

27HK510S

## LG 27" Full HD IPS Surgical Monitor

1/9

### Key Features

27" FHD IPS Display (1920x1080)

sRGB 115%(Deep Red)

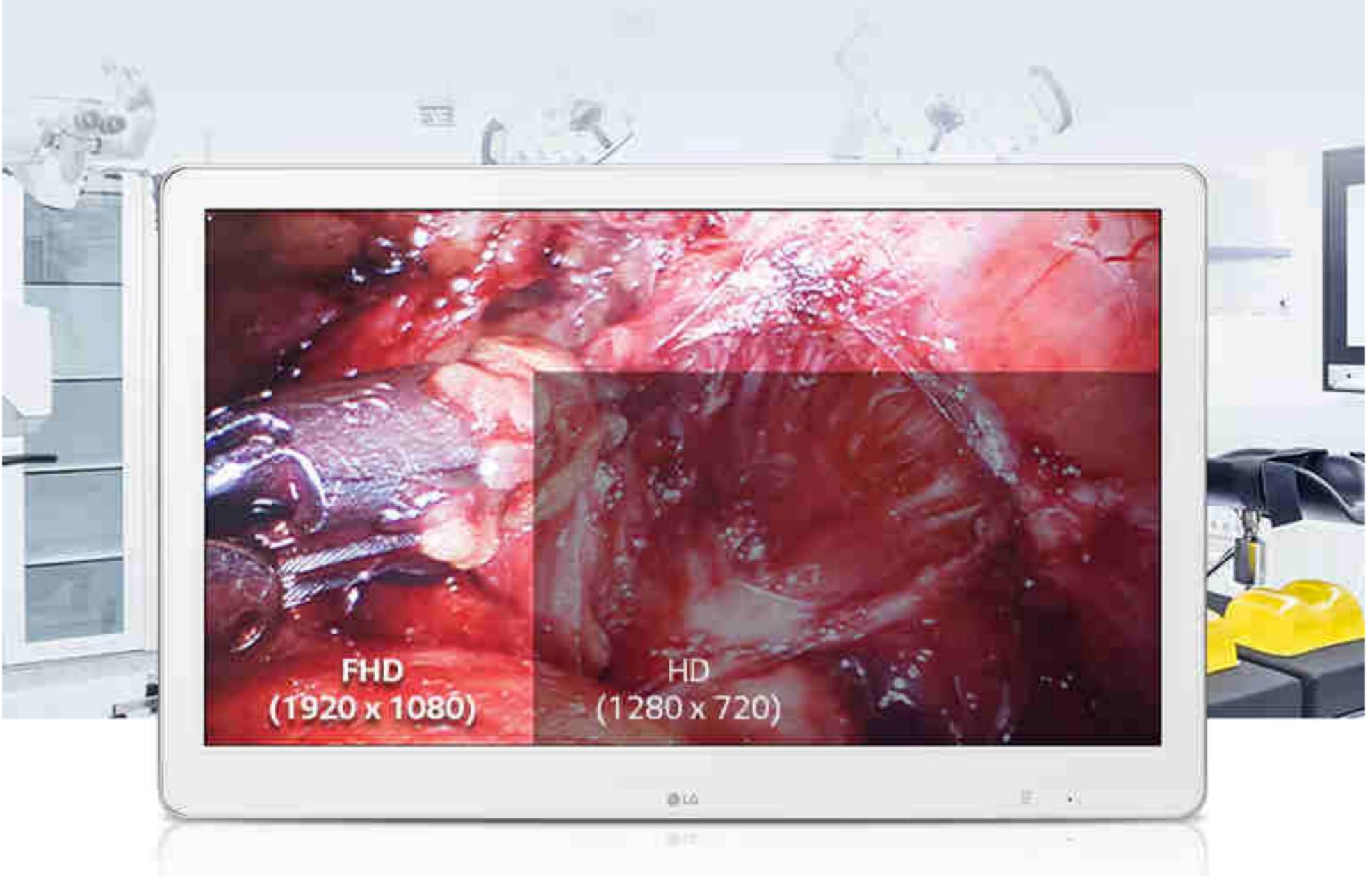
Brightness Stabilization

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ADD TO COMPARE

## A Display Optimized for Compatibility

The detailed picture quality of the LG surgical monitor meets operating room requirements. With its 27-inch Full HD IPS Display, the LG surgical monitor improves work efficiency.



