

## HDS800C 4K UHD HDMI Camera



### Introduction

As the 4k resolution UHD Screen is more and more popular, 1080p HDMI cameras seem can not be effectively use the screen to show the image details. Based on the latest HD high speed CMOS image sensor, the FPGA hardware image processor and HDMI V1.4 standard, our company released the HDS800C 4k UHD HDMI industry camera.

The camera adopts high sensitive 1/1.9 inch (pixel size 1.85um) 8.0 Mega pixel color CMOS image sensor, the sensor has high dynamic range, high sensitivity and excellent thermal noise suppression features. The camera can be connected to 4K UHD Screen to preview and real-time capture the BMP&RAW image to TF card (mini SD card), it support Max. 64GB TF card. The camera is plug and play. The 4k UHD camera can ensure every detail is not to be missed. The camera can not take videos, if you want to take videos, the cameras should be connected with HDMI image acquisition card, The cameras can take both images and videos when they are connected to image acquisition card. The cameras comes with IR remote controller, no shaking when take pictures.

### Features

1. High resolution. The 4K UHD cameras output 4k resolution (3840 x 2160), the resolution is four times as large as 1080p cameras.
2. High speed frame rate (Max. 30fps), no compression, no interpolation, Max. Transmission bandwidth is 5.97 Gb/s.
3. Equipped with IR remote control, which can realize fast parameter adjustment, support hardware auto white balance, auto exposure, 2800k\5000k\6500k color correction, two groups of cross line adjustment, Image flip, mirror, freeze, capture, preview, parameter saving and other functions.
4. Support the firmware updated by TF card.
5. CNC processed aluminum alloy casing, industrial standard circuit board, precise and reliable. Provide 3 years warranty.

## Application

HDS800C 4K UHD HDMI digital camera can be widely used in video conferencing, remote medical diagnosis, microscopy images, industrial inspection, video projectors, security monitoring field. With the high image quality and easy to operate features, it will be your best assistant for following applications:

- Live Cell Imaging
- Surgical Microscopic Imaging
- Pathology
- Cytology
- Defect Analysis
- Semiconductor Inspection
- Metrology
- Navigation for Processed Imaging
- Industrial Optical HD Digital Imaging
- Astronomical Observation

