

Minimally Invasive Surgery
Overall Solution

4K UHD

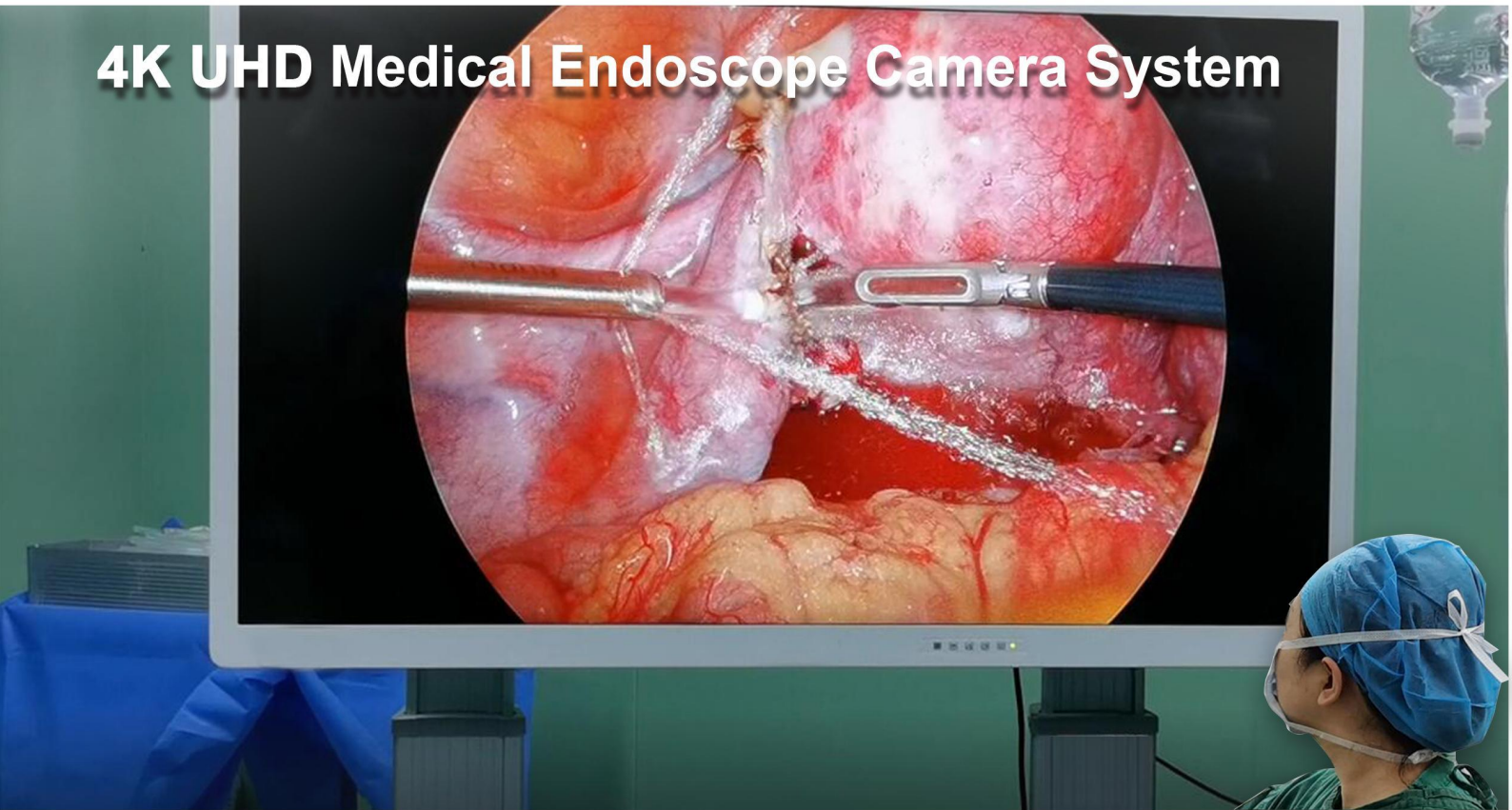
Medical Endoscope
Camera System



FDA CE FSC

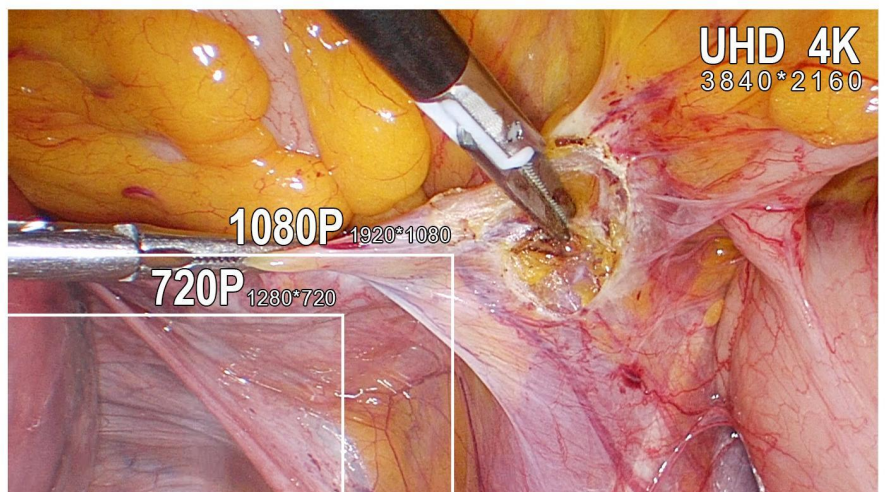
4K UHD

4K UHD Medical Endoscope Camera System



- **4K UHD** medical endoscope camera provides high-quality imaging that can aid in the diagnosis and treatment of various medical conditions, making it a valuable tool for medical professionals.

- **The** term 4K UHD refers to the camera's ability to capture images with a resolution of 3840x2160 pixels, which is four times the resolution of standard high-definition (1080p) cameras. This higher resolution provides greater clarity and detail in the images captured by the camera, which can be particularly important in complex medical procedures.



