

## Aohua Endoscopy

Aohua Endoscopy Co., Ltd. was originally incorporated in 1994, a globally-renowned medical endoscope manufacturing company with products consisting of video endoscopy system, endoscopy peripheral equipment, endoscopic diagnosis and treatment device etc. And sales network covering more than 80 countries and regions in the world. Our mission is to take the lead of endoscopy technology innovation and push forward the technological progress of endoscopic diagnosis and treatment technology. We will proactively and constantly serve the cause of human health.

To date, more than 10,000 hospitals around the world are using Aohua endoscopy equipment. It is precisely because of the existence of Aohua who is providing abundant, easy to use and affordable endoscopic products and services that thousands of hospitals can carry out endoscopic diagnosis and treatment services. Aohua now provides end-to-end solution and service to end-users with digestive endoscopy equipment, endoscopic diagnosis and treatment consumables, surgical endoscopy products and peripheral devices.



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AOHUA

CE 0197  
ISO 9001/ISO 13485 Certified

AOHUA  
Since 1994



Provider of Integrated Solutions  
More than 10,000 hospitals

AQ-100  
HD Endoscopy System

# AQ-100

## HD Endoscope



Aohua Endoscopy Co., Ltd. was originally incorporated in 1994, keeping constant progression and research in the endoscopy industry. Aohua serves customers with innovative and dedicated technology plus excellent product quality, having become the world's leading provider of integrated endoscopy solutions.



### AQ-100HD Endoscopy System

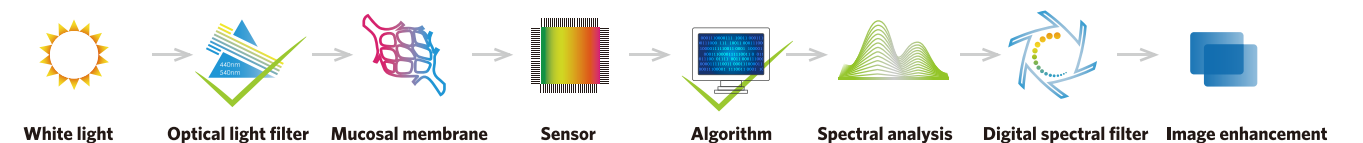
AQ-100 with Optical chromoendoscopy technique, is the first HD endoscopy system with independent intellectual property rights in 2011, aiming to provide early cancer diagnosis and treatment for all hospitals.



## (CBI) Compound Band Imaging

"Optimized Optical chromoendoscopy techniques" + "Fast and accurate image algorithm"

In 2011, Aohua developed the first endoscopy system (AQ-100) of China, which applied the Optical chromoendoscopy techniques (CBI, Compound band imaging). Now, after seven years of accumulation and improvement, the new generation of CBI technique applied in AQ-100 has significantly improved the brightness compared to the past and the short-range staining images are more sharp and clear with the aid of new imaging sensor, leading to the expansion of the area being examined by CBI Plus during endoscopic examination of the alimentary tract, and can be widely used in the diagnosis and observation of Barrett's esophagus, early digestive cancer, throat and bronchial precancerous lesions.

