



## ENDOSCOPIC IMAGE PROCESSING SYSTEM (HD) PRODUCT NUMBER: HD810



# ENDOSCOPIC IMAGE PROCESSING SYSTEM (STANDARD) PRODUCT NUMBER: HD710



- ◆ Camera: 2 megapixel 1/2.8 "CMOS image sensor
- ◆ Resolution 1920 (H) \*1080(V)
- ◆ Definition 1080 line
- ◆ Brightness S\N :over 50dB (AGC OFF)
- ◆Minimum illumination color: 1Lux black and white: 0.5Lux
- ♦ Video output signal: number: DVI,SDI, VGA
- ◆ simulation: NTSC/PAL CVBS
- Synchronizing inter-sync
- ◆ Move to detect :open/close
- ◆Gain control: automation
- ◆ Shutter speed :1/60~1/60000(NTSC), 1/50~50000 (PAL)
- ◆ Digital slow block door :open/close (x2/X4/X8/X16/X32/X64)
- **♦ AWC: AUTO/KEY AWC/MANUAL AWC**
- ◆ DNR: Close/LOW/MIDDLE/HIGH
- ◆ English and Chinese can be switched
- ◆ Camera connection line: 2.5m/ special length needs to be customized
- ◆ power:AC220/110V±10%
- Dynamic detection of open/close
- Power: 2.5 W
- ♦ Storage temperature: 20 ~ +50
- ♦ Working temperature: -10 ~ 45
- ♦ Work humidity: 20 ~ 85%
- ♦ Image sensor 1/3"Sony IMX122LQJ180 megapixel
- ♦ Frame width dynamic low illumination
- Scan type by line scan
- ◆ Effective pixel: 1280 (H) x 1024 (V)
- resolution: exceeds 720 lines
- ♦ Interface: C/CS or board lens
- ♦ Automatic gain control :low/high/close
- ◆ Minimum illumination: 0.8 Lux(color)
- ◆ White balance :manual /
- ♦ Backlight compensation/low/medium/high/highest
- ♦ High level dynamic close/low/medium/high /
- ♦ 2D/3D noise reduction/open/automatic
- ♦ No flicker mode 50Hz/60Hz optional
- ♦ number is multiplied by 1 ~ ~ 255, except for fog grade adjustment
- **♦** calibration
- ♦ Digital image stabilizes :open/close
- ◆ Strong light suppression:0-254 (regional adjustable)
- ♦ Standard: hd-sdi without
- ◆ Simulated CVBS: composite video output, 750hm, 1vp-p
- ◆ Output pixel :25/30fps(1280 x 1024)
- OSD menu: function Settings
- ◆ Power: dc +12V/ normal work 90mA(CVBS output)
- ♦ Working temperature: 20 °C ~ 70 °C

## ENDOSCOPIC IMAGE PROCESSING SYSTEM (ULTRA HD) PRODUCT NUMBER: HD930



◆ Camera: 230 million pixels 1/2 COMS image sensor

◆ Resolution :1944 (H) \*1092(V)

◆ Definition: 1400 lines

◆ Brightness S\N over 50dB (AGC OFF)

♦ Minimum illumination color: 1Lux black and white: 0.5Lux

♦ Video output signal number: 3G-SDI,DVI,VGA,HDMI

**♦** simulation: NTSC/PAL CVBS

Synchronizing: inter-sync

◆ Move to detect :open/close

**▲** Gain control: automation

♦ Shutter speed :1/60~1/60000(NTSC), 1/50~50000 (PAL)

◆ Liquid crystal display: 6 inch LCD

◆ Digital slow block door :open/close (x2/X4/X8/X16/X32/X64)

**♦** AWC: AUTO/KEY AWC/MANUAL AWC

**♦ DNR** Close/LOW/MIDDLE/HIGH

◆ English and: Chinese can be switched

◆ Camera connection line:2.5m/ special length needs to be customized

◆ Power: AC220/110 v + / - 10%

◆ Dynamic detection of :open/close

◆ Power:2.5 W

♦ Storage temperature: - 20 °C to + 50 °C

♦ Working temperature - 10 °C ~ 45 °C

♦ Work humidity: 20 ~ 85%

# ENDOSCOPIC IMAGE PROCESSING SYSTEM (FULL HD) PRODUCT NUMBER: HD910



♦ Camera: 2 million pixels 1/2.8 "COMS image sensor

♠ Resolution :1944 (H) \*1092(V)