IPS



2MP



sRGB 115%

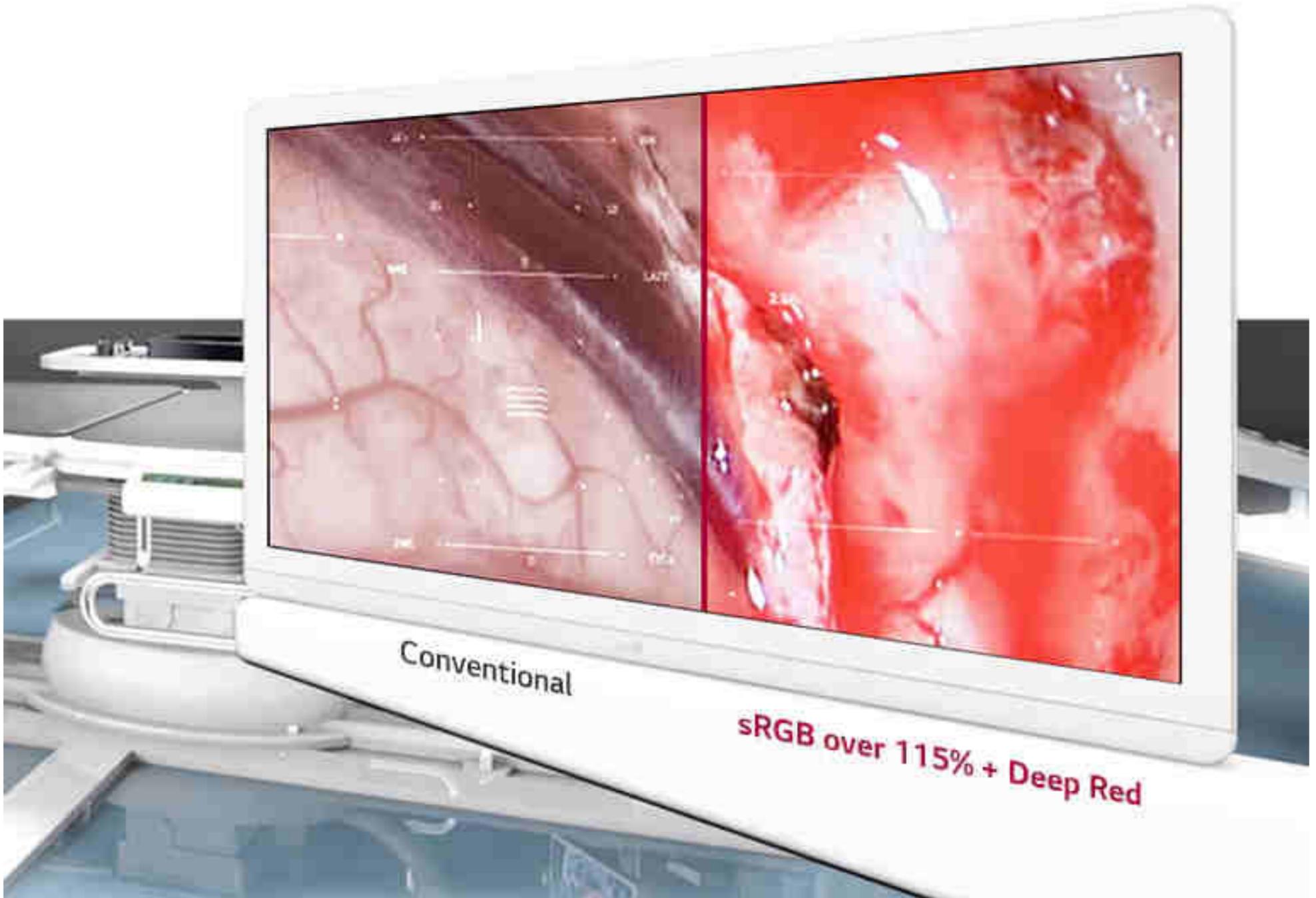


Brightness  
Stabilization



Flicker Safe

# Optimal Image Quality



## sRGB 115% (Deep Red)

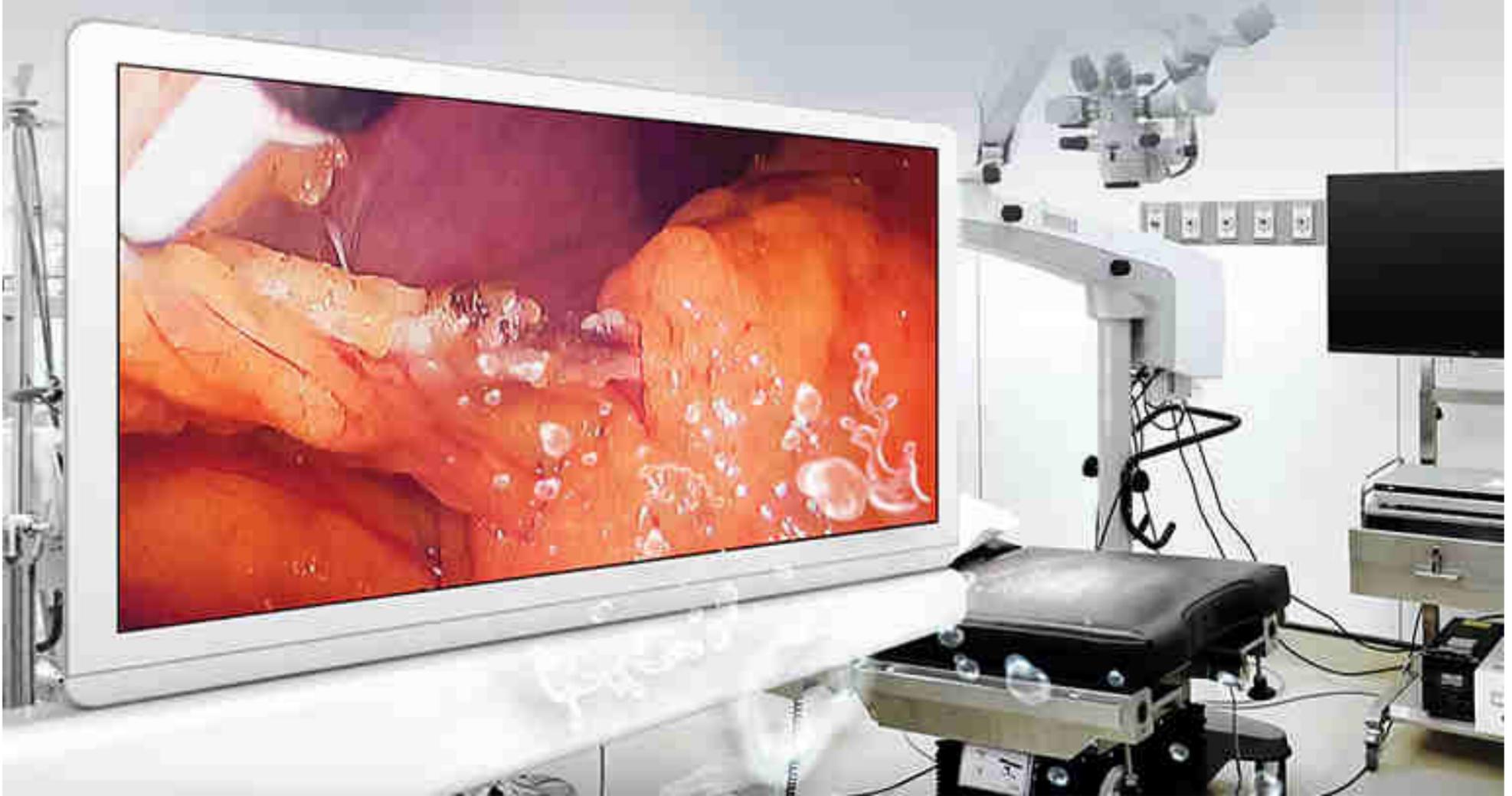
The Full HD IPS display with sRGB 115% (Deep Red) is designed to fit with other Full HD surgical devices. It enables surgeons to view accurate, realistic images especially in the red color spectrum.