4K UHD

4K Camera Head

YOUTAK-GW001.1

4K UHD Endoscope Camera

YOUTAK-GW001

LED Light Source

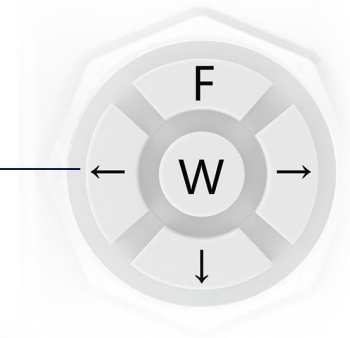
YOUTAK-GW101



- Full intelligent automatic white balance with one click
- CMOS sensor: 1/1.8
- Comfortable, lightweight, durable and waterproof (IPX8)

F: freeze

W: white balance





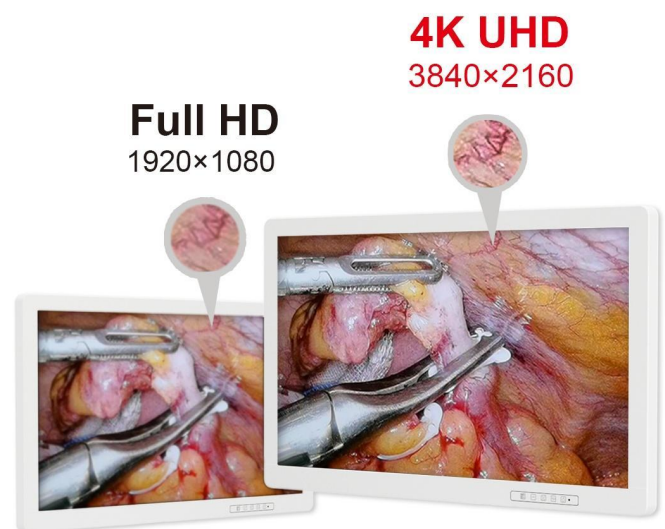
4K UHD

Advantages of 4K UHD endoscope camera

Higher resolution: 4K UHD endoscope camera offer four times the resolution of standard high-definition cameras, providing greater clarity and detail in the images captured by the camera.