◆ Definition: 1200 lines

◆ Brightness S\N over 50dB (AGC OFF)

◆ Minimum illumination color: 1Lux black and white: 0.5Lux

♦ Video output signal number: 3G-SDI,DVI,VGA

Synchronizing: inter-sync

♠ Move to detect :open/close

Gain control: automation

◆ Shutter speed :1/60~1/60000(NTSC), 1/50~50000 (PAL)

◆ Digital slow block door :open/close (x2/X4/X8/X16/X32/X64)

**◆** AWC: AUTO/KEY AWC/MANUAL AWC

◆ DNR Close/LOW/MIDDLE/HIGH

◆ language:English and Chinese can be switched

◆ camera connection line:2.5m/ special length needs to be customized

◆ Power AC220/110 v + / - 10%

◆ Dynamic detection of: open/close

◆ Power :2.5 W

♦ Storage temperature: - 20 ~ +50

◆ Working temperature: -10 ~ 45

## ENDOSCOPIC IMAGE PROCESSING SYSTEM (ULTRA HD) PRODUCT NUMBER: HD960



Camera: 3\*1/3 SONY CMOS sensor

◆Effective pixels: 1920 (H) ×1080 (V)

Scanning way: progressive scan

♦ Horizontal resolution:1400line

**♦ SCENE:** unique ENH color enhancement function

♦ SCENE:laparoscopic/hysteroscopy/cystoscope/arthroscopy/standard

scene:Moorish removal function

♦ display:7 "LCD screen, real-time display image

♦ Electronic amplification:X1、x1.1、x1.5、x2.0、x2.5

♦ Sharpness control:20step

◆ Digital fast keyboard: On/off (x2/x4/x8/x16/x32/x64)

♠ AWE:auto/key awc /manual awc

◆ The extinction rate:0.1seconds

♦ Waterproof level:ipx7

♦ Gain control: Automatic/close

**♦** Minimum illumination: f1.2≤when0.1lux

♦ Signal to noise ratio:50≤db

◆ Electronic shutter:1/50s-1/50000s

♦ Video output:dvi/sdi/video/video/usb

Remote control:camera has a brightness/white balance/freeze/Color enhancement and other functions

## Product features:

- > original imported 3\*1/3 CMOS chip with a resolution of over 1200 lines.
- > using digital photographic chip with functions of high-definition imaging, 1920 x 1080 p high-definition output, ENH color enhancement after enhanced open surgical field mucosal morphology and blood vessels of sharpness, highlights the structure of the organization in the capillaries, make the organization in the blood vessels in the image more clear, fine
- > camera has the function of brightness/white balance/freeze/color enhancement, which is convenient for clinical operation and use.
- > electronic amplification function makes it easier to see small lesions.
- > extinction rate is less than 0.1 second, surgery reduces visual fatigue, and the vision is more comfortable.
- > menu is simple and simple, convenient and practical, and sets various parameters and modes according to the user's requirement.
- > camera rear panel is equipped with the integration of open interface, using a third party system or tablet devices, can complete save images and video, so that the program of the operating room can be perfectly tailored, significantly improve the safety of users and patients.

Product number: HD710



Image sensor: 1/3 "Sony IMX122LQJ 1.8 megapixel"

Prime frame width dynamic low illumination

Scan Type: Progressive Scan

Effective pixels: 1280 (H) x 1024 (V)

Resolution: More than 720 lines

Interface: C/CS or Board lens

Automatic Gain Control: Low / High / Off

Minimum illumination: o.8 Lux (color)

White balance: manual /

BlC: off / low / middle / high / ultrahigh

High grade wide dynamics: off / low / middle/ high /

2D/3D DNR: Off / On / Automatic

No flicker mode: 50Hz/60Hz

Digital multiplication, defog,

DIS: Digital multiplication× 1 ~ × 255, defog grade adjustment

Digital image stabilization: ON-OFF

HLC: 0-254 (Region adjustable)

Standard HD-SDI: None

Analog CVBS: composite video output, 75Ohm, 1Vp-p

Output pixel: 25/30fps (1280×1024)