## Brightness Stabilization

The LG surgical monitor carefully measures and sets every grayscale tone to create a monitor compliant with DICOM Part 14. Furthermore, LG's surgical monitors offer stabilized brightness settings.

\* DICOM (Digital Imaging and Communications in Medicine): Standard applied to the grayscale tone characteristics of monitors used in the medical field.

## Designed for the Operating Room



[OVERVIEW](#) [SPECS](#) [RESOURCES](#)

## Dustproof & waterproof

To ensure protection against contact with objects such as blood or bodily fluids, LG surgical monitors are cleanable and durable, with ratings of IP35 on the front and IP32 on the back, securing them from any direction.

## PROTECTION GLASS

The LG surgical monitor with protection glass provides a more durable display by safeguarding the monitor from water and bodily fluids and making it easier to clean.

## Reduces Visual Fatigue

Flicker Safe reduces the onscreen flicker level to almost zero, which helps minimize eye strain and eye fatigue. By combining Flicker Safe with the IPS technology, users can comfortably work throughout the day.

### DISPLAY

Aspect Ratio	16:9
Backlight Dimming Technology	Global Dimming
Backlight Technology	LED
Brightness (Typ.)	1000 cd/m <sup>2</sup>
Brightness (Stabilization)	600 cd/m <sup>2</sup>
Color Bit	10bit
Color Gamut (Typ.)	sRGB 115%(Area), sRGB over 99%(Coverage)
Contrast Ratio (Typ.)	1000:1
Pixel Pitch(H x V)	0.3114mm x 0.3114mm
Resolution	1920x1080
Response Time (GTG)	14ms(Off-setting), 5ms(Faster-setting)
Size (Diagonal, Inch)	27
Size (H x V)	597.89 x 336.31mm (23.54 x 13.24")

Viewing Angle (CR≥10)	178° (Right/Left), 178° (Up/Down)
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## FEATURE

Hot Key	Yes (2keys)
Brightness stabilization	Yes
Black Stabilizer	Yes
HW Calibration	Yes(LG Calibration Studio)
DICOM Compliant	Yes
Color Temperature	6500K / 7500K / 9300K Manual (5000K - 10000K)
Flicker safe	Yes
PBP	Yes (2PBP)
PIP	Yes
Failover Input Switch	Yes
Smart Energy Saving	Yes
Super Resolution+	Yes

## SW APPLICATION

LG Calibration Studio (True Color Pro)	Yes
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## CONNECTIVITY

3G-SDI	Yes (3G,INx1/OUTx1)
D-Sub	Yes
DVI	DVI-D (In)/DVI-D(Out)
HDMI	Yes (1ea)
Component	Yes
RS-232	Yes (1ea)
USB Downstream Port	Yes(1ea/ver3.0)
USB Upstream Port	Yes (1ea/ver3.0)

## POWER

AC Input	100-240Vac, 50/60Hz
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DC Output	
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**OVERVIEW** **SPECS** **RESOURCES**

Power Consumption (DC Off)	Less than 0.3W
Power Consumption (Max.)	120W
Type	External Power(Adapter)

## MECHANICAL

Borderless Design	Normal
Display Position Adjustments	No Stand
Down Height	No Stand
Height Range	No Stand
Machanical Power Switch	Yes
OneClick Stand	No Stand
Pivot	No Stand
Swivel	No Stand
Tilt	No Stand
Wall Mount Size	200x100mm/100x100mm

