## 

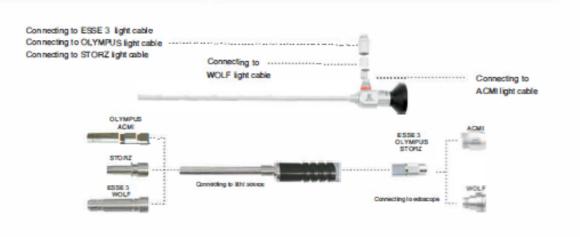
#### Code of endoscope

Endoscopes	Autoclavable endoscope
JDDDDG G or CG G: wide angle,CG: wider angle Code(English letter) Angle of view direction (Arabic numerals) Kinds of endoscopes(Arabic numerals)	Autoclave 134° C/273° F

#### Mark of color code



#### • How to connect the light cable



The picture is only for reference.Please refer to the real object.





# LAPAROSCOPY

## Since1985 ENDOSCOPES





## Laparoscope DF

#### **Product features**

- Endoscope adopts imported stainless steel material
- Endoscope adopts German optic glass, light fiber and light cone
- Adopt the patented technology of rod optical lens, clear field of view
- With direction index, sapphire lens cover never abrasion



#### 

J0800B	0° Endoscope (Angle of field:70°)
J0800G	
J0830B	30° Endoscope (Angle of field:70°)
J0830G	

#### • **Φ5mm Endoscope**

J1800	0° Endoscope ∳5mm × 290mm	<u></u>
J1830	30° Endoscope ∳5mm×290mm	
• 4K H	HD laparoscope	
J0800BH	0° Endoscope (Angle of field:75°) $\varphi$ 10mm $\times$ 340mm	

J0830BH	30° Endoscope (Angle of field:75°)
	<b>♦</b> 10mm × 340mm

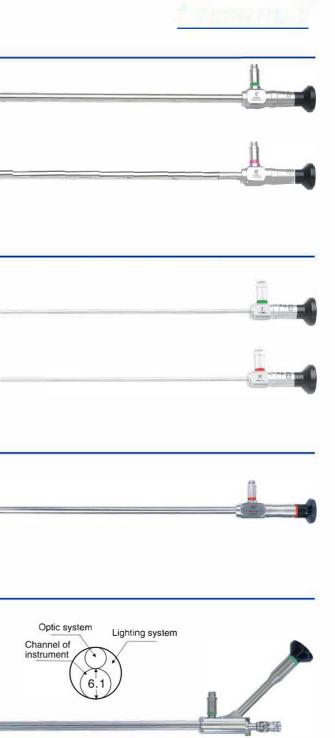
#### Oblique laparoscope

JY0800S2 Oblique laparoscope  $\phi$ 11mm × 270mm Used with  $\phi$ 6mm instrument

### • Trocar, Veress needle, Reducing cannula, Outer rubber cap, Inner sealed cap

D4701C-0	Reducing cannula(short) $\phi$ 10mm- $\phi$ 5mm	
D4701C-1	Reducing cannula(long) φ10mm-φ5mm	
D4610 D4612 D4615	φ2.2mm × 100mm φ2.2mm × 120mm φ2.2mm × 150mm	





	Outer rubber cap $\phi$ 5.5mm Outer rubber cap $\phi$ 10mm	0
	Inner sealed cap $\phi$ 5.5mm Inner sealed cap $\phi$ 10mm	

### • Trocar

D4561D	Trocar(magnetic ball) φ5.5mm × 100mm	D45618
D4521D	Trocar(magnetic ball) \$\phi10.5mm \times 100mm \$\phi10.5mm \times 100mm \times 100mm \$\phi10.5mm \times 100mm \times 100mm \$\phi10.5mm \times 100mm \times 100mm \$\phi10.5mm \times 100mm \times 10	D4521E
D4561DB	Trocar(magnetic ball/protection) φ5.5mm × 100mm	D45618
D4521DB	Trocar(magnetic ball/protection) φ10.5mm × 100mm	D45218
D4561DL	Trocar(magnetic ball/thread) φ5.5mm × 100mm	D4561E
D4521DL	Trocar(magnetic ball/thread) $\phi$ 10.5mm × 100mm	D45218
D4561E	Trocar(magnetic sheet) φ5.5mm × 100mm	D45218
D4521E	Trocar(magnetic sheet)	D4561F
D4561EB	Trocar(magnetic sheet/protection) φ5.5mm × 100mm	D4521F
D4521EB	Trocar(magnetic sheet/protection) $\phi$ 10.5mm × 100mm	D4561F
D4561EL	Trocar(magnetic sheet/thread) $\phi$ 5.5mm × 100mm	D4521F
D4521EL	Trocar(magnetic sheet/thread) $\phi$ 10.5mm × 100mm	D45 <mark>33</mark> E
D4521EZ	Trocar(magnetic sheet/convertible) φ10.5mm × 100mm	D4567
D4521FL	Trocar(switch panel/thread) $\phi$ 10.5mm × 100mm	D4566E
D4561FL	Trocar(switch panel/thread) $\phi$ 5.5mm × 100mm	D4566E
D4529A	Trocar(cross-shaped with rubber cap)	D45668
D4561EB	11 Trocar(thorax) φ5.5mm <b>applier</b>	D4561E
- Only		
D5006C	Clip applier Middle(Single–action,Double–action)	D5006E
Dw5021	Clip applier Single–action(Small) ↓ 5mm × 330mm	D5006E
DW5022	Clip applier(Deep-seated)	D5006E
DW5023	Clip applier(Large)	D5006F