OSD menu: Function setting

Power: Direct current +12V / normal work 90mA (CVBS output)

Working temperature: -20 ° C ~ 70 ° C

Humidity: 0%RH~80%RH

Product number: HD810



Camera device: 2 megapixel 1/2.8 "CMOS image sensor

Resolution: 1920 (H) \*1080(V)

Definition: 1080 lines

Brightness S\N: over 5odB (AGC OFF)

Minimum illumination: color: 1Lux black and white: 0.5Lux

Video output signal: digital: DVI,SDI, VGA

Simulation: NTSC/PAL CVBS,

Synchronization type: internal synchronization

Motion detection: ON-OFF Gain control: automatic

Shutter speed: 1/60~ 1/60,000 (NTSC), 1/50~50000 (PAL) Digital slow shutter: ON-OFF (x2/X4/X8/X16/X32/X64)

AWC: AUTO/KEY AWC/MANUAL AWC

DNR: Close/LOW/MIDDLE/HIGH

Language: Chinese and English

Camera cable: 2.5m/ special length to be made to order

Mains: AC220/110 v + / - 10% Dynamic detection: ON-OFF

Power: 2.5 W

Storage temperature: - 20 °C to + 50 °C Working temperature: - 10 °C ~ 45 °C

Working humidity: 20 ~ 85%

Product number: HD910



Camera device: 2 megapixel 1/2.8 "CMOS image sensor

Resolution: 1944 (H) \*1092(V)

Definition: 1200 lines

Brightness: S\N over 5odB (AGC OFF)

Minimum illumination, color: 1Lux, black and white: 0.5Lux

Video output signal: digital: DVI,SDI, VGA

Simulation: NTSC/PAL CVBS,

Synchronous type: synchronization

Motion detection :ON-OFF

Gain control:Automatic

Shutter speed: 1/60~1/60000(NTSC), 1/50~50000 (PAL) Digital slow shutter ON-OFF: (x2/X4/X8/X16/X32/X64)

AWC :AUTO/KEY AWC/MANUAL AWC

DNR:Close/LOW/MIDDLE/HIGH

Language: Enghlish and Chinese

Camera cable :2.5m/ special length needs to be made to order

Power :AC220/110 v + / - 10%

Dynamic detect :ON-OFF

Power: 2.5 W

Storage temperature: - 20  $^{\circ}$ C to + 50  $^{\circ}$ C

Working temperature: - 10 °C ~ 45 °C

Working humidity: 20 ~ 85%



## **Brief description of parameters:**

Camera device: 2 million 300 thousand pixel 1/2.8 "CMOS image sensor

Resolution: 1920 (H) \*1080(V)

Clarity: 1080 lines

Brightness S\N: over 50dB (AGC OFF)

Video output signal: digital: DVI,SDI, BNC,VGA

Simulation: NTSC/PAL CVBS

AWC: AUTO/KEY AWC/MANUAL AWC

DNR: Close/LOW/MIDDLE/HIGH

Language: switch between Chinese and English

Camera cable: 2.5m/ special length to be customized

Power supply: AC220/110 v + / - 10%

LED light source power 6oW

## **Brief description of parameters:**

< standard selection >

Image sensor: 1/3 "Sony IMX122LQJ 1 million 800 thousand image"

Plain width dynamic low illumination

Scan type: progressive scan

Effective pixel:1280 (H) x 1024 (V)

Resolution: over 720 lines. Interface: C/CS or trigger lens

Automatic gain control: low / high / off Minimum illuminance:o.8 Lux (color)

# Medical monitor PRODUCT NUMBER: HD2770



Display size: 27 inches.

Power supply: external power supply 24V.

Resolution: 2560\*1440.

Ratio: 16:9

Color: 16.7 million

Calibration brightness: 250 + 10 CDS / m²
The highest brightness: 350 CD / m²

Contrast: 1000:1 Perspective: 178/178 Response time: 14MS.

Installation standard: VESA 100x 100MM.

Power consumption:≤100W MAX



# Medical monitor PRODUCT NUMBER: HD2450

Display size: 24 inches.

Power supply: external power supply 24V.

Resolution: 1920\*1200.