## DIMENSIONS/WEIGHT

Dimension in Shipping (W x H x D)	743x157X496 mm
Dimension with Stand (W x H x D)	No Stand
Dimension without Stand (W x H x D)	656.4x412.9x62.2mm
Pallet Stuffing (20ft/40ft/40ft HC)	420 / 900 / 900
Weight in Shipping	11.3kg(24.9lb)
Weight with Stand	No Stand
Weight without Stand	7.7kg (17lb)

## STANDARD

IEC (IEC 60601-1 / IEC 60601-1-2)	Yes
EN (EN 60601-1 / EN 60601-1-2)	Yes
IEC (IEC 60950-1 & IEC 62368-1 / CISPR 32, 35)	Yes
EN (EN 62368-1 / EN 55032, 55035)	Yes
cUL (ANSI/AAMI ES 60601-1, CSA CAN/CSA-C22.2 NO. 60601-1)	Yes

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FDA	Registration (Class I)
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ISO13485	Yes
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RoHS	Yes
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REACH	Yes
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WEEE	Yes
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MFDS	Yes
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IP(front/except for front)	IP35/IP32
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Vandal-proof	IK06
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## ACCESSORY

Adapter	Yes
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Calibration Report (Paper)	Yes
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D-Sub	Yes
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DVI-D	Yes
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HDMI	Yes
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Power Cord	Yes
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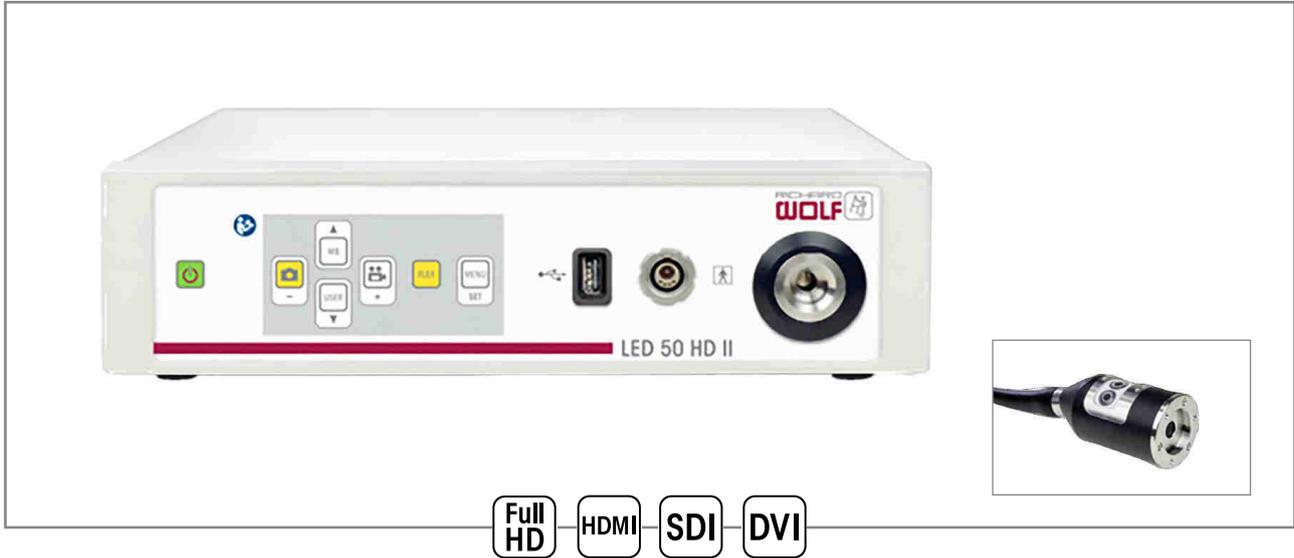
## PHYSICAL SPECIFICATIONS

Weight(Without Stand)	7.7kg
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To access more technical documentation and downloads, please visit the [LG B2B Partner Portal](#).

