

5.6 XCAM0720PHA C-mount HDMI CMOS Camera(1) (Discontinued)

5.6.1 XCAM0720PHA's Basic Characteristic

- Through standard HDMI interface to stream the video to display or HDTV.
- Aptina CMOS sensor;
- Easy connecting to other equipment on the production line with the C-mount interface.
- High-resolution and high frame rate, perfect color reproduction, highly integrated and compact, low failure rate and stable performance.
- 1280 × 720 (720P) resolutions to match the current high-definition displayer on the market.
- Supporting various OSD cursors which can be toggled On/Off (functions shift as users press the button). The OSDs including: scale, double horizontal line, double vertical line, double cross line, Tri-cross line.
- Function buttons including automatic white balance and exposure on/off (AEWB), saving images to SD card (SAVE), video stream and freeze on/off (FREEZE), remote image snapshot controller to reduce the vibration blur (REMOTE).
- Meet various applications and can be widely used in industrial inspection, education and research, materials analysis, precision measurement, medical analyses etc.



5.6.2 XCAM0720PHA Datasheet

Order Code	Sensor & Size(mm)	Pixel(μm)	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure(ms)
XCAM0720PHA XP0720A(Suspended)	720P/MT9P031 (C) 1/2.5"(5.70x4.28)	2.2x2.2	1.4 V/lux-sec 70.1dB 38.1dB	30@1280x720	1x1	0.21ms~33ms

Interface & Button Functions



Button 1	Video Stream/Freeze
Button 2	AEWB ON/OFF
Button 3	Save Image to SD Card
Button 4	Cursor ON/OFF

1X HDMI Output Port
1X SD Card Slot
1X Power Input Slot
1X Remote Switch Slot

Overall Dimensions

Width X Depth X Height	68 mm (2.67") X 68 mm (2.67") X 92mm (3.62")
Shipping Weight	0.25 kg (0.55 lbs)

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/1A Adapter

Optional Accessories

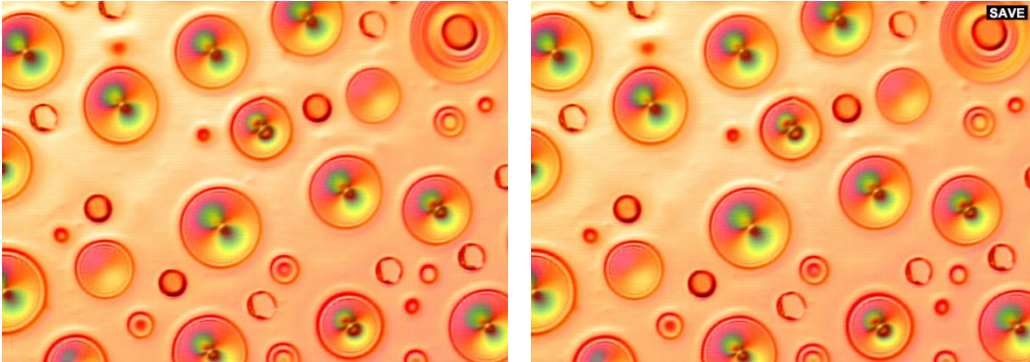
Lens	C-mount Lens
Cable	HDMI Cable
Memory Card	SD Card
Remote Image Save Switch	2.5mm Headphone Jack Remote Image Save Switch

5.6.3 Function Key Description

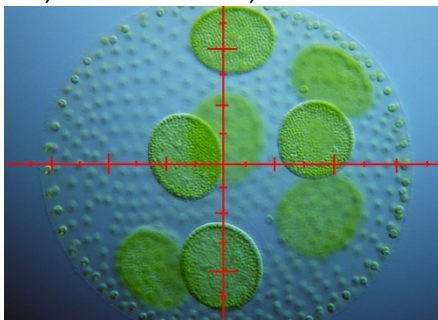
The XCAM0720PHA light indicator flashes about 15s after the power on. Then the XCAM0720PHA will load software, after finish loading, the system begins to work. Auto exposure and white balance are the default state now.