Ratio: 16:10 Color: 16.7 million

Calibration brightness: 250 + 10 CDS / m²

Contrast: 1000:1
Perspective: 178/178
Response time: 15MS.

Installation standard: VESA 100x 100MM.

Power consumption: no more than 100W MAX

# Medical monitor PRODUCT NUMBER: HD2110



Display size: 21.5 inches.

Power supply: external power supply 12V.

Resolution: 1920\*1080.

Ratio: 16:9

Color: 16.7 million

Calibration brightness: 200 + 10 CDS / m²
The highest brightness: 250 CD / m²

Contrast: 1000:1 Perspective: 178/178

Response time: 14MS.
Installation standard: VESA 100x 100MM



# Medical monitor PRODUCT NUMBER: HD1910

Display size: 19 inches.

Power supply: external power supply 12V.

Resolution: 1280\*1024.

Scale: five

Color: 16.7 million

Calibration brightness: 200 + 10cd/ CD. The highest brightness: 300 CD / m²

Contrast: 1000:1 Perspective: 178/178 Response time: 25MS

# Suction Cutter PRODUCT NUMBER: X700 (Arthrodynamic system)



#### FUNCTIONAL FEATURES:

1000-8000R/MIN

HIGH SPEED: 1000-8000R/MIN

CONTINUOUS ADJUSTABLE

TOP GRADE: 7INCH COLOR LOUCH SCREEN

## TECHNICAL PARAMETERS:

SUPPLY VOLTAGE:~220V 50Hz

Power:≤30VA

ROTATE SPD : 1000-8000R/MIN

Noise:≤60bB(A)

DISINFECTION: HIGH TEMPERATURE AND HIGH PRESSURE

, LOW TEMPERATURE PLASMA, ETC

SAFETY: THE HANDLE AND FOOT ARE WATERPROOF

CONVENIENT: THE TOOL IS SHARP, EASY TO INSTALL,

ATTRACT UNIMPEDED

## CHOOSE:



Tread Switch

Spherical Cutter

Serration Cutter

er Smooth Cutte



## **Cold light source PRODUCT NUMBER: L200**





**Cold light source PRODUCT NUMBER: L100** 

### FUNCTIONAL FEATURES:

RATED POWER: 80VA

LUMINOUS FLUX : ≥1001M

COLOR TEMPERATURE: 7000K

INTENSITY OF ILLUMINATION: ≥190000LX

COLOR RENDERING INDEX: RA>90

LAMP LIFE: 20000-4000H

#### FUNCTIONAL FEATURES:

RATED POWER: 350VA

COLOR TEMPERATURE: 6500K

INTENSITY OF ILLUMINATION: ≥180000LX

COLOR RENDERING INDEX: RA>90

LAMP LIFE: 300H

### TECHNICAL PARAMETERS:

HIGH POWER LED IMPORTED LUMINOUS COMPONENTS

THERE IS NO DELAY WHEN STARTING UP

0-100

THE BRIGHTNESS NUMBER SHOWS 0-100 ADJUSTABLE

LED

LED PERFORMANCE AND GOOD COLOR RENDERING

PROVIDE MULTI - APERTURE CONNECTOR FOR SELECTION

#### TECHNICAL PARAMETERS:

USING HIGH BRIGHTNESS XENON LAMP COMPONENT-

PERFORMANCE IS STABLE

THE BRIGHTNESS NUMBER SHOWS 0-100 ADJUSTABLE

GOOD COLOR RENDERING

THE SURGICAL VISION WAS SOLID

SUITABLE FOR ANY SOFT/HARD ENDOSCOPE

SUITABLE FOR ANY SOFT/HARD ENDOSCOPE



OLYMPUS quide beam interface



quide beam interface



KARL STORZ guide beam interface



quide beam interface









mirror end interface

OLYMPUS mirror end interface

Edison beam

## Portable fiberoptic bronchoscope



### **Product technical parameters:**

Product number	Field Angle	Depth of field	Bending Angle	
BP66P	120°	3-50mm	上180°	下130°
BC66P	100°	3-50mm	上180°	下130°

Outer diameter Pliers pipe		Working length	All waterproof
4.9mm	2.2mm	550-600mm	•
3.5mm	1.2mm	550-600mm	•

