# **Laparoscopic Camera System**

#### HD3

Dimension 350mm x 380mm x 80mm

Weight 5.0Kg

Resolution 1920 \* 1080 pixels Image Sensor 3-chip CMOS

Optical Interface Integrated parfocal zoom objective

Focal Length F = 14mm - 30mm(2.0X)

Scan Mode Progressive
Frequency 50/60 Hz
Display Format 16:9

Output Signal HD-SDI x 2, S - Video x 1, DVI x 2
Data Management Full HD Recording with External USB

Storage Flash disk(up to 256GB)

Protection Against Moisture Camera head IPX7
Protection Against Electric shock Class I, Type BF

The main components of Endoscope Camera system are Camera Head and Image processing host, which are shown in the figure below:



Figure 1 Camera Head

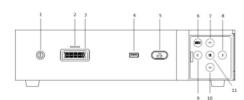


Figure 2 Front panel of image processing host

#### Descriptions of front panel:

- 1. Standby switch: Open and standby image processor
- 2. Indicator lamp of camera connection: Indicates weather or not camera is connected to image processor
- 3. Camera connection port: Connect to camera
- 4. USB interface: Connect to USB storage device
- 5. White balance button: Start white balance operation
- 6. Menu button: Enter system setting menu
- 7. "Up" navigation button: Move left in system setting menu
- 8. "Right" navigation button: Move up in system setting menu
- 9. "Left" navigation button: Move right in system setting menu
- 10. "Down" navigation button: Move down in system setting menu
- 11. "OK" button: Select "OK"



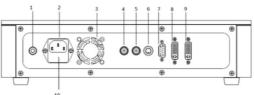


Figure 3 Real panel of image processing host

#### Description of rear panel:

1.Equipotential column

2.Input interface of AC power

3.Air outlet

4.SDI output: Digital video output

5.SDI output: Digital video output

6.S-Video output: Analog video output

7. Serial control interface: Connected to external devices.

8.DVI output: Digital video output 9.DVI output: Digital video output

10.Fuse cartridge

#### **HB200L LED Light Source**

Dimension 350mm x 380mm x 80mm

Weight 6.6Kg

Lamp High Brightness White LED

Lamp Life Approx. 20,000h Color Temperature 3000-7000K

Protection Against Electric Shock Class I, Type CF Intensity ≥300000Lux (max center)

#### PV26/PV27 Monitor

LCD Size

PV26 26 inch PV27 27 inch

Resolution 1920 \* 1080 pixels

Contrast Ratio 1400:1 Backlight Brightness 800 cd/m2

Input Signal Y/Pb/Pr, R/G/B, CVBS, S-Video, DVI, SDI, VGA

Output Signal SDI, DVI
Max Viewing Angel 178°
Loop Out Yes
Picture in Picture Yes

### Laparoscope

Field of View

M 01030A/M 01000A 80°

Direction of View

M 01000A 0° M 01030A 30°

Working Length

M 01030A/M 01000A 321mm

Diameter

M 01030A/M 01000A 10mm

Depth of View

M 01030A/M 01000A 3-200mm

Color Rendering Index

M 01030A/M 01000A 90

Autoclavable

M 01030A/M 01000A Yes

Insufflator					
Model	HS- 50F	HS- 50H	HS- 50V	HS- 50S	HS- 30
Flow Rate	50L/ min	50L/ min	50L/ min	50L/ min	30L/ min
Heating	√	√	×	×	×
Smoke Evacuation	√	×	√	×	×
Modes	5	5	5	5	5
Touch Screen	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

Dimension 380\*350\*141 (mm)

Flow Range

HS-50F/HS-50V/HS-50H/HS-50S 0.1L/min - 50L/min

HS-30S 0.1L/min - 30L/min

Pressure Range 1mmHg - 30mmHg

Modes Bariatric, Adult, Pediatric, Retroperitoneum,

Customize

Smoke Evacuation(HS-50F/HS-50V) Yes

Heating function(HS-50F/HS-50H) Yes, Temperature  $\leq$ 41 $^{\circ}$  C

Display 7 inch color touch screen

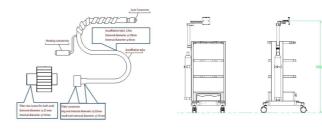
Protection against harmful ingress of water or particulate matter

Foot pedal IPX8

The insufflator is an ordinary-type device (sealed device that does not protect from liquid inlet)

Protection against electric shock Type CF

Method of sterilization By other methods validated and described by the manufacturer



Insufflation tube Trolley

Some of functions marked with an asterisk may

Some of functions marked with an asterisk may not be available. Please contact your local Mindray sales representative for the most current information.

## www.mindray.com

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