## LED 50 HD II Camera control unit



Full HD | HDMI | SDI | DVI

- Camera and light source in a single device
- Small design – low space requirement
- Connection option for C-Mount lenses
- Connection of Richard Wolf light cables without light source adapter
- Image and video recordings on USB using camera head buttons
- Use-specific camera profiles

**LED 50 HD II** ..... **862-2512**

Consisting of:

- 1x camera control unit
- 1x camera head (ECOHDII) with 3.05 m (10 ft) cable
- 1x power cable
- 1x HDMI-DVI cable

## LED 50 HD II

### Technical data of camera control unit

LED 50 HD II		862-2512
<b>Device properties</b>		
Max. native video signal resolution	1,920 x 1,080 pixels	
Type and number of lamps	LED	
Brightness in lumens	Approx. 950 lm	
Light output	50 W	
Digital zoom	10x max.	
Operating conditions	+10 °C to +40 °C, 30 % to 75 % rel. humidity, atmospheric pressure 700 hPa to 1,060 hPa	
Image format of saved pictures / videos	JPG (1,920 x 1,080) / Full HD 1,920 x 1,080	
<b>Equipment</b>		
IP rating	IP 20	
<b>Camera head</b>		
Sensor:	1x 1/2" CMOS	
Operation:	3 programmable head buttons	
Lens thread:	C-Mount	
Sensitivity:	< 3 lux (1/1.4)	
<b>Power supply</b>		
Mains + frequency	100–240 V AC, 50/60 Hz	
Power consumption	95 VA	
<b>Regulatory standards</b>		
Safety	US/CA: UL 2601-1 / CSA C22.2 NO.601.1, EU: EN 60601	
EMC	EN 60601-1-2	
Medical device class	Class 1	
Classification of applied part	BF	
<b>Interfaces</b>		
Video outputs	1x HDMI, 1x DVI, 1x SDI, 1x video	
Resolution	1,920 x 1,080 / 60p (16:9)	
USB port	USB	
<b>Dimensions and weights</b>		
Weight	Device: 3 kg / camera head: approx. 180 g	
Dimensions (W x H x D)	Device: 295 x 128 x 278 mm / camera head: d = 38 mm; l = 79 mm	

## FLUID CONTROL Arthro 2204

Suction and irrigation pump for arthroscopy with automatic tube recognition



### FLUID CONTROL Arthro

is a new pump system for arthroscopy and fully endoscopic spinal surgery. The particular strength of this system lies in a practical combination of high performance and a cost-effective overall concept. The new software and technical enhancements make the **FLUID CONTROL Arthro** ideal for diagnostic and therapeutic arthroscopies.

**FLUID CONTROL Arthro** has already been prepared for integration in core, the digital OR from Richard Wolf.

## FLUID CONTROL Arthro 2204

Suction and irrigation pump for arthroscopy with automatic tube recognition



**Arthro/spine suc./irrig.pump bndl**  
for arthroscopy ..... **22040011**

- Comprising:
- 1 x arthro/spine suc./irrig.pump 200mmHG..... 2204001
  - 1 x irrigation tube set spike ..... 8171223
  - 1 x tube set for vacuum, incl. filter ..... 2206207
  - 1 x protection filter for gas filtration ..... 4171.121
  - 1 x power cable ..... 2440.03

**Arthro/spine suc./irrig.pump bndl**  
with Spine Mode software module for arthroscopy and fully endoscopic spinal surgery ..... **22040012**

- Comprising:
- 1 x arthro/spine suc./irrig.pump 200mmHG ..... 2204001
  - 1 x Spine mode software module .....2204101
  - 1 x irrigation tube set spike ..... 8171223
  - 1 x tube set for vacuum, incl. filter ..... 2206207
  - 1 x protection filter for gas filtration ..... 4171.121
  - 1 x power cable ..... 2440.03