	Trocar(cross–shaped) φ5.5mm × 100mm	
D4521B	Trocar(cross–shaped) φ 10.5mm × 100mm	
	Trocar(cross-shaped/protection) $\phi$ 5.5mm × 100mm	
	Trocar(cross-shaped/protection) $\phi$ 10.5mm × 100mm	
	Trocar(cross-shaped/thread) φ5.5mm × 100mm	
	Trocar(cross-shaped/thread) $\phi$ 10.5mm × 100mm	
	Trocar(cross-shaped/convertible) $\phi$ 10.5mm × 100mm	U.
	Trocar(switch panel) φ5.5mm × 100mm	
	Trocar(switch panel) φ10.5mm×100mm	
	Trocar(switch panel/protection) $\phi$ 5.5mm × 100mm	$\bigcirc$
	Trocar(switch panel/protection) $\phi$ 10.5mm × 100mm	
	Trocar(cross–shaped) φ12.5mm×100mm	
D4567	Reducing adapter	
D4566EB	Trocar(magnetic sheet/protect $\phi$ 12.5mm × 95mm	tion)
D4566E	Trocar(magnetic sheet) $\phi$ 11mm	
D4566E1	Trocar(magnetic sheet) $\phi$ 12mm	
D4561EB.1	1 Trocar(thorax)	
	φ12.5mm	
	φ 12.5mm	
ŝ	φ 12.5mm	3
(	<ul> <li>         φ 12.5mm         <ul> <li></li></ul></li></ul>	
(	Clip applier Used with imported biologic clip)	
(	Clip applier Used with imported biologic clip) \$10mm × 330mm Clip applier(Medium)(purple) Used with imported plastic clip \$10mm × 330mm	

## • Method of detaching the instrument(Insulated)

					Ţ.	
	(3)	32				1An
		Handle				
	()F (2(	ocedure of detachment Press the button Open the handle Pull out the metal forceps			9	With lock
	• Fo	rceps (Insulated,⊄	9 <b>5mm</b> )			
	D6529	Duck–jaw forceps ∳5mm × 330mm		D6535	Atraumatic forceps φ5mm × 330mm	
	D6530	Punch grasping forceps $\phi$ 5mm × 330mm	a start and a start of the star	D6536	Grasping forceps φ5mm × 330mm	
	D6531	Grasping forceps \$\$ 5mm × 330mm		D6537	Tine forceps φ5mm × 330mm	
	D6531A	Grasping forceps φ5mm × 330mm		D6539	Biopsy forceps ∳5mm×330mm	
	D6532	Organ–anchoring forceps φ5mm x 330mm		D6540	Biopsy forceps (with needle) ∳5mm × 330mm	
t	D6533	Grasping forceps (Rat-teeth)1+2teeth ∳5mm × 330mm		D6541	Bitting and cutting forceps $\phi$ 5mm × 330mm	
1	D6533A	Grasping forceps (Rat-teeth)2+3teeth φ5mm × 330mm	and a star	D6546	Medium grasping forceps ∲5mm×330mm	

