


AOHUA

NEW



AQL-200L

Intelligent Multispectral endoscope system

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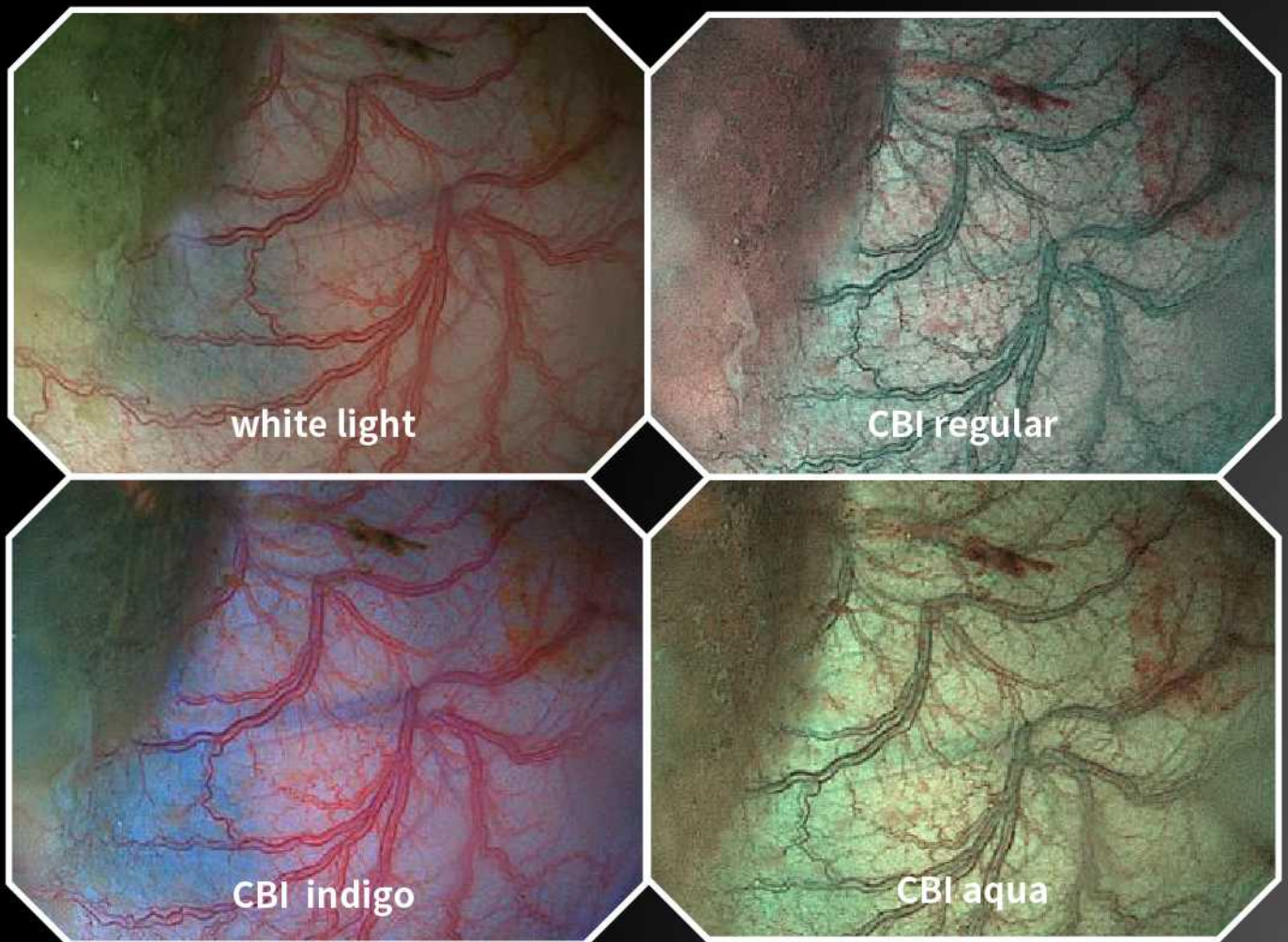
Email: marketing@aohua.com

www.aohua.com/en

See the Manual for details of contraindications or precautions.

