Storage Temperature(in Centidegree)	-20~ 60
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 5V over PC USB Port

Software Environment

Operating System	Microsoft® Windows® XP / Vista / 7 / 8 /10 (32 & 64 bit) OSx(Mac OS X) Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory:2GB or More
	USB Port:USB2.0 High-speed Port
	Display:17" or Larger
	CD-ROM



Standard Camera Packing List

A	Carton L:52cm W:32cm H:33cm (50pcs, 12~17Kg/ carton), not shown in the photo
B	Gift box L:14cm W:9.7cm H:6cm (0.17~0.18Kg/ box)
C	ICMOS series USB2.0 C-mount camera
D	High-speed USB2.0 A male to B male gold-plated connectors cable /2.0m
E	CD (Driver & utilities software, Ø12cm)

Optional Accessory

F	Adjustable lens adapter	C-mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108001/AMA037 108002/AMA050 108003/AMA075
		C-mount to Dia.31.75mm eyepiece Tube (Please choose 1 of them for your telescope)	108008/ATA037 108009/ATA050 108010/ATA075
G	Fixed lens adaptor	C-mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108005/FMA037 108006/FMA050 108007/FMA075
		C-Mount to Dia.31.75mm eyepiece tube (Please choose 1 of them for your telescope)	108011/FTA037 108012/FTA050 108013/FTA075
Note: For F and G optional items, please specify your camera type(C-mount, microscope camera or telescope camera) , ToupTek engineer will help you to determine the right microscope or telescope camera adapter for your application;			
H	108015(Dia.23.2mm to 30.0mm Ring)/Adaptor rings for 30mm eyepiece tube		
I	108016(Dia.23.2mm to 30.5mm Ring)/ Adaptor rings for 30.5mm eyepiece tube		
J	108017(Dia.23.2mm to 31.75mm Ring)/ Adaptor rings for 31.75mm eyepiece tube		
K	Calibration Kit	106011/TS-M1(X=0.01mm/100Div.); 106012/TS-M2(X,Y=0.01mm/100Div.); 106013/TS-M7(X=0.01mm/100Div., 0.10mm/100Div.)	

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