## Visual laryhgoscope



## **Product technical parameters:**

Product number	Field Angle	Sight direction	Field depth	Outside diameter	All waterproof
VT66	80°	0°	3-100mm	5mm	•

## Fiber choledochoscope



## **Product Technical Parameters:**

Product number	Field Angle	Depth of field		Depth of field Bending Angle	
HP66E	120°	3-50mm		上160°	下130°
HT66	100°	3-50mm		上160°	下130°
Outer diameter	ter Pliers pipe		Working I	ength	All waterproof

Outer diameter	Pliers pipe	Working length	All waterproof
4.9mm	2.2mm	380mm	•
5.9mm	2.6mm	380mm	•

## Bronchoscope



### **Product Technical Parameters:**

Product number	Field Angle	Depth of field	Bending Angle	
BP66E	120°	3-50mm	上180°	下130°
BC66	100°	3-50mm	上180°	下130°

Outer diameter	Pliers pipe	Working length	All waterproof
4.9mm	2.2mm	550-600mm	•
3.5mm	1.2mm	550-600mm	•

## Fiber nose and throat mirror



#### **Product Technical Parameters:**

Product number	Field Angle	Depth of field	Bending Angle
ET66	90°	3-50mm	上130° 下130°
EP66	90°	3-50mm	上130° 下130°

Outer diameter	Pliers pipe	Working length	All waterproof
4.9mm	2.2mm	360mm	•
3.5mm	$\odot$	300mm	•

## Fiber ureteroscope



Fiber kidney ureter mirror, viewing Angle 0 ° and 270 ° bend, bend under 270 °, the outer diameter of 2.9 mm, length 680 mm, 3.6 channel Fr

3Fr 4-wire set stone blue length 910mm.

3Fr 3 claw clamp 910mm.

3Fr biopsy forceps 920mm.

3Fr foreign body clamp 920mm.

3Fr electric coagulation rod 920mm.

## **Guide beam**



#### PRODUCT FEATURES:

High transmission performance, low color, long service life.

It has high temperature resistance and can be used with high intensity light source. Offers a variety of joint selection, length 2 meters /2.5 meters /3 meters, suitable for all kinds of cold light source and endoscope.