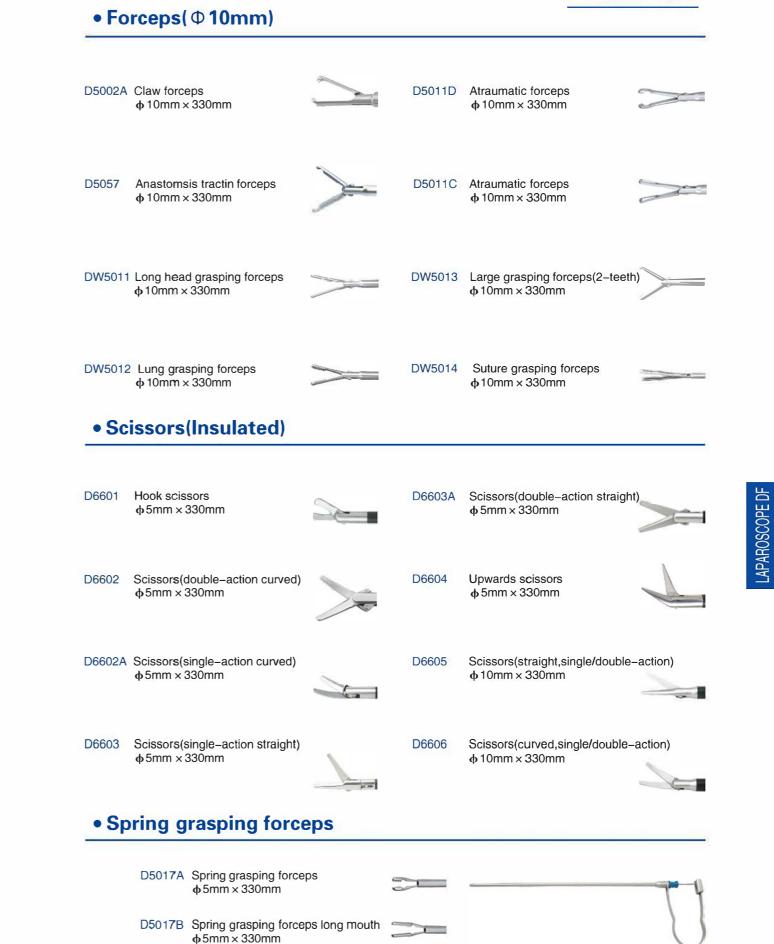


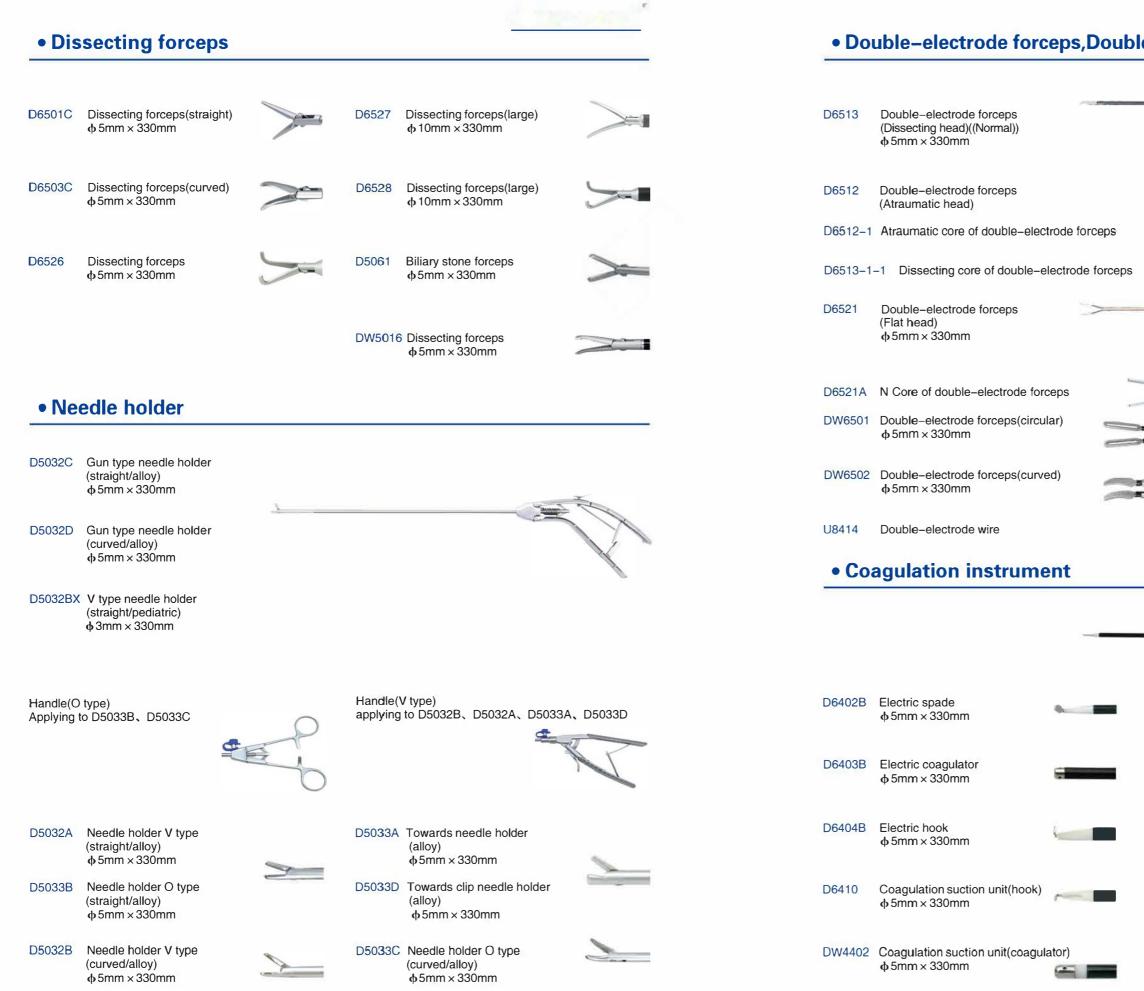


#### • Forceps (Insulated, $\Phi$ 5mm)

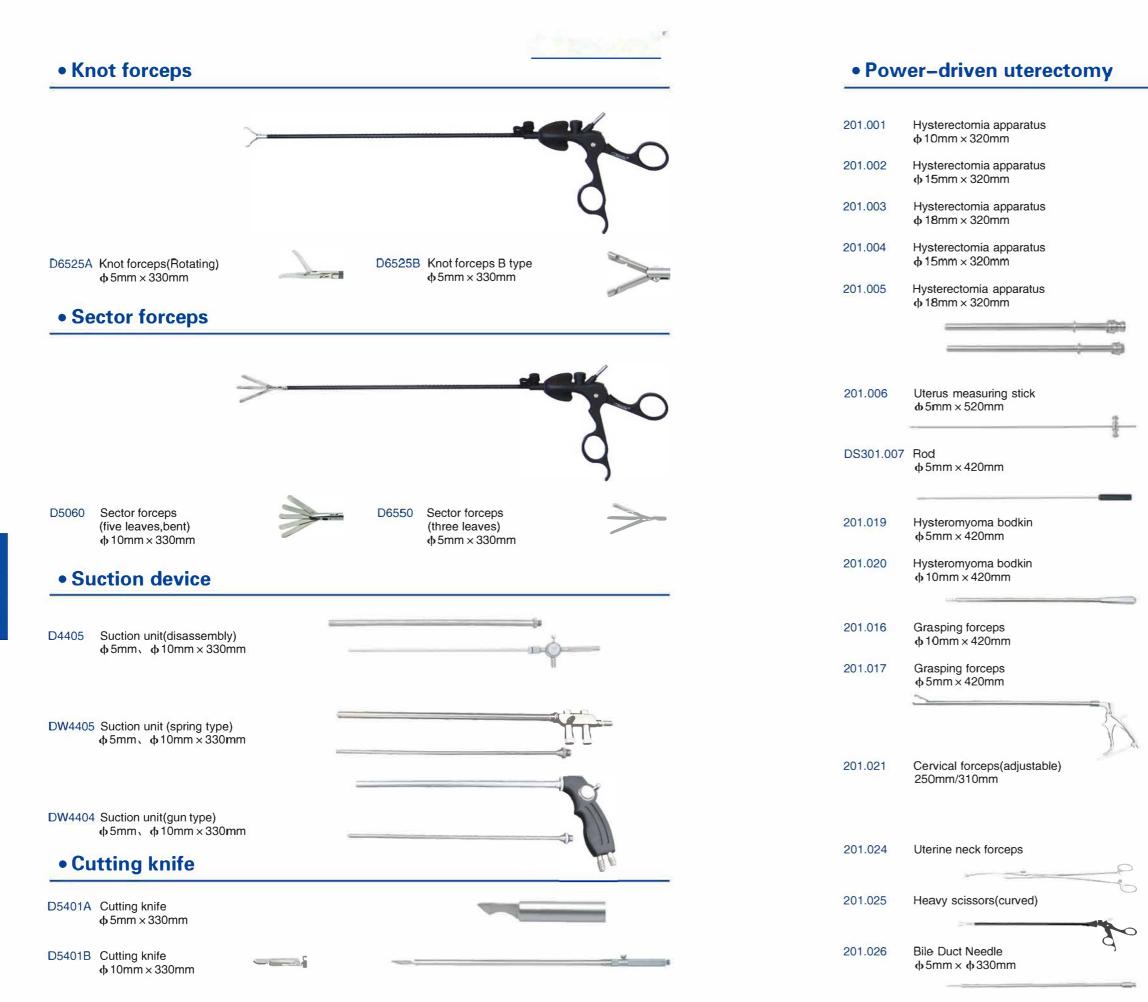
φ 10mm × 330mm

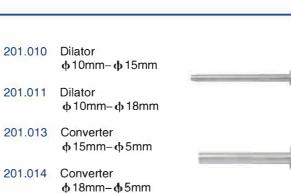
D6520	Atraumatic forceps φ5mm × 330mm		D6538	Appendix grasping forceps φ5mm × 330mm	
D6520A	Atraumatic forceps(small) $\phi$ 5mm × 330mm		D6534	Grasping forceps(small teeth)	<u> </u>
D6523	Cholecystic grasping forceps φ5mm × 330mm		D6545	Mucous membrane forceps $\phi$ 5mm × 330mm	
D <mark>652</mark> 4	Fallopian tube grasping forceps $\phi$ 5mm × 330mm		D6547	Hollow erect grasping forceps $\phi$ 5mm × 330mm	
