



# LG Clinical Review Monitor Tech Highlights

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19-inch 1.3MP Clinical Review Monitor | 19HK312C

# LG Clinical Review Monitor

## Tech Highlights

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## Have Flawless Confidence in the Precise LG Clinical Review Monitor

The main purpose of clinical review monitors is cross-checking and analyzing. Compared to other equipment, different decoders can result from the same test depending on the monitor's image quality, color expression, and contrast. This could lead to faulty reviews or treatment, so a clinical review monitor needs to provide high-quality images comparable to a high-end monitor.

For over 35 years, LG has been the leader in the global display market, introducing a variety of high-resolution diagnostic monitors enhanced with innovative technology.

LG Clinical Review Monitor delivers outstanding 'Accuracy' by maintaining high-quality images and resolution. In addition, it enhances 'Work Efficiency' through various review functions and improves 'User Convenience' considering all situations of medical professionals. This allows for precise clinical review.



19HK312C