v2.0_2209

New Upgrade Compound Band Imaging

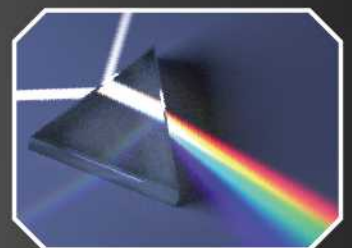
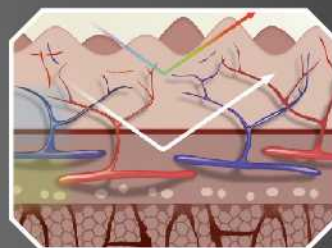




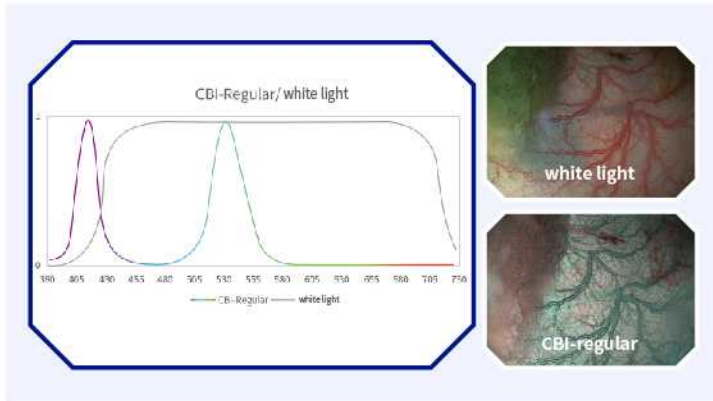
CBI

New Optical Technology

Featuring 3 CBI modes , new AQL-200L light source provides
real-time optical enhancement for each procedure.



AQ-200 Colouring Patterns

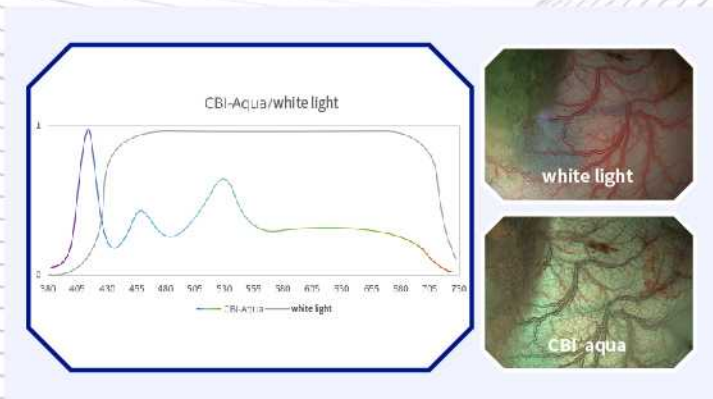
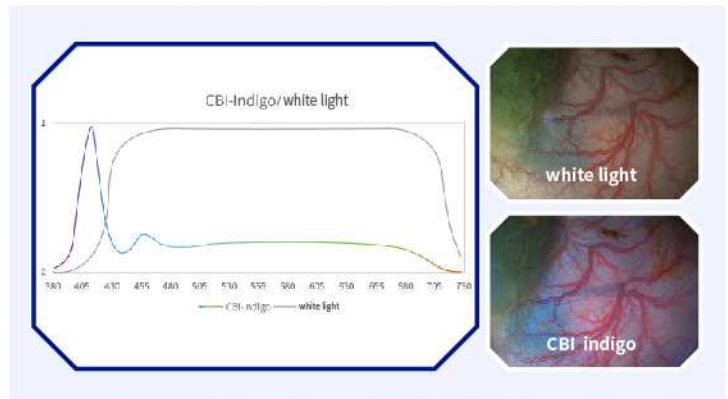


CBI regular (CBI-R)

With the application of the LED light source, our CBI mode can realize the optical staining of blood vessels and superficial fiber structures by emitting compound narrow band lights of 405-425nm (blue light) and 530nm (green light).

