

**CÁMARA OCULAR CMOS USB2.0
USB2.0 CMOS EYEPIECE CAMERA
CAMÉRA OCULAIRE CMOS USB2.0**

REF. - CODE - RÉF. - HGB010



Este manual es parte inseparable del aparato por lo que debe estar disponible a todos los usuarios del equipo. Le recomendamos leer atentamente el presente manual y seguir rigurosamente los procedimientos de uso para obtener las máximas prestaciones y una mayor duración del mismo.

This manual should be available for all users of these equipments. To get the best results and a higher duration of this equipment it is advisable to read carefully this manual and follow the processes of use.

Ce manuel est une partie indissociable de l'appareil et doit être mis à la disposition de tous les utilisateurs de l'équipement. Nous vous recommandons de lire attentivement ce manuel et de suivre scrupuleusement les procédures d'utilisation afin d'obtenir des performances maximales et une plus longue durée de vie de l'appareil.

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1. USB2.0 CMOS EYEPIECE CAMERA

1.1.1 Basic Characteristics

The HGB010 eyepiece camera is an economic model with simple and compact structure. USB2.0 is used as the data transfer interface. This USB2.0 high-speed interface and the high frame rate video display keep the screen smooth without interruption.

It comes with the advanced video & image processing application ToupView/ToupLite.

This eyepiece camera is widely used to convert the mono or binocular student microscopes to digital microscopes.

With 23.2 to 30mm or 23.2 to 30.75mm adapters, this camera can also convert the stereo microscopes to digital stereo microscopes.

- Eyepiece camera with 23.2 diameter and compact size.
- Easy to extend to C or CS- Mount camera with high quality lens (optional).
- High-quality camera with Aptina CMOS sensor.
- Auto white balance and auto-exposure; brightness, contrast, chroma, and saturation can be adjusted.
- High-speed USB2.0 interface and high frame rate video display keep the screen smooth without interruption.
- With advanced video & image processing application ToupView/ToupLite.
- Providing Windows/Linux/Mac OS multiple platforms SDK.
- Native C/C++, C#/VB.NET, DirectShow, Twain Control API.



1.1.2 Technical Data

Code	Sensor & Size (mm)	Pixel (μm)	G Responsivity Dynamic range SNR max	FPS/Resolution	Binning	Exposure
HGB010	5.1M/AR0521(C) 1/2.5" (5.70x4.28)	2.2x2.2	18.8ke-/lus 73dB 40dB	30@2592x1944 30@1280x960 30@640x480	1x1 1x1 1x1	0.1-1000 ms

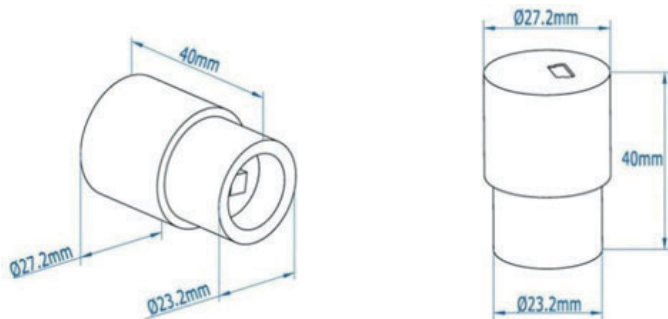
C: Color

Other Specifications	
Spectral Range	380-650nm (with IR-cut Filter)
White Balance	Auto/ROI/Manual White Balance
Color Technique	N/A
Capture/Control SDK	Windows/Linux/macOS/Android Multiple Platform SDK (Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc)
Recording System	Still Picture and Movie
Data Format	MJPEG
Cooling System	Natural
Operating Environment	
Operating Temperature (°C)	-10~ 50
Storage Temperature (°C)	-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 / 11 (32 & 64 bit) OSx(Mac OS X)
PC Requirements	Linux
	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

1.1.3 Structure

The camera body, made from aluminum alloy blackening, ocular housing Dia.27.2 X 40mm, ensures heavy duty, workhorse solution. The camera is designed with a high-quality IR-CUT filter to protect the camera sensor. No moving parts included. This design ensures a rugged, robust solution with an increased lifespan when compared to other industrial camera solutions.

Dimensions



1.1.4 Packing Information



Standard Packing List

A	Carton L:52cm W:32cm H:33cm (50pcs, 12~17kg/carton), not shown in the photo
B	Camera box L:14.5cm W:9.5cm H:6.0cm (0.15~0.16kg/box)
C	One CMOS eyepiece camera
D	High-speed USB2.0 A male to mini B 5-pin male gold-plated connectors cable /1.5m
E	CD (Driver & utilities software, Ø8cm)