D6542	Tharm grasping forceps φ5mm × 330mm	>	D6543	Tharm grasping forceps(empty) φ 5mm × 330mm	
D6548	O–shaped grasping forceps $\phi$ 5mm × 330mm	2-	D6549	V–shaped grasping forceps \$\overline{5mm} \times 330mm	
D6525A	Knot forceps(Rotating) φ5mm × 330mm	And	D6525B	Knot forceps B type φ 5mm × 330mm	
1.04.01.(	Bulldog clips applicator ∳5mm × 330mm				K
• Fo	rceps(Ф10mm)				
D5000	Normal handle of instrument ∲10mm	K	D5000S	Handle of instrument with lock $\phi$ 10mm	X
D5014A	Grasping forceps \$\$\phi\$ 10mm × 330mm	<u> </u>	D5056	Liver grasping forceps \$\$\phi\$10mm \$\times 330mm\$	>
D5050	Tharm grasping forceps,bent φ10mm×330mm		D5062	Interdiction vessel forceps(S type	
D5054	Stomach grasping forceps φ 10mm × 330mm		D5063	Spleen pedicel vein grasping for \$\overline{10mm \times 330mm}\$	ceps
D5055	Stomach grasping forceps	-			





le-electr	ode wire		
	r	K	I APAROSCOPE DE
D6407B	Electric knife φ5mm × 330mm		
D6408B	Electric pin \$5mm × 330mm		
DW4402X	Electric Coagulator(pediatric) φ 3mm × 330mm	-	
D6410X	Electric hook(pediatric)		
D6408B.X	Electric pin(pediatric)		





- 201.008 Trocar cannula  $\phi$  15mm × 95mm
- 201.009 Trocar cannula  $\phi$  18mm × 95mm