CBI indigo(CBI-D)

On the basis of blue narrow-band light combined with appropriate amount of white light for illumination, the color in the red spectrum is further expanded. Thereby the contrast between mucosa and blood vessels is effectively improved. The contrast for blood vessel texture display is sharper and the color difference contrast of red area display is more obvious.



CBI aqua(CBI-Q)

Some of blue and green narrow-band light is used, in combination with quantitative white light to ensure to ensure high-quality illumination of the image. Combined with the new image processor platform, the visibility of mucosa structure can be effectively improved.



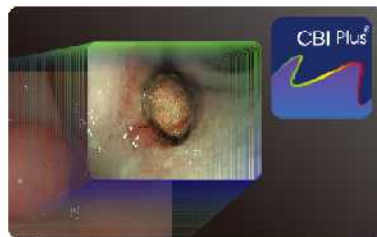
AQ-200

+

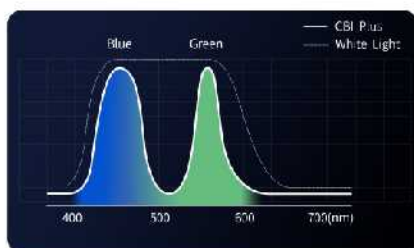


AQL-200L

Technology accumulation



Xenon light source dyeing technology



Multi-LED light source dyeing technology

CBI regular

CBI indigo

CBI aqua

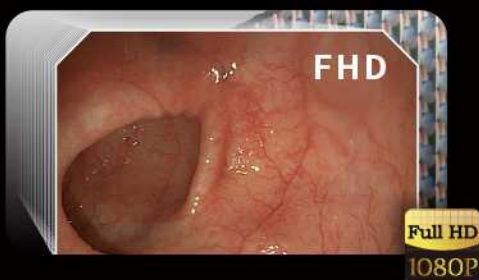
Innovative Technology



Laser transmission

Laser transmission can achieve a transmission rate of 8GB/s, which is a high-speed transmission and can present more detailed information of the endoscopic images.

At the same time, the high frequency signal is transmitted by laser to enhance the insulation strength, improve the anti-interference performance and provide more stable transmission images.



1080P60 2 megapixel

With 2 megapixel image sensor, 1920 x 1080p endoscopic images can be processed and output at a frame rate of 60 Hz to provide clinical data of high quality.



Wireless power supply

Non radiation wireless power supply, a new intelligent and convenient endoscopic technology, is adopted based on the magnetic coupling resonance principle, no physical connection is required to realize the electrical isolation of the endoscope in principle, effectively reducing the risk of exposing the patient to leakage current. Wireless power supply reduces the electromagnetic interference to the endoscopic system such that the high frequency electro tome or peripheral equipment cannot work properly due to the interference.



Radio Frequency Identification (RFID)

The technology of Radio Frequency Identification is additionally applied, which can customize setting information of all the system and endoscope buttons for doctors according to their operating habits. The settings can be accessed in one second after a single card swiping, which saves the time for doctors to set up instruments and effectively improve work efficiency.



USB storage

With USB storage function, the images and videos collected during examination or operation can be transferred to the memory, which is convenient for physicians to collect clinical teaching materials and make backup copies.



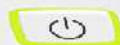
Dual screen display

With the dual screen display, it is unnecessary to switch back and forth between the two image modes and can view the images of CBI+ and white light simultaneously, facilitating the identification of the lesions by comparison. Besides, it is equipped with a 26 inch extra-large medical professional monitor to make the images displayed on the dual screen clearer and more recognizable.

AQ-200



AQL-200L





High extensibility

Aohua Endoscopy AQ-200 collects the video streaming generated during the operation in real time. Through a DVI cable, it can be connected to the artificial intelligence computer-aided diagnosis equipment for digestive tract with digestive endoscopy assisted quality control software, becoming the diagnosis and treatment assistant of digestive endoscopy doctors.

