## Specifications

		LG 8MP Clinical Review Monitor	LG 1.3MP Clinical Review Monitor	LG 8MP Surgical Monitor 27HJ710S
	ITEMS		TOTAL CONTROL OF THE PARTY OF T	2/10/103
Panel	Туре	IPS	IPS	IPS + Glass
	Size	27" (16:9)	19" (5:4)	27" (16:9)
	Native Resolution	3840 x 2160	1280x1024	3840 x 2160
	Pixel Pitch	0.1554mm x 0.1554mm	0.294mm x 0.294mm	0.1554mm x 0.1554mm
	Display Colors	10bit / sRGB 99%	8bit / NTSC 72%	10bit / sRGB 115%(Deep Red)
	Viewing Angles	178/178	178/178	178/178
	Brightness	350cd/m2 (Typ.)	330cd/m2 (Typ.)	800cd/m2 (Typ.)
	Surface Treatment	-	-	Optical Bonding Glass (1.3T)
	Contrast Ratio	1000:1 (Тур.)	900:1 (Typ.)	1000:1 (Typ.)
	Response Time	14ms (Typ.)	18ms (Typ.)	14ms (Typ.)
Video Signals	Input Terminals	HDMI(2.0) x 2, DP(1.2) x 1	D-sub x 1, DVI-D x 1 , HDMI(1.4) x 1, DP(2.0) x 1	HDMI(2.0) x 1, DP(1.2) x 1, DVI-D x 1, 3G-SDI x 1
	Output Terminals	Headphone Out	-	DP(1.2) x 1, DVI-D x 1, 3G-SDI x 1
	Digital Scanning Frequency (H/V)	30~135kHz / 56~61Hz	30 ~ 83 kHz / 56 ~ 75 Hz	HDMI, DP: 30~135kHz / 56~61Hz DVI-D: 30~83kHz / 56~61Hz
	Sync Formats	Dynamic Sync Mode (Thru Mode)	Dynamic Sync Mode (Thru Mode)	Dynamic Sync Mode (Thru Mode)
USB	Function	1upstream, 2downstreams	1upstream, 2downstreams	1upstream, 1downstream (For calibration)
	Standard	USB3.0	USB3.0	USB3.0
Power	Power Requirements	100-240Vac, 50/60Hz	100-240Vac, 50/60Hz	100-240Vac, 50/60Hz
	Maximum Power Consumption	65W	50W	120W
	Power Save Mode	0.5W	0.5W	-
	Power Management	0.3W	0.5W	0.3W
Sensor		Brightness Stabilization	Brightness Stabilization	Brightness Stabilization
Environmental Requirements		-	-	IP35 / IP32 (Front / Back)
Certifications & Standards		IEC(IEC60601-1 / IEC60601-1-2), FCC(FCC part 15 Class A), CB, UL(UL60601-1), C-UL-US, KC, RoHS, REACH, WEEE, CISPR, EN, ANSI, AAMI, CE MDD(Class 1)	IEC(IEC60601-1 / IEC60601-1-2), FCC(FCC part 15 Class A), ANSI/AAMI ES 60601-1 CSA CAN/CSA-C22.2 NO. 60601-1, CB, KC, RoHS, REACH, WEEE, CISPR, EN, ANSI, AAMI, CE MDD(Class 1)	IEC(IEC60601-1 / IEC60601-1-2), FCC(FCC part 15 Class A), CB, UL(UL60601-1), C-UL-US, KC, RoHS, REACH, WEEE, CISPR, EN, ANSI, AAMI, CE MDD(Class 1)
Supplied Accessories		Power cord, HDMI Cable, DP Cable, USB Cable, Adapter, CD/Book Manual	Power cord, D-sub Cable, Dvi-D Cable, HDMI Cable, DP Cable, USB Cable, CD/Book Manual	Power cord, HDMI Cable, DP Cable, Adapter, CD/Book Manual
Physical Specifications	Weight (Without Stand)	4.7kg	2.9kg	7.7kg
	Weight (With Stand)	6.2kg	5.1kg	-

<sup>\*</sup>The monitor stand is not included with the surgical monitor.