201.015 Knot-pushing stick φ5mm × 330mm

201.018 Lift uterus apparatus 400mm



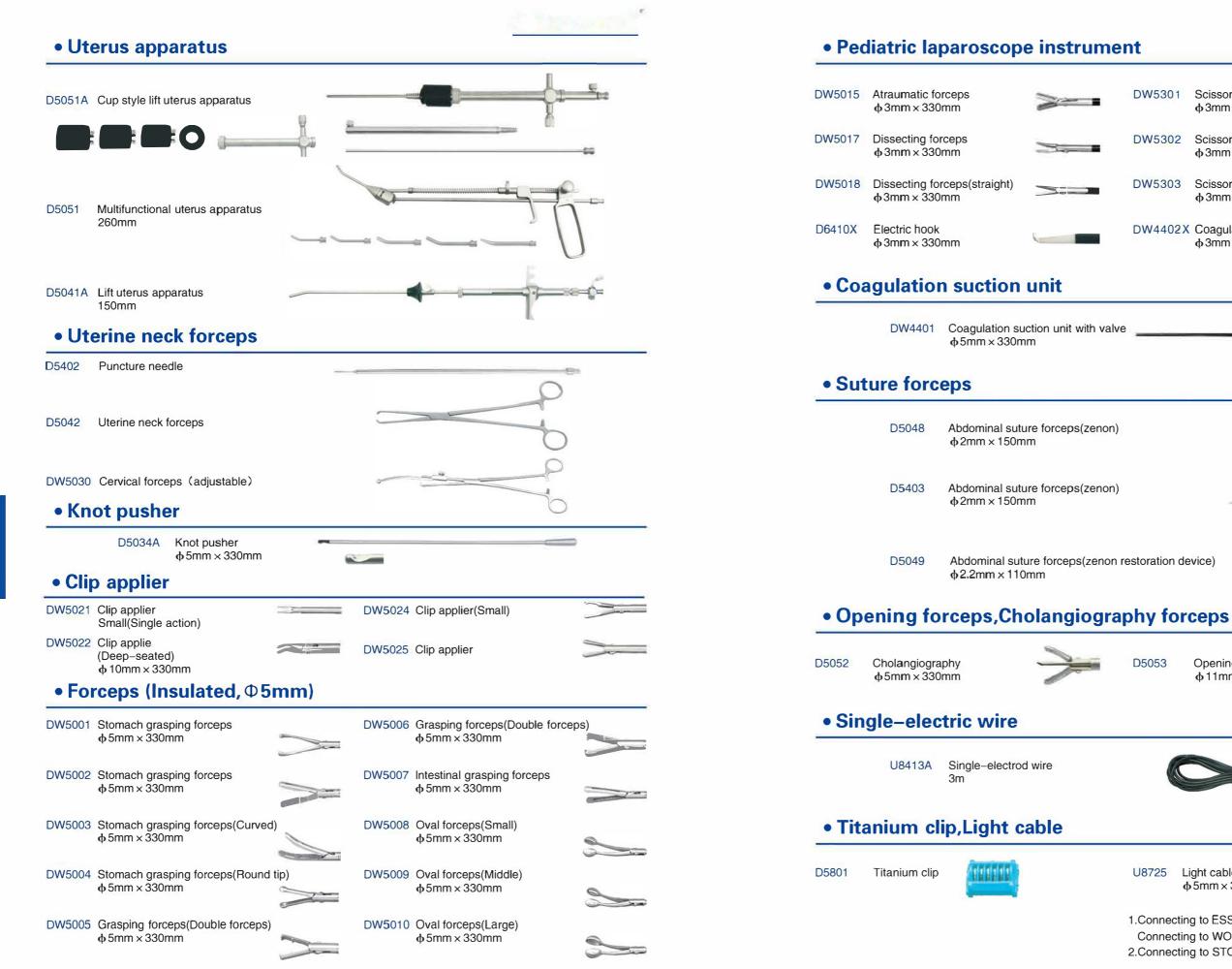
- 201.012 Guide probe **∲**10mm × 330mm
- 201.023 Electro-motor

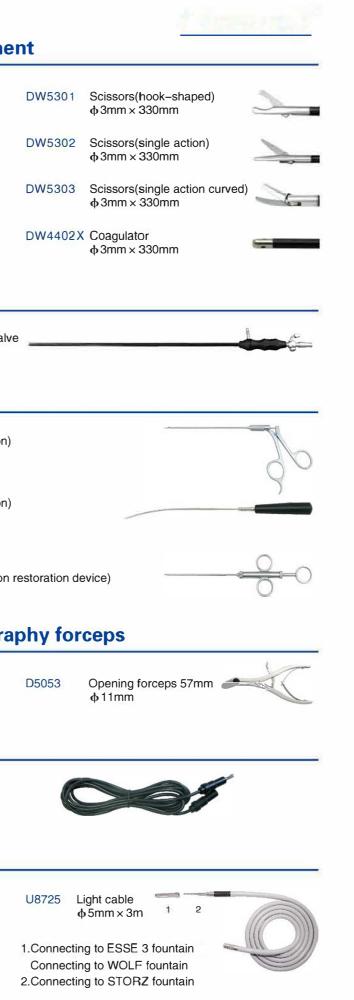


201.028 Cord

201.027









#### HD Camera System(With Screen)

- Type: ESD-HD668P
- HD output:1920(H)x1080(V)
- Image sensor: 2.86-inch ultra-low voice global exposure CMOS sensor
- Output signal:Dual HDMI, Dual DVI
- Sharpness:1080p
- Frame frequency:60FPS
- Minimal illumination:5Lx at F5.5
- Power source condition: AC 220V, 50Hz
- Input power:35VA
- ♦ Optical connector size:Rigid endoscope connector: 032±0.1mm
- ♦ Working environment: Temperature +10° C~+40° C Humidness 30%~75%

Barometric pressure 860hpa~1060hpa

- Security type: Class I BF type application part

#### SD-LED Medical cold light source



Medical cold light source

ESD-LED

HD Camera System

ESD-HD668F

- Power source condition:220V, 50Hz Input power:150VA
- ◆ Spectral properties:①Color rendering index:≥90 2 Color temperature: 3000k~7000k
- ◆ Total luminous flux:≥410lm
- Output aperture: 10 ± 0.050mm
- Working noise: < 35dB</p>
- Electrical safety should meet the GB9706.1–2007 standard