## **Optical interface**



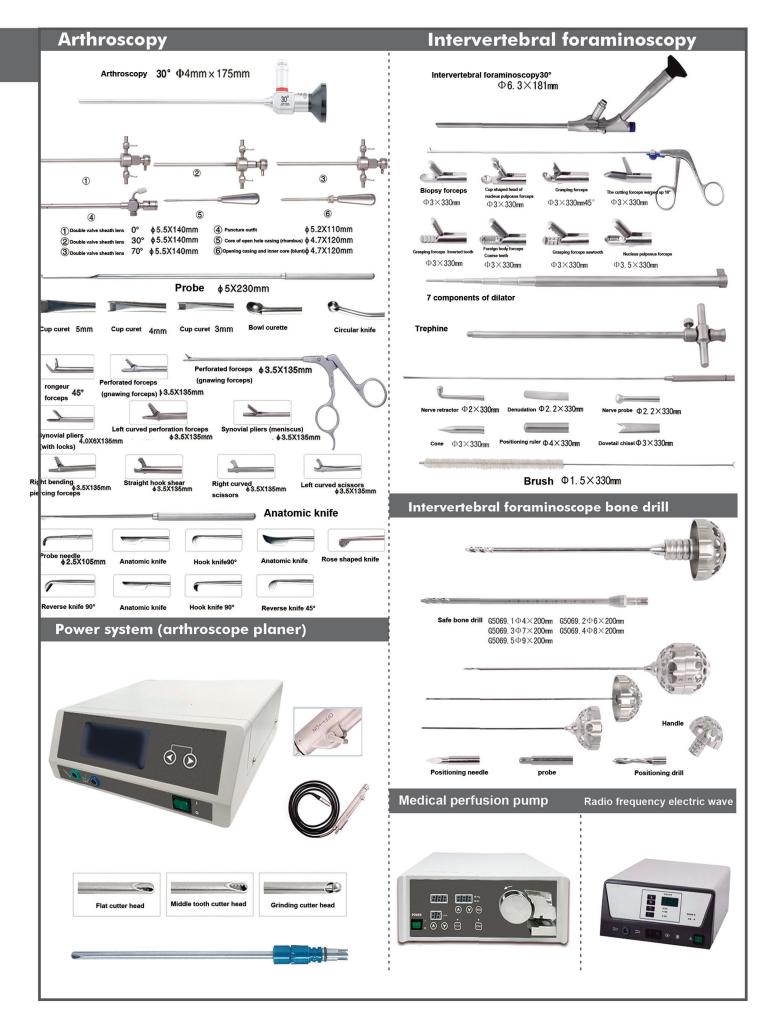
### **PRODUCT FEATURES:**

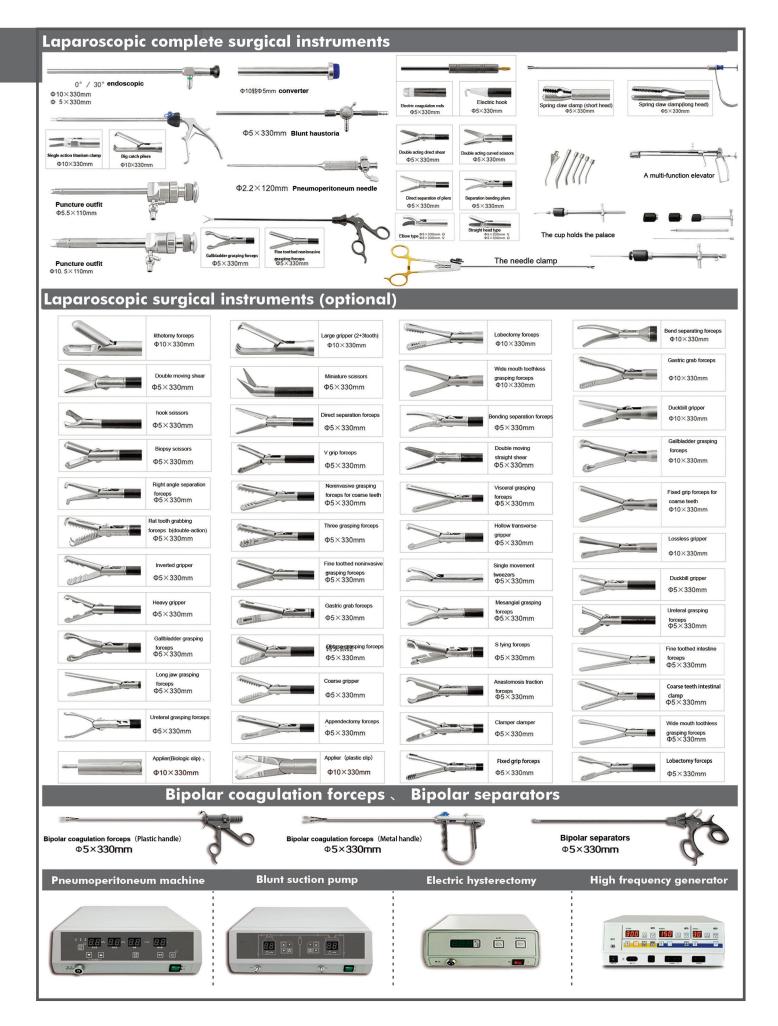
The whole field is transparent, and the image is clear and not deformed.

Waterproof design, convenient for cleaning and disinfection after operation.

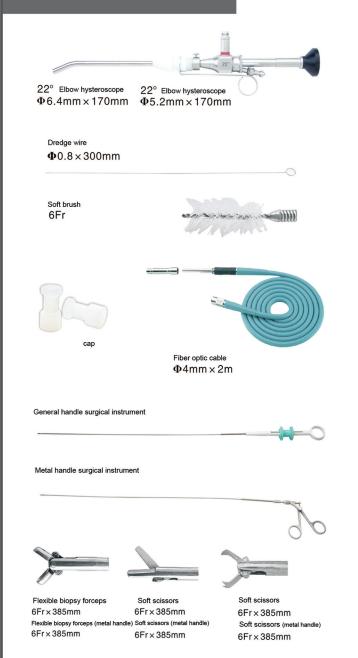
Optical hd resolution, suitable for various cameras and soft - rigid endoscope.