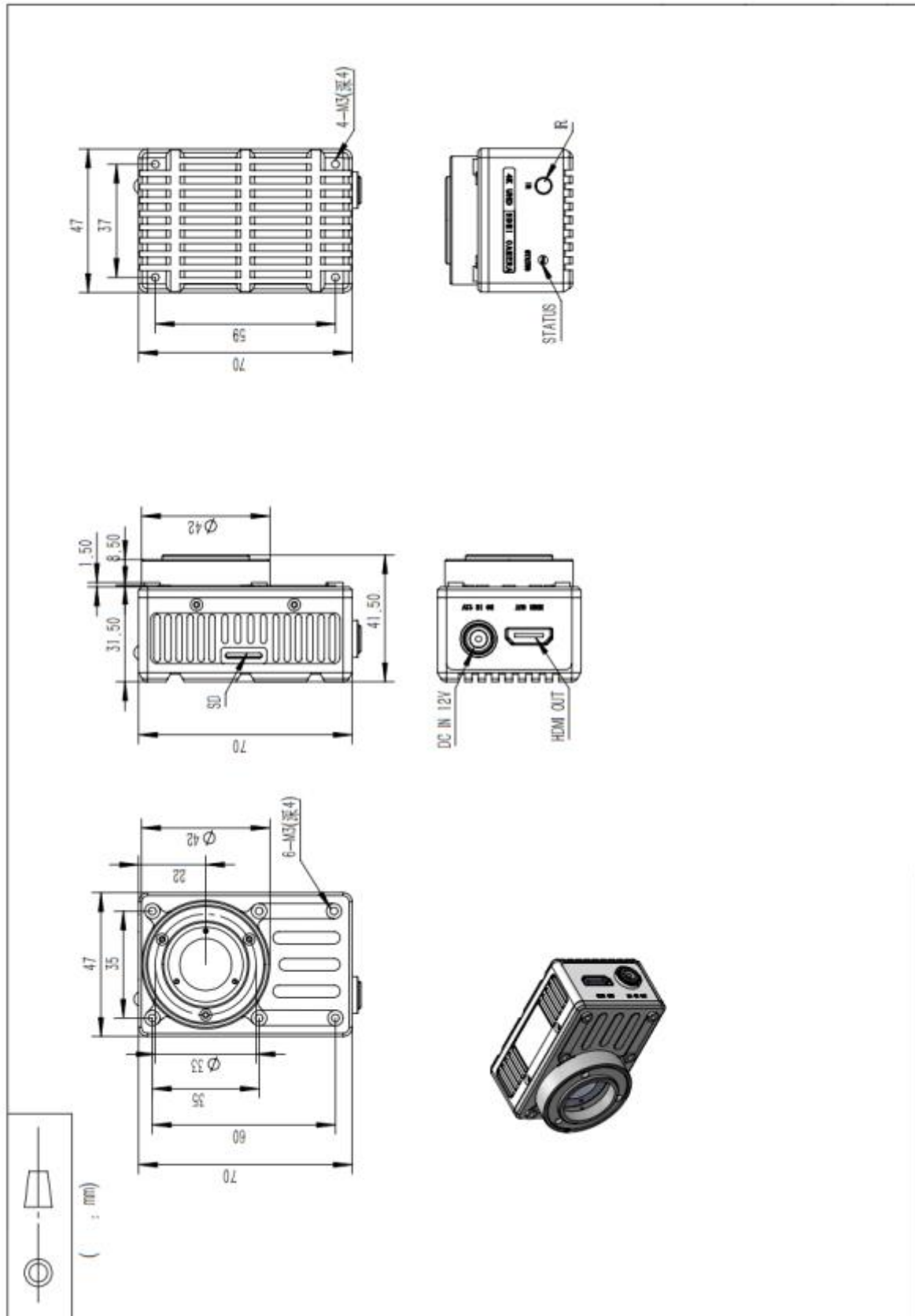
## Specification

Model	HDS800C
Resolution	8.0MP
Max FPS	4K@30FPS / 1080P@60FPS
Sensor Type	1/1.9" CMOS sensor (Sony IMX226)
Shutter	Rolling
Color	Color
Pixel Size	1.85μm
Max Resolution	4K(3840X2160)
Image Format	BMP / RAW
Function	BMP image Capture, Preview, Freeze, Mirror, Flip, Cross line, AWB, AE, Gain, Color temperature preset, Parameter save, Resolution switching, Restore Setting and other functions.
Interface	HDMI v1.4
Memory	TF Card Max. 64Gb
Input Power	DC 12V 2A
Lens	C-mount
Dimension	47x70x31 mm
Weight	168 g
Accessories	IR Remote Controller *1, 12V 2A Power Supply*1, HDMI Cable*1

IR Remote Controller







Dimension



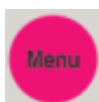
## Operation Instruction

Connect the display with 4K Camera through HDMI interface. Plug the power supply and boot the camera, the screen will show objective's image when lens aims at it. User can control 4K Camera and carry on following operations by using remote controller. (Be aware to pull out the separator paper while using the remote controller for the first time).

User can press the Menu button to add an OSD on the screen, and show the current parameters and status.

4K UHD HDMI CAMERA	
Auto EXP	ON
Auto WB	5000K
Flicker	50Hz
Gain	 001
Exposure	 049
Contrast	 100
Gamma	 006
Sharpness	OFF
ZOOM	4X
PLVer: 2.5 PSVer: 2.2 MODE: 4K ID: 0074211E9CA44804	

### 1. The meaning of the IR Remote Controller Parameters



Menu, The menu shown at the lower right corner of the screen.

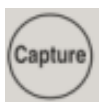


Image Capture, Screen prompts the icon




Browse the image from TF card/preview, Screen prompts the icon



Flip, Screen prompts the icon





Mirror, Screen prompts the icon 



first group Cross line




second group Cross line



Make the selected cross line in the center




Auto exposure, Screen prompts the icon 



Auto White balance, Screen prompts the icon 




Preview Freeze, Screen prompts the icon 




Do the color correction under the 2800k color temperature, Screen prompts the icon 




Do the color correction under the 5000k color temperature, Screen prompts the icon 



Do the color correction under the 6500k color temperature, Screen prompts the icon 




Parameter saving, Screen prompts the icon 



4k or 1080P mode switching



Restore setting, Screen prompts the icon 



Move up



Move down



Move left



Move right

## 2. The operation of the IR Remote Controller

### Capture



Press capture button to capture one image to the TF card as the BMP & RAW format.

### Freeze



Press freeze button to freeze the current image, press once again can back to normal.

### Mirror



Mirroring the image, press again can back to normal.

### Flip

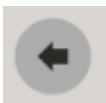


Flip the image, press again can back to normal

### Preview



Press the preview button , the Image will be displayed on the screen from TF card. Press “move left



” and “move right



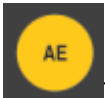
” button to select the correct image. Press the preview



button again

can back to normal preview.

### Auto Exposure



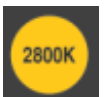
The camera automatically adjusts the brightness as the ambient light changes to achieve the best possible visual effect.

### Auto White Balance

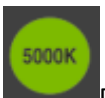


The camera performs a white balance operation based on the current color temperature of the light source.

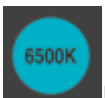
### Color correction



Do the color correction under the 2800k color temperature.



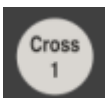
Do the color correction under the 5000k color temperature.



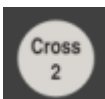
Do the color correction under the 6500k color temperature.

### Cross Line adjustment

4K Camera can display 2 groups of cross lines and adjust their position.



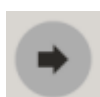
Add the first group cross line, press again to hide it.



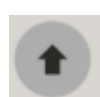
Add the second group cross line, press again to hide it.



cross line move left;



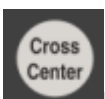
cross line move right;



cross line move up;



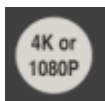
cross line move down.



Make the selected cross line in the center.

### Mode switching





4k or 1080P mode switching.