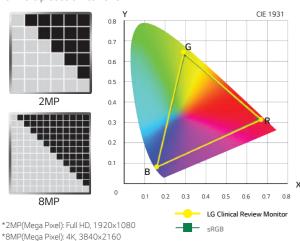
# LG Medical Imaging Displays

8MP Clinical Review Monitor (27HJ712C) | 1.3MP Clinical Review Monitor (19HK312C) | 8MP Surgical Monitor (27HJ710S)



#### 8MP IPS Display & 350 nits with sRGB over 99%

The 27-inch 8MP display with IPS technology offers an outstanding picture quality along with superb wide viewing angles. With its 178 wide viewing angles, images can be viewed simultaneously by several people with the highest quality reproduction and minimal color shift. Furthermore, a wide range of colors represented by sRGB over 99% of the color space guarantee vivid color expression without any color shift for more precise clinical review.



#### **DICOM Part 14**

In the medical field, monitors must display images accurately and consistently especially for the grayscale tone that may vary even between two monitors of the same model. To ensure the most accurate and consistent shading possible for medical images, LG measures and sets every grayscale tone on the production line to produce a monitor compliant with DICOM Part 14.

DICOM Part 14, published by the National Electrical Manufacturers Association (NEMA) and the American College of Radiology (ACR), provides strict guidelines for how grayscale display function calibration and quality assurance tests should be performed on displays used in medical imaging applications.



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

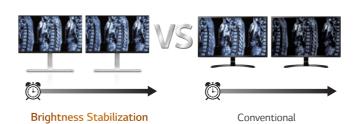
#### **Eye-comfort features**

Flicker Safe reduces on-screen flickers, which helps minimize eye strain and eye fatigue. By combining Flicker Safe with the proven picture quality of IPS technology, users can comfortably work throughout the day.

Also, Reader Mode provides optimal conditions for clinical use. LG's Reader Mode technology reduces blue light, protecting doctors' eyes from fatigue.

#### **Brightness Stabilization**

A sensor measured the backlight brightness stability and automatically compensates for brightness fluctuations caused by aging for a consistently stable display during the usage time.



#### Dynamic Sync Mode

Whenever a scanning is done after checking up, a lot of heavy information is created which is hard to get all information at once clearly.

Since the LG clinical review monitor supports low input lag and quick response time, it allows the monitor to receive a signal quickly and display a clear image with no distortion for precise decoding of information for efficient clinical review.



**Quick Response Time** 

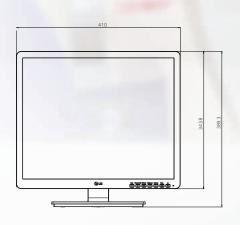
Conventional

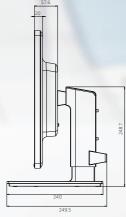
\*Dynamic Sync Mode is only available to 60Hz input source.

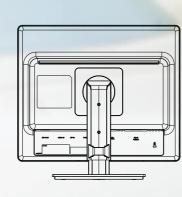
## 1.3MP CLINICAL REVIEW MONITOR

A Display compliant with DICOM Part 14 for Clinical Review Applications

Easily multi-task while clinical reviewing from different clinical review applications such as department of radiology and exchanges and study information!



























Calibration Ready







### **Antimicrobial Properties\*** Built In the Plastic Housing\*\*

The antimicrobial properties are applied to the housing of this medical monitor. This medical monitor complied with the ISO22196 standard, which is the measurement of Antimicrobial properties are built in to inhibit the growth of bacteria that may affect the housing of this product.

\*The antimicrobial properties do not protect users or others against bacteria, viruses, germs, or other disease organisms.

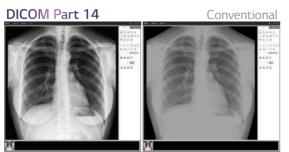
\*\*External plastic housing except the front LCD panel



#### **DICOM Part 14**

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DICOM Part 14, published by the National Electrical Manufacturers Association (NEMA) and the American College of Radiology (ACR), provides strict guidelines for how grayscale display function calibration and quality assurance tests should be performed on displays used in medical imaging applications.



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

#### Eye-comfort features

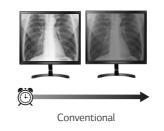
Flicker Safe reduces on-screen flickers, which helps minimize eye strain and eye fatigue. By combining Flicker Safe with the proven picture quality of IPS technology, users can comfortably work throughout the day.

Also, Reader Mode provides optimal conditions for clinical use. LG's Reader Mode technology reduces blue light, protecting doctors' eyes from fatigue.

#### **Brightness Stabilization**

A sensor measured the backlight brightness stability and automatically compensates for brightness fluctuations caused by aging for a consistently stable display during the usage time.