#### Perfusion pump for endoscope



Perfusion pump for endoscope ES-QB-

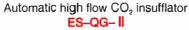
- ♦ The cavity speculum filling pupm QB-1 is an open pressure equipment.It is easy and convenient to clean the liquid in the operation.
- It takes stepping electrical motor. When the equipment drives. It is steady and makes low noise.
- Pressure and flow is controlled by computer automatically, when the power is over, the computer will cut off electric source automatically, and when the power recovers, the equipment will be in normal situation. Meanwhile, control equipment is safe and reliable.
- The range of pressure is 2- 53Kpa, the range of flow is 0.1-1L/min.The number is showed on the equipment, and it can adjust the number according to the need.
- Cavity speculum filing pump QB-1 has the ability of memory. When you open the equipment, it can show the power and flow stated last time.

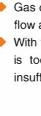




#### Automatic high flow CO<sub>2</sub> insufflator







#### Uteri auto inflate and pressure





♦ Speed adjustment range:200rpm/min~6000 rpm/min (forward and reverse) 200rpm/min~3000 rpm/min (round trip) With stepless speed regulation function + Flushing flow: The controller has flushing function Maximum flow is 15ml/min (no-load) Adjustable flow • The maximum output torque of hand-held motor shall not be less than 36mN · M Working noise: < 65db</p> Full LCD display, touch screen control + Flushing linkage control: when the flush switch is on, press the foot switch to flush automatically, and release the foot switch to stop automatically Power source: 220V 50/60HZ Overall power≤180VA

• Gas flow and abdominal pressure are controlled by microcomputer technology automatically.

Pulse gas supply can be adjusted by setted abdominal pressure and actual abdominal pressure value automatically according to advanced pulse gas supply principle.

• Gas cylinder pressure, the actual abdominal pressure and air flow are displayed by light beam.

• With the electrical safety protection system, when the pressure is too high, inflation needle is jammed or gas pressure is insufficient, audible and visual alarm will work.

#### ES-QG-II

Inlet pressure:0.28~0.6MPa

Setted abdominal pressure:5~25mmHg

Set flow:0~30L/min

It is used for gynecology endoscope and operation. In order to make the field of view clear, uterus is inflated by gas pressure Power:220V ± 22V 50Hz ± 1Hz

Power rating 30W

Power rang 1Kpa~~30Kpa

Adjusting step length 1Kpa

Setting pressure 1~30Kpa

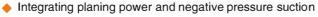
Alarm pressure 30Kpa



#### Computer powerful chipping device



Compute powerful chipping device ES-BXQ-1



- ♦ 4.2mm cutters, larger internal suction space, peak flow 28L/min Vacuum degree: – 88kPa
- Imported cutters, ultra-low vibration, effective protection of endoscope
- Simple operation, sensitive response, three-speed adjustable

#### Peritoneum cleaner

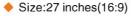


Peritoneum cleaner **ES QXQ-1000J** 

Peritoneum Cleaner QXQ-1000J is used for irrigations and suctions of organs in cavity under the laparoscopic surgery in order to make the field of view clear and clean the feculence prevent from pollution and adhesion after the operation

- The peritoneum cleaner is controlled by computer, adjusted the positive pressure and negative pressure according to the user's demands
- It can positive pressure irrigate and negative pressure suck, it can be matched single tube with double channels suction unit (D4403,D4403A) for irrigation and suction and exchange frequently.
- Washing pressure: 75±5KPa Suction pressure: ±65t5KPa

#### ESSE 27/24-inch full-HD surgical special monitor

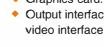


- Contrast:1000:1 Max Resolution: 3840x2160
- Viewing Angle:178/178 Response Time:8ms
- Appearance and structure: white metal shell with high strength. fast heat dissipation and anti-interference
- Installation standard: VESA 100x100mm Power source: DC12V
- Built-in curve: more than ten kinds of medical display curves
- Color:1.07B Brightness:800cd/m<sup>2</sup>
- Input Interface:DVI/HDMI2.0/VGA/DP/USB
- Size:24 inches(16:10)
- Contrast:1000:1 Max Resolution:1920x1200
- Viewing Angle:178/178 **Response Time:5ms**
- Appearance and structure: white metal shell with high strength, fast heat dissipation and anti-interference
- Power source: External power supply 24V Installation standard: VESA 100x100mm
- + Built-in curve: more than ten kinds of medical display curves
- Brightness: $650 \pm 10\%$  cd/m<sup>2</sup> Color:1.07B
- Input Interface:DVI/VGA/VIDEO/S-VIDEO/YPBPR/HDMI/SDI (for choice)