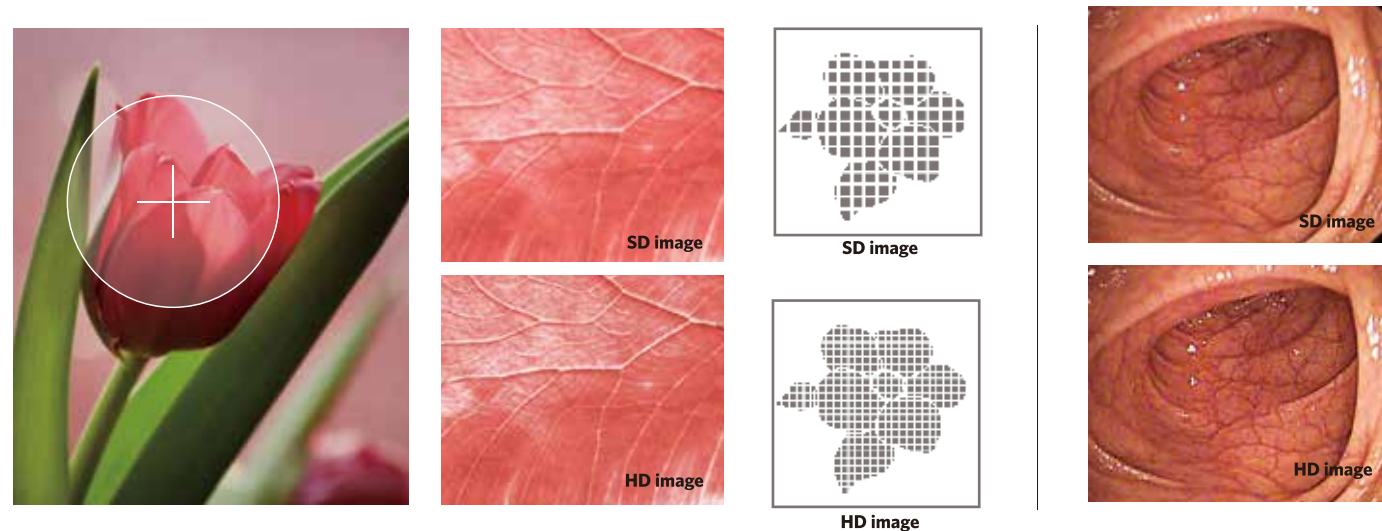


"Two key technologies" makes the "Optical chromoendoscopy techniques" more excellent.

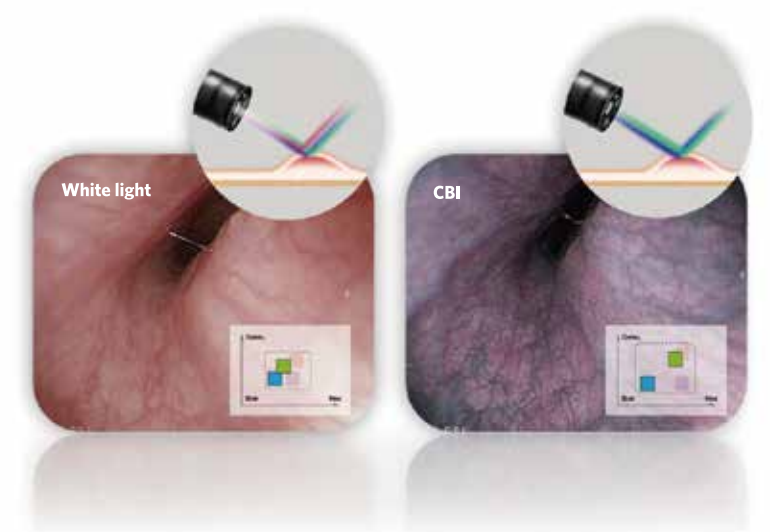
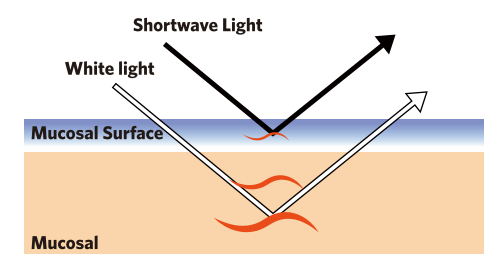
## Megapixel display

### HD display, true representation

High-definition image display, more details, clearly looking into any subtle changes before the eyes.



Under the application of special light filter, the light source equipment can emit compound light with wavelengths of 440nm and 540nm, taking on the spectral characteristic of being easily absorbed by hemoglobin. Light of wavelength 440nm is easily absorbed by the fibrous tissue of mucosal layer, and the light of wavelength 540nm normally comes into the submucosal blood vessels. Therefore, the CBI mode cannot only identified the lesion range of mucosa layer, but also highlighted the distribution of submucosal blood vessels.