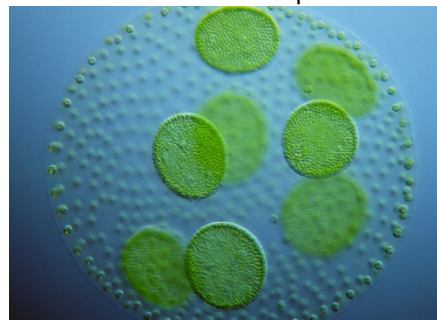
- **FREEZE** button: Toggle between the video stream mode/freeze mode(Default is video stream);
- **AEWB** button: Toggle auto exposure and white balance on/off (Default is on);
- **SAVE** button: Saving the current screen to the image SD card, the compression format is JPEG with a resolution of 1280x720, users can press the button or click the remote controller button to save picture;



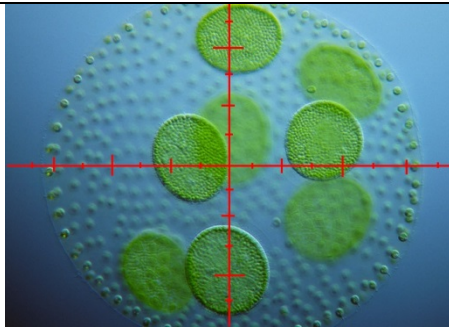
- **CURSOR** button: Toggle the OSD cursor on/off (default is off). Crosshair style including: scale, double horizontal line, double vertical line, double cross line, Tri-factor cross line. Functions shift as user press the button.