#### Endoscope image system



Endoscope image system ES-NYX-1





- Multi-department application mode is provided, including Thoracoscope, Fiber-optic, Hysteroscope, Cystoscope, ENT and Laparoscope, etc 7-inch LCD screen, real-time image display • High waterproof camera, which can be soaked and disinfected Menu memory function, can switch different endoscope modes
- and vertical mirroring functions The camera handle has three function keys, brightness increase. brightness decrease and image freeze(This key can also be set as white balance function in the menu)

- SD-HD668P Endoscope Image System
- SD-LED Medical cold light source
- Trolly
- ESSE Monitor



**ESSE** Monitor



Convenient operation process, efficient and simple functions;

- High-resolution synchronous display of real-time dynamic images; • Digitally capture images to ensure that they are clear and realistic; It has the function of real-time local clipping and blackout collection; Large capacity and high quality dynamic video storage system;
- The software supports calibration, measurement of length and area, and automatic placement of measured values:
- Basic operations such as zooming in, zooming out, mirroring and rotating images are supported;
- Support image brightness and contrast adjustment, text and region annotation and other functional processing ;
- The diagnostic report supports multiple modes and respects the working habits of doctors. You can click input, select input, fill in the blank, and text input;
- There is no limit to the size of printing paper. You can choose to print paper so that it can be used with the hospital standard medical record folder.

Endoscope Imaging System

- CPU: high-end Acquisition card: high-definition imported chip Display: 19.5-inch LCD Memory: 4G
- Printer:all-in-one machine Hard disk: 1T
- Graphics card: integrated graphics card Trolley: medical trolley Output interface: 3-way output of S terminal interface and AV

- The main machine has fiber-optic mode, which can be connected to the fiber mirror for use
- With image freezing, 4-level image magnification, image horizontal

 Power : AC 220V ± 22V 50Hz ± 1Hz Output power: 35VA Image pixels: 1920 (H) x 1080 (V) (2.073 million pixels) Scanning standard: 1125 lines, 60 frames Video output: dual HDMI, dual DVI Minimal illumination: 5Lx at F5.5

- ◆ QG- || Automatic high flow Co₂ insufflator
- QB–1 Perfusion pump for endoscope

ELECTRICAL EQUIPMENT

## 4K Medical Endoscope Camera System



#### **Product features**

- Color reproduction, closer to eye vision The 4K medical endoscope camera system can reproduce the color, generally same as the original.
- Supporting high color reproduction Clear display of organ tissue and nature color, improve the surgery safety .
- Large picture, large field of view Immersive observation, help doctors focus on the surgery
- 4K HD laparoscope with Ultra HD Resolution Display tiny blood vessels, tiny nerves and tissue levels accurately. Images are more clear smooth
- With two electronic dyeing functions The 4K medical endoscope camera system includes features such as vascular enhancement and special spectra.

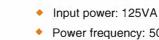
#### • 4K 3 Chips camera system



4K 3 Chips camera system ESD-4K-3P

#### Medical Endoscope LED cold light source





Medical Endoscope LED cold light source ESD-LED100

#### • Medical monitor (High-quality SONY customized)32/55" monitor - extends surgical view

- Size: 32 inches
- Aspect ratio: 16:9
- Backlight: LED
- assemblied)
  - Size: 55 inches

  - Backlight: LED

  - Weight: Approx. 27kg



Medical monitor

LMD-X3200MC

LMD-X550MC

 Power supply: 220V, 50HZ Input power: 80VA Camera resolution: 3824x2160 Image sensor: CMOS sensor Output video signal: HDMI 2.0 4K Ultra HD output

 Supply voltage: 220V Power frequency: 50HZ Spectral properties:①Color rendering index: ≥90 2 Color temperature: 3000k~7000k Total luminous flux:>550lm Working environment: Temperature +10° C~+40° C Humidness 30%~75% Barometric pressure 860hpa~1060hpa Security type: 1 type BF type application part

```
    Resolution(H*V): 3840x2160

    Consume electricity: Approx. 163W (maximum)

    Weight: Approx. 11.8kg (SU–600MD optional bracket not

    Resolution(H*V): 3840x2160

    Aspect ratio: 16:9

    Consume electricity: Approx. 290W (maximum)
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