## Brand-new Motus 3.0 image processing platform



### Higher data processing capacity

Higher data processing capacity, compared to 2.0 platform, it has more than 10 times computing power, 5 times memory bandwidth and 8 times memory capacity, all this makes it possible to easily process real-time image data with higher resolution and more computing power (such as CBI, HbE, etc.).

### High modularization

Its high modularization enables our latest research results into other Aohua products, make sure a high compatibility for all product line.

### Fully digital image processing

Fully digital image processing, it has enhanced the image signal's SNR and reliability compare to 2.0 platform due to the deletion of the A/D process. Motus3.0 platform features a brand-new image sensor with higher image resolution, lower power consumption, and better photosensitivity.

### A variety of interfaces

Motus3.0 platform provides a variety of interfaces to facilitate connections with different equipment in operating room.

## Outstanding performance of image processor



### No frame skip, no delay, smoother

Image processing of AQ-100 endoscopy system is much smoother, with no frame skip, high frequency frame rate mode can perfectly display the picture details in the process of movement.



Regular frame rates



High frame rates



### Automatic Brightness Control

AQ System's unique new form of automatic brightness control. This new advanced system reduces light halation and provides images that are easier on the physician's eyes.



Normal light mode



Automatic brightness control

- The USB interface can be used to store video and still images using U disk. A keyboard and display lamp etc. can also be connected.

- Xenon lamp light source (LED is optional), features a higher brightness and authenticity of color.

- Integrated circuit design guarantees a high operational flexibility to switch the endoscopes with power on.

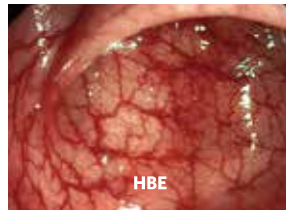


### (HbE) Hemoglobin Enhancement HbE highlight the pathological tissues

Detailed images of vein patterns are useful for advanced diagnosis of alimentary canals. The Hemoglobin Enhancement Function improves the projection and clarity of vein patterns. It applies to real-time and frozen images as well.



Normal light mode

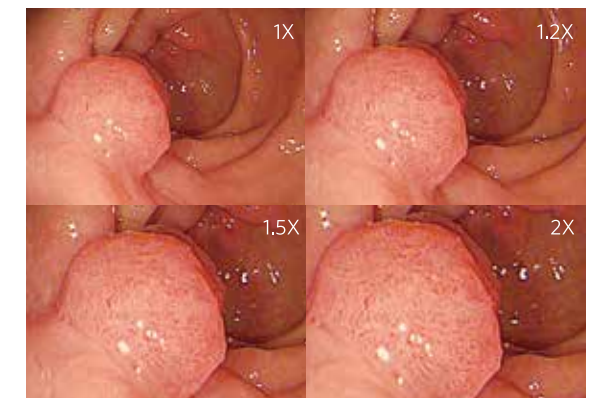


HbE



### Electronic magnification

Realize HD detail magnification of mucosa and help to find small lesions.







## Ergonomics handle, operation more comfortable and convenient

### ● Ergonomics handle

#### Customer oriented design criteria

The handle is designed to fit for different hand size. Streamlined aesthetic design and non-slip line manipulative experience enable doctors to carry out the operation more comfortable and convenient. In consideration of the hand size of men and women, Aohua has been studying the endoscope handle based on years of research data to create the most suitable handle for the users.



### ● Lightweight handle

#### Relieving the feeling of fatigue effectively by reducing the handle weight

Given the long-term use of the handle, it is necessary to consider not only the function, but also the operating experience. Aohua has come up with a much lighter handle based on the balance between function and experience, which will effectively reduce doctor's fatigue level during the long-term use.