Better color reproduction: 4K UHD endoscope camera offer a wider color gamut than traditional endoscopes, which can improve the accuracy of diagnosis and treatment. This can be especially useful in identifying abnormalities or lesions that may not be visible with lower resolution cameras.

Name	Pixel layout
FHD	
UHD (4K×2K) RGB	



Improved image stability: 4K UHD endoscope camera use advanced image stabilization technology to reduce shaking or blurring of the image, which can improve the accuracy of diagnosis and treatment.

Enhanced visualization: 4K UHD endoscope camera often include advanced lighting techniques that improve the visibility of internal structures.

4K UHD

Improved image management: 4K UHD endoscope technology often includes advanced software and hardware for image processing and management. This can include real-time image adjustment, video recording, and image storage and sharing capabilities.



Overall, 4K UHD endoscope technology is a valuable tool for medical professionals, providing high-quality imaging that can aid in the diagnosis and treatment of various medical conditions.

Parameters :

4K UHD endoscopy camera

Image Sensor	1/1.8 CMOS
Effective Pixels	3840(H)*2160(v)
Resolution	≥1600TVL
Scanning Mode	Progressive Scan
Waterproof	Camera head IPX8 waterproof
Output Port	HDMI 2.0, DVI, SDI, USB*2
Language	English/Chinese/Russian
Power Supply	AC100-240V 50/60Hz
Lens Mount	C-Mount
SNR	≥50dB
Min. Illumination	< 3Lux

LED light source

Input Power	120VA
CRI	≥90
CCT	4400K-6600 K
IR-CUT	4 mW/lm
Uniformity of Illumination	0.3111
Luminous Flux	≥100 lm
Interface	Φ(10±0.30)mm

4K UHD monitor 32"

Display size	698.4(H)*392.85(V)mm
Dot pitch(diagonal)	0.36375(V)*0.12125(H)mm
Maximum resolution	3840×2160 UHD
Display color	10-bit
Contrast	1400: 1
Brightness	700 cd/ m ²
Response time	6ms
Viewing angle (CR≥10)	89/89/89/89 (Min.)
Power	120W
Signal interface	HDMI、DVI、DP、VGA、USB
Input voltage	100-240VAC, 50-60Hz, 1.4A 12V 8.5A,102W

Video recorder

Recording format	MP4
Recording quality	MAX 18Mbs@1080P 30fps
Recording interface	USB disk and Removable hard disk
External U flash disk	MAX 128G
External mobile HDD	MAX2T
Input signal	BNC、HDMI
Output signal	HDMI

4K UHD



Application of 4K UHD endoscope

4K UHD endoscopes have a wide range of applications in the medical field. Some of the common applications of 4K UHD endoscopes include:

General surgery

4K UHD endoscopes are used in general surgery to visualize and treat conditions such as cholecystectomy, to help the surgeon view the gallbladder and surrounding tissue to identify any abnormality or cyst.

Gynecology

4K UHD endoscopes are used in gynecology surgery to visualize and treat conditions such as hysteroscopy, to help the gynecologist visualize the uterine cavity and identify any abnormalities such as polyps or fibroids.

Gastroenterology

4K UHD endoscopes are commonly used in gastroenterology procedures to diagnose and treat conditions such as ulcers, polyps, and gastrointestinal bleeding.

Pulmonology

4K UHD endoscopes are used in pulmonology procedures to visualize and biopsy the lungs for diagnosis and treatment of conditions such as lung cancer and pneumonia.

Urology

4K UHD endoscopes are used in urology procedures to visualize and treat conditions such as kidney stones, bladder cancer, and urethral strictures.

Otolaryngology

4K UHD endoscopes are used in otolaryngology procedures to visualize and treat conditions of the ear, nose, and throat, such as sinusitis, nasal polyps, and tonsillectomies.

Neurosurgery

4K UHD endoscopes are used in neurosurgery procedures to visualize and treat conditions such as brain tumors and aneurysms.

Orthopedics

4K UHD endoscopes are used in orthopedic procedures to visualize and treat conditions such as joint damage, arthritis, and spinal injuries.