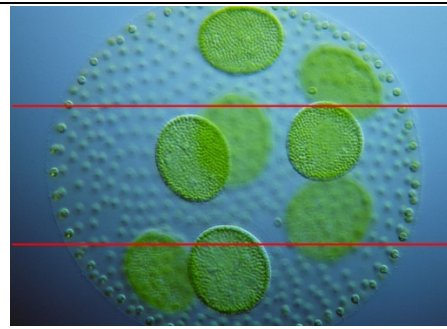
Scale



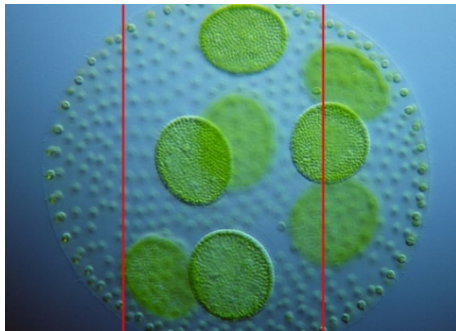
Default is off



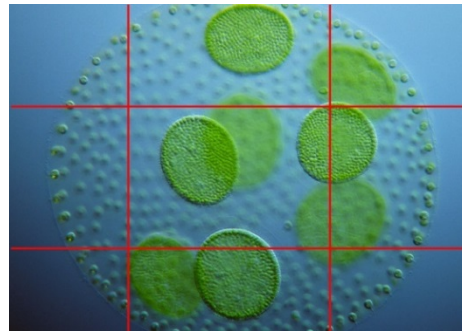
Scale



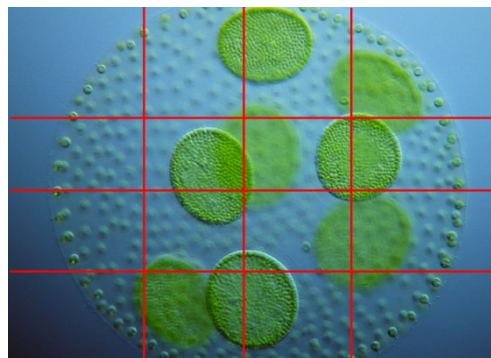
Two horizontal lines



Two horizontal lines

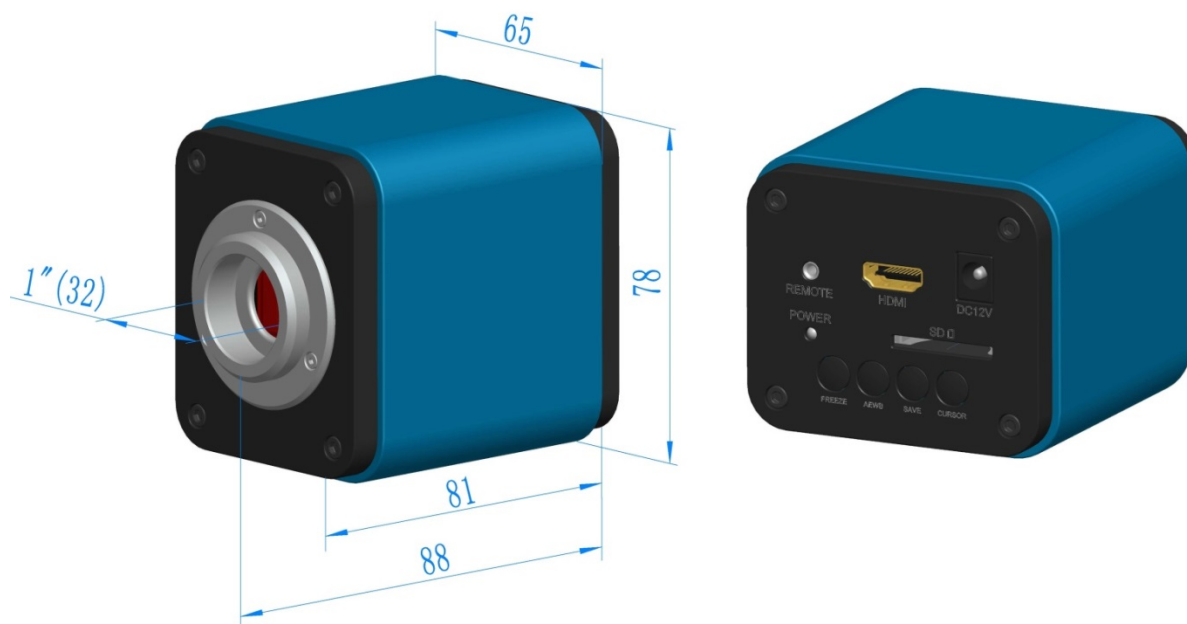


Double cross line



Tri-factor cross line

5.6.4 Dimension of XCAM0720PHA



Dimension of XCAM720PHA

5.6.5 Packing Information for XCAM720PHA



Packing Information of XCAM0720PHA

Standard Packing List

A	Gift box : L:25.5cm W:17.0cm H:19.0cm (1pcs, 1.43Kg/ box)
B	XCAM0720PHA
C	Power Adapter: Input: AC 100~240V 50Hz/60Hz, Output: DC 12V 1A American standard: Model: GS12U12-P1I 12W/12V/1A: UL/CUL/BSMI/CB/FCC EMI Standard:EN55022,EN61204-3, EN61000-3-2,-3, FCC Part 152 class B, BSMI CNS14338 EMS Standard: EN61000-4-2,3,4,5,6,8,11,EN61204-3,Class A Light Industry Standard European standard: Model:GS12E12-P1I 12W/12V/1A; TUV(GS)/CB/CE/ROHS EMI Standard:EN55022,EN61204-3, EN61000-3-2,-3, FCC Part 152 class B, BSMI CNS14338 EMS Standard:EN61000-4-2,3,4,5,6,8,11,EN61204-3,Class A Light Industry Standard
D	HDMI Cable
E	2.5mm Headphone Jack Remote Image Save Switch

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 Adapter	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)/Adapter rings for 30mm eyepiece tube		
I	108016(Dia.23.2mm to 30.5mm Ring)/ Adapter rings for 30.5mm eyepiece tube		
J	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.)	
K	SD Card(4G or 8G)		

5.6.6 Extension of XCAM0720PHA Camera with Microscope or Telescope Adapter

Extension	Picture	
C-mount Camera		
Microscope Camera	 <p data-bbox="459 835 849 860">XCAM0720PHA+AMAXXX(23.2mm Adapter)</p>	 <p data-bbox="975 835 1364 860">XCAM0720PHA+FMAXXX(23.2mm Adapter)</p>
Telescope Camera:	 <p data-bbox="459 1081 849 1106">XCAM0720PHA+ATAXXX(31.75mm Adapter)</p>	 <p data-bbox="975 1081 1364 1106">XCAM0720PHA+FTAXXX(31.75mm Adapter)</p>