Remarkable Performances

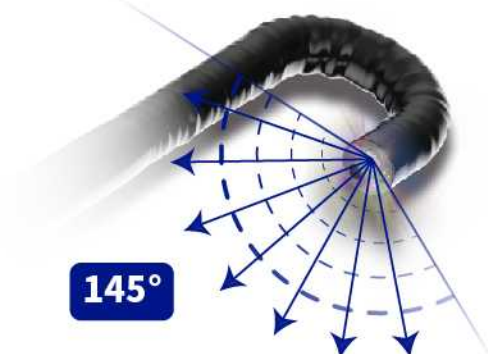
Integrated waterproof connector

Novel connection between the light source and endoscope with contactless wireless power supply. Being detachable by one click, it can reduce the tedious steps to remove the endoscope; it can be soaked and washed as a whole without additional waterproof cover, which makes washing and disinfecting more convenient.



Large view angle and small curvature

Large view angle of 145° can effectively improve the examination scope and provide more details to be observed. The hard part of the apex is short and the bending radius of the insertion part is small, which makes it more convenient to access and observe the cardia, stomach fundus, gastric angle and other parts.





Excellent forward flushing function

FHD series endoscopes have excellent forward auxiliary flushing function, which can keep the mucosa clear during the diagnosis and treatment, making it possible to quickly find bleeding points.



Customizable Buttons

For the Aohua endoscopes, the function and operating experience of the handle are both taken into consideration. With more than 20 years of experience in the industry, we have provided customers with lighter handles to effectively reduce the fatigue for physicians due to long time operation. At the same time, the customization of shortcut buttons is supported for the usage habits of different physicians.

AQ-200

Host	Product name	Endoscope image processor
Power supply	Rated voltage	220V
	Rated frequency	50Hz
	Input power	60VA
Dimensions	Size (width * high *depth)	420*390*115 mm
	Weight	8.54 kg
Protection	Electric shock protection class	Class I
	Electric shock protection class	Type BF
	Explosion-proof grade	It cannot be used in the presence of flammable anesthetic gas mixed with air or flammable anesthetic gas mixed with oxygen or nitrous oxide.
Observation	Color gamut	Observation color gamut: NTSC×PAL
	HDMI	SDI*2, DVI*2; Output video resolution ≥ 1920 * 1080P
	Standard definition output signal	VIDEO*2, Y/C, component output (RGB/YPbPr, SYNC) etc.
	USB interface	With USB * 3, it can store videos and images through external USB storage device
	Video signal input	It supports Picture-in-Picture video input. There are OFF, CVBS and Y/C options for video input interface. External video can be connected and displayed in Picture-in-Picture.
	Fiber optic transmission of laser	Video signals are transmitted through optical fiber with faster speed, stronger interference resistance, and more stable image and video transmission.
	White balance adjustment	White balance by one touch can correct the color of the endoscopic image. The white balance information can be stored in the endoscope which has information memory function, without frequent operation;
	Tone/hue adjustment	R\B\C:150-step adjustment; Image color can be set and customized. Red, blue and saturation components can be selected for adjustment. After setting, the user mode can be stored. When using, the custom mode can be accessed by one touch;
	Automatic gain AGC	When the front end of the endoscope is too far from the mucosa and the brightness is insufficient, the endoscopic image can be enhanced electronically;
	Contrast	The contrast of endoscopic images can be adjusted; contrast can be adjusted to high, medium and low levels;
	Noise reduction	In the process of image processing, noisy points can be automatically corrected
	Photometry mode	There are three photometry modes: peak value automatic measuring, mean value automatic measuring and full automatic measuring; Peak value measuring: adjust according to the brightest part of the image; Mean value measuring: adjust according to the mean brightness of the image; Full automatic measuring: automatically set the optical aperture to adjust the overall brightness of the image.
	Structure highlighting	Structure highlighting: it has the highlighting On/Off feature. When highlighting is enabled, it has three adjustment stages of S1, S2 and S3. Each stage has 8 adjustment levels, and there are 24 levels in total.