### ● Brand-new nozzle design

#### Quickly send air and water for the purpose of ensuring a clear sight

It is necessary to quickly send gas and water for the purpose of ensuring a clear sight. The aim of such brand-new design is to separate the gas and water supply and send the gas quickly to dry the lens after cleaning with water in order to ensure a clear sight.



### ● Superior brand-new insertion tube

#### Smoother operation feeling

The insertion tube made by brand-new material, has excellent elasticity and lubricity. The insertion tube will enter the patient body easily by better elasticity and rigidity, which can also effectively reduce the patient's discomfort, while helping doctors to better operate.



### ● Flexible bending section

#### Observe the cardia and lower part of esophagus without blind angle

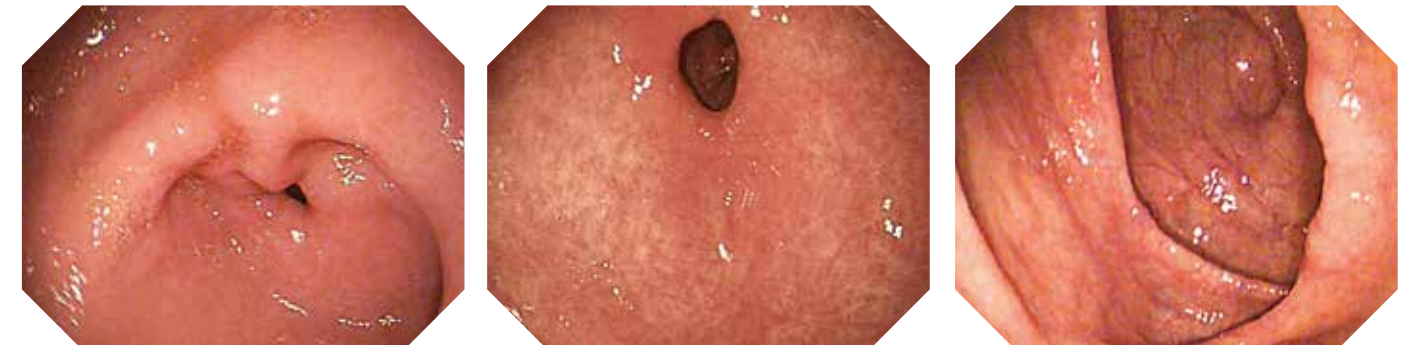
The newest design of bending section can help doctors easily observe the cardia, fundus of stomach, gastric angle and other parts. Small radius and wide angle of the bending section, makes it possible to avoid missing points and reduce the rate of missed diagnosis.



### ● Superior forwarding water-jet function

#### Keeps the mucous membrane clean, and view clear

The doctor can locate the bleeding point faster with the help of the endoscope configured with AQ-100 system, which provides superior forwarding water-jet function to maintain the cleanliness of mucous membrane and a clear field of view.



Compatibility



● Video Gastroscope

Model	VGT-Q30	Model	VGT-Q30J ●	Model	VGT-1T30J ●
Field of view	140°	Field of view	140°	Field of view	140°
Depth of field	3-100mm	Depth of field	3-100mm	Depth of field	3-100mm
Range of bending (Up/Down)	210°/90°	Range of bending (Up/Down)	210°/90°	Range of bending (Up/Down)	210°/90°
Range of bending (Right/Left)	100°/100°	Range of bending (Right/Left)	100°/100°	Range of bending (Right/Left)	100°/100°
Diameter of instrument channel	2.8mm	Diameter of instrument channel	2.8mm	Diameter of instrument channel	3.2mm
Diameter of insertion tube	9.6mm	Diameter of insertion tube	9.6mm	Diameter of insertion tube	10.5mm
Working length	1050mm	Working length	1050mm	Working length	1050mm