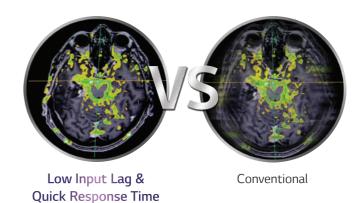




#### Dynamic Sync Mode

Whenever a scanning is done after checking up, a lot of heavy information is created which is hard to get all information at once clearly.

Since the LG clinical review monitor supports low input lag and quick response time, it allows the monitor to receive a signal quickly and display a clear image with no distortion for precise decoding of information for efficient clinical review.

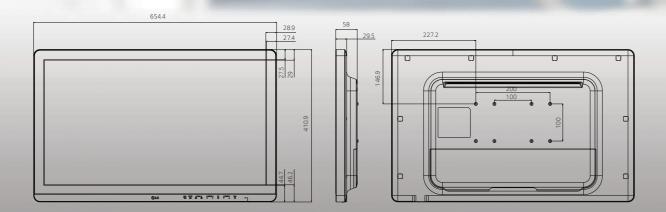


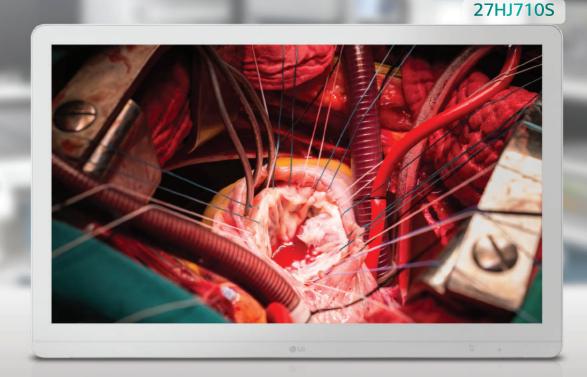
\*Dynamic Sync Mode is only available to 60Hz input source.

## **8MP SURGICAL MONITOR**

#### A Display Enhanced Deep Red Color Expression

The superior detailed picture quality of the LG surgical monitor is designed for a multitude of applications in the operating room. With its 27-inch IPS 8MP display, the LG surgical monitor improves work efficiency by providing detailed images and multiple imaging applications.



















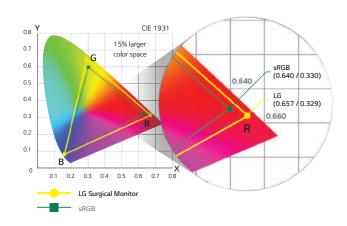






#### IPS & 115% of sRGB Enhancing Deep Red

The 8MP IPS display is a significant factor that enables surgeons and operating room staff to get a detailed picture of previously hard-to-see regions and display multiple imaging applications. Most importantly, the 8MP IPS display provides even more accurate color reproduction with sRGB 115% enabling the LG surgical monitor to enhance the deep red color spectrum for color expression.



#### \*8MP(Mega Pixel): 4K, 3840x2160

#### **DICOM Part 14 & Brightness Stabilization**

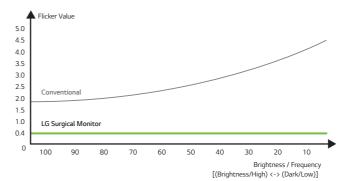
With various features to stabilize and adjust the brightness to meet viewing standards, the LG surgical monitor carefully measures and sets every grayscale tone to create a monitor compliant with DICOM Part 14 to ensure visual accuracy and consistency. Furthermore, LG surgical monitors include a sensor that measures the backlight brightness stability and automatically compensates for brightness fluctuations over time for a consistently stable display.

DICOM Part 14, published by the National Electrical Manufacturers Association (NEMA) and the American College of Radiology (ACR), provides strict guidelines for performing grayscale display calibration and quality assurance tests on displays used in medical imaging applications.

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

#### Flicker Safe

Flicker Safe reduces on-screen flickers, which helps minimize eye strain and eye fatigue. By combining Flicker Safe with the proven picture quality of IPS technology, users can comfortably work throughout the day.



<sup>\*</sup>This result based on internal LGE lab tests.

#### **Dustproof & Waterproof**

LG's surgical monitor is highly durable and scratch-resistant to protect the display during a surgical procedure. The front screen of the LG surgical monitor has an IP35 protection level and the back has an IP32 level, securing it against water or fluids that may contact it during an operation. In addition to the waterproofing safeguards, its flat surface allows for easy cleaning of the 8MP panel and control buttons.







#### Anti-Reflection & Optical Bonding Glass

The LG surgical monitor with optical bonding glass significantly reduces internal reflection between the outer glass and the LCD to enhance accuracy. The improved anti-reflection ability enables a brighter and sharper display for the highest image quality.