Magnification F14 / F16 / F18/F20 / F22/F25 / F28 / F30 / F14-30, a variety of specifications to choose from.

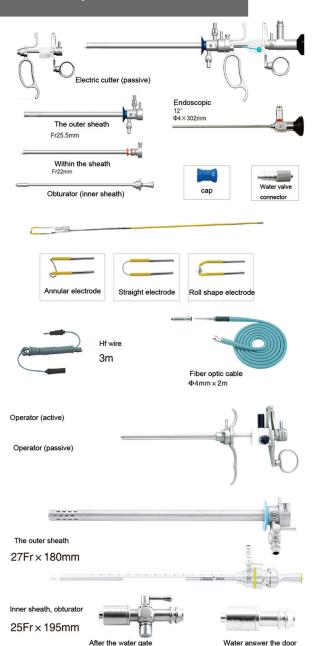




## Hysteroscopy



## **Electricity cut mirror**



# Series of hysteroscopy --Focusing on the gynecological uterine cavity



Outer sheath can rotate 360 °

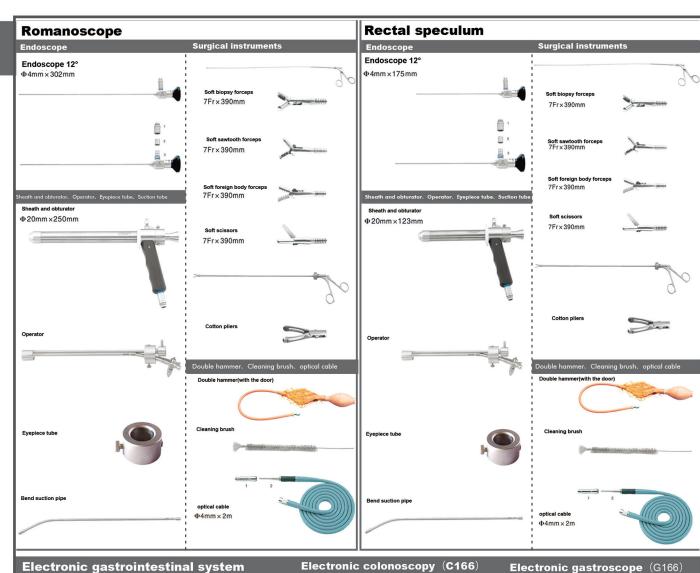
Outer sheath can rotate 360 °



The outer sheath cannot be rotated



The outer sheath cannot be rotated





	otelli .	zicotionio cononcocopy (	0.00/	Electronic gastroscope	(6100)
	Angle of view	120 ° look		120 ° look	
	Observation of depth of field	3mm-100mm		3mm-100mm	
	Bending degree	$(U)$ 180 $^{\circ}$ , ([	D) 160°	Bending angle $(U)$ 210 $^{\circ}$ ,	(D) 100°
		(L) 160°, (I	R) 160°	(L) 100°,	(R) 100°
	Cutting-edge	external diameter 12.8mm		external diameter 9.8mm	
	Inserting tube	external diameter 12.6mm		external diameter 9. 6mm	
	Pliers pipe	internal diameter 3.8mm		internal diameter 2.8mm	
	Effective length	1300mm/1500mm/168	Omm	1025mm	

#### Performance characteristics of electronic gastroenteroscopy products:

1.we use the latest imported SONY 480 thousand high pixel, high sensitivity, true color CCD camera elements to ensure more accurate and accurate observation results.

2.the screen has super large depth of field and large field of vision, which can accurately reflect the mucosal surface and micro lesion. It can guarantee high level of observation and treatment performance.

3.gastroenteroscope full waterproof design, which can entirety infiltrate and sterilize, and equipped with leak detector. It can confirm whether the endoscope is damaged or not, and cause inflow and prevent damage.

4.the small diameter endoscopic and gradual soft design improved the insertion, alleviated the pain of the patients, shortened the hard part of the front end, and made the frontal observation easier.

5.freezing function, continuous freezing of four images, freezing of two pictures and freeze screen function of full screen.

6. automatic dimming function, automatic white balance, automatic gain function.

7. light source, low power, free adjustment of brightness, light and color remain unchanged, ensure true image reduction, long life silent air pump.