● Video Colonoscope

Model	VCC-Q30L	VCC-Q30JL ●	VCC-Q30L	VCC-Q30JL ●	VCC-Q30S	VCC-P30S	VCC-1T30L
Field of view	140°		140°		140°		140°
Depth of field	3-100mm		3-100mm		3-100mm		3-100mm
Range of bending (Up/Down)	180°/180°		180°/180°		180°/180°		180° /180°
Range of bending (Right/Left)	160°/160°		160°/160°		160°/160°		160° /160°
Diameter of instrument channel	3.7mm		3.7mm		3.7mm	2.8mm	4.2mm
Diameter of insertion tube	12.8mm		12.8mm		12.8mm	10.8mm	12.8mm
Working length	1300mm		1650mm		730mm		1650mm



# Main Parameters

## AQ-100 VIDEO PROCESSOR

Type of protection against electric shock	Class I
Operation Model	Continuous Operation
Voltage	~220V
Frequency	50Hz /60Hz
Input power	60VA
Video signal outputs	RGB、CVBS、Y/C、DVI、VIDEO



## AQL-100 XENON LIGHT SOURCE

Type of protection against electric shock	Class I
Operation Model	Continuous Operation
Voltage	~220V
Frequency	50Hz
Average life of bulb	500h
Luminous flux	≥300lm
Color temperature	3000K~7000K
Air pressure	40-90kPa
Air level	High / Low

## AQL-100L LED LIGHT SOURCE

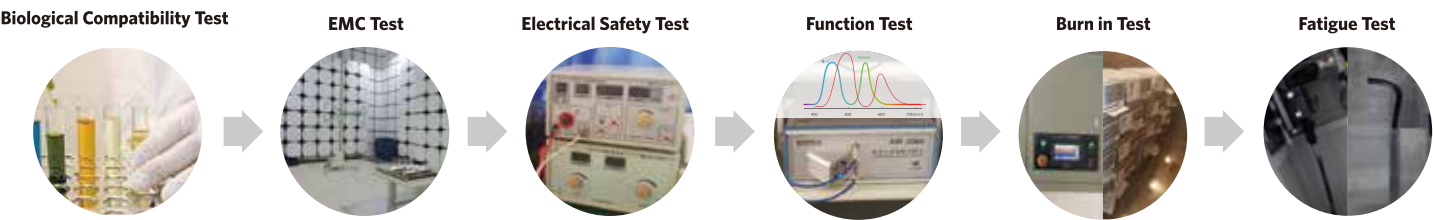
Type of protection against electric shock	Class I
Operation Model	Continuous Operation
Voltage	~220V
Frequency	50Hz
Average life of bulb	50000h
Luminous flux	≥300lm
Color temperature	3000K~7000K
Air pressure	40-90kPa
Air level	High / Low

## Feature

White balance	Press the white balance switch to do the white balance adjustment
Metering mode	Average; Peak
(HbE)Hemoglobin Enhancement	The Hemoglobin Enhancement Function improves the projection and clarity of vein patterns
Structure Enhancement	Structure Enh for observation of larger mucosal structures with high contrast
Edge Enhancement	Edge Enh for observation of smaller structures, such as capillaries
Electronic Magnification	1x,1.2x, 1.5x or 2x
Freeze &Playback	The image can be frozen and replayed easily
PIP Function	Display different images in PIP window from other sources

# Professionalism and history (SINCE 1994)

- Professional quality assurance  
R&D , Quality Test- Ensure Endoscope’s safety and reliability



## Aohua Histories



## Aohua endoscopy

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Today, more than 10,000 hospitals in the world are using Aohua endoscopy equipment. It is because of the existence of Aohua who is providing easy to use and affordable endoscopic products and services that thousands of hospitals can carry out endoscopic diagnosis and treatment services. Aohua now provides end-to-end solution and service to end-users with digestive endoscopy equipment, endoscopic diagnosis and treatment consumables, surgical endoscopy products and peripheral devices.



Aim to be a leading international  
endoscopy integrated solution provider.