Recommended accessories		Product no.
Footswitch		<b>2204901</b>

# FLUID CONTROL Arthro 2204

## Irrigation and suction pump for arthroscopy with automatic tube recognition

### Day-patient tube set

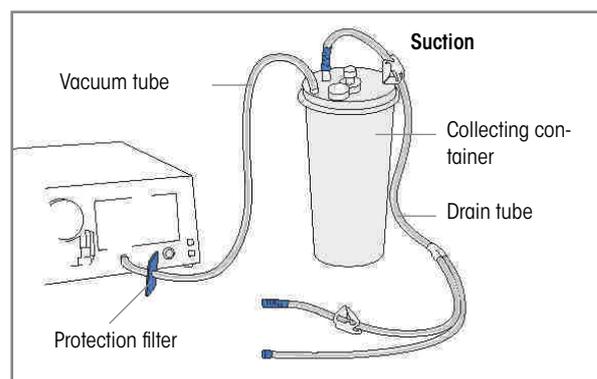
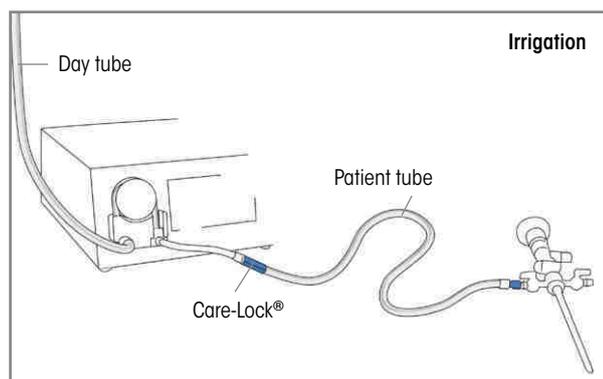
#### From two interventions/patients per day:

Use the **day-patient tube set**, which comprises a day tube and a connected patient tube. The day tube remains in the pump throughout the day, while the patient tube has to be changed for each operation. The irrigation fluid bag can remain on the pump until it has been completely

used up. **This significantly reduces the amount of waste and cuts costs.**

**Further tube versions are available to complement the system.**

**Note:** The use of the day-patient tube set has not been approved for the Spine Mode application.



Irrigation			Product no.
Accessories – reusable	Irrigation tube set spike	With Luer-Lock connection, autoclavable, incl. 10 spare membranes, reusable for 20 reprocessing cycles	<b>8171223</b>
	Irrigation tube set with spike L 3 m	(PACK= 10 PCS), with Luer-Lock connection, sterile, disposable product	<b>4171223</b>
Accessories – disposable	Irrigation tube set CARE-LOCK, L 3 m	(PACK= 10 PCS), sterile, disposable product	<b>4171224</b>
	Day irrigation tube set	(PACK= 10 PCS), with piercing spike, sterile disposable product, PVC	<b>4171226</b>
	Patient irrigation tube set L 3m	(PACK= 10 PCS), with Luer-Lock connection, sterile, disposable product, PVC	<b>4171227</b>
<i>Note: Day tube and patient tube can only be used together. A new patient tube is required for each patient – the day tube can be used for up to 20 patients.</i>			

Suction			Product no.
Accessories – reusable	Tube set for vacuum, incl. filter	with integrated hygiene filter, PACK= 10 PCS, service life of 30 days (connected to irrigation pump)	<b>2206207</b>
Accessories – disposable	Secretion container, 2 L	2 liters, no lid	<b>8170.6551</b>
	Secretion container, 2.5 L	2.5 liters (PACK= 2 PCS)	<b>41706566</b>
	Tube set for suction (with 2 ports)	sterile, disposable, (PACK= 10 PCS) for connecting instruments to collecting container	<b>T0503-01</b>

VII/21 || Subject to modifications. Please note that some products may not be available in all countries. For more detailed information, please consult with your contact partner or directly with Richard Wolf GmbH.

## Technical Data

### FLUID CONTROL Arthro 2204

<b>Arthro/spine suc./irrig.pump 200mmHG</b>	<b>2204001</b>
Power supply connection	100–240 VAC, 50/60 Hz
Power consumption	118 VA
Protection class to VDE 0750 / IEC 601	1
Classification	CF
Pressure range (infinite preselection)	15–200 mmHg
Delivery rate (can be preselected in 50 ml increments)	0–2 l/min
Dimensions (W x H x D)	300 x 157 x 436 mm
Weight	8.3 kg
Interfaces	USB / CAN bus (core) service interface