		Structure highlighting: it can highlight the structure of endoscopic images.
	Color/Hemoglobin highlighting	HBE blood highlighting: it can highlight the morphology of mucosal capillaries and enhance the display of vascular tissue. It can highlight protoheme in blood, and enhance the display of blood vessels and blood-rich tissues.
	Digital zoom	It has digital zoom function, which can digitally zoom and view the abnormal mucosa. There are 4 adjustment levels; 1x, 1.2x, 1.5x and 2x;
	Pre-freeze	The image processor can select the clearest one in the images before freezing for display and storage;
	Image playback and processing	It supports image playback, and perform image processing on the playback image such as enhancement, HBE and zoom;
	Optical observation mode	CBI narrow-band imaging: it has optical staining observation mode; CBI regular (CBI-R) regular mode, CBI indigo (CBI-D) indigo carmine mode, CBI Aqua (CBI-Q) lake green mode
	Image display adjustment	The endoscopic image on the display can be adjusted by itself at 16:9, 5:4 or other different ratios. Selection
	User/custom mode settings	RFID RF card swiping mode: support user-defined mode, with no less than 5 modes; The configuration information of the image processor is written in the RF card. Color customization information, enhancement type and enhancement level information, video output format, and picture-in-picture mode switching.
	Dual screen display	Dual screen display/dual screen display function, supporting simultaneous output of white light image and optical staining image. Different modes such as large white light image or large staining image can be selected for the image size;
	Picture-in-picture	Picture-in-picture feature is available for selection;
Information display	Information display query	The display supports the display of endoscope model, serial number, for cep channel, staining mode, photometry mode and other information, and the product information is visually displayed.
	Patient data	The display can input the patient ID, name, gender, age and remarks through the keyboard.
	Display image information	The display can display the endoscope model, serial number, staining mode, highlighting level, photometry mode and other main information.
	Updates	Without being sent back to the manufacturer, the system can be directly upgraded through the USB interface by one touch, to obtain the latest optimized image processing functions.
Storage	Image freezing	Images can be frozen. There are 4 freezing control modes, freezing by handle key, image processor, host foot switch and keyboard;
	Video recording	Video recording feature is available. It can connect a storage device through USB. It is easy to operate and videos can be recorded and stored at any time. External memories such as hard disk, U disk are supported;
	Storage mode	Images are stored in JPEG, with original output (1/1) supported, and lossless compression formats such as MP4 are supported for videos;
Memory storage	User setting	The user card is configured as standard, and the entered information is stored in the user's RF card;
	Setting saved	After the image processor is turned off, the color mode, photometry mode, enhancement mode, etc. are automatically saved, and the latest user information is defaulted on the next boot.
Other	High frequency equipment	It can be used with high-frequency electric burning, YAG and semiconductor laser.

AQL-200L

Light source	Product name	Endoscope LED cold light source
Light source	Rated voltage	220V
	Rated frequency	50Hz
	Input power	300VA
Overall	Size (width * high *depth)	470 (L) × 400 (W) × 165 (H) mm
	Weight	17KG
Medical appliance category	Electric shock protection class	Class I
	Electric shock protection class	Type BF
	Explosion-proof protection grade	It is strictly prohibited to install and use in the room containing combustible gas to avoid explosion or fire.
Lighting	Light source type	LED light source
	Lighting mode	White light and three narrow-band lighting modes are supported.
	Optical staining	It has three modes of optical staining: CBI-R, CBI-D and CBI-Q.
	Light source service life	Light source service life: about 10000 hours
	Service life indication	The main lamp has a life indication function, which can indicate the used time of the bulb.
	Light source color temperature	Light source color temperature: 3000-7000k
	Color rendering index	Color rendering index: ≥ 90
	Dimming mode	Dimming mode: manual dimming and automatic dimming, two modes
Air pump	Air pump type	Diaphragm air pump
	Air pump pressure	Air pump pressure range: 40-90kPa
	Flow selection	Air pump flow: OFF\ L\M\H (off, high, medium and low flow) options for air pump flow
	Air pump flow rate	Flow rate range: 4-7L/min
Water delivery	Water bottle	The detachable water bottle is pressurized to realize water delivery for lens washing
Memory storage	Save settings	The parameter settings used are automatically saved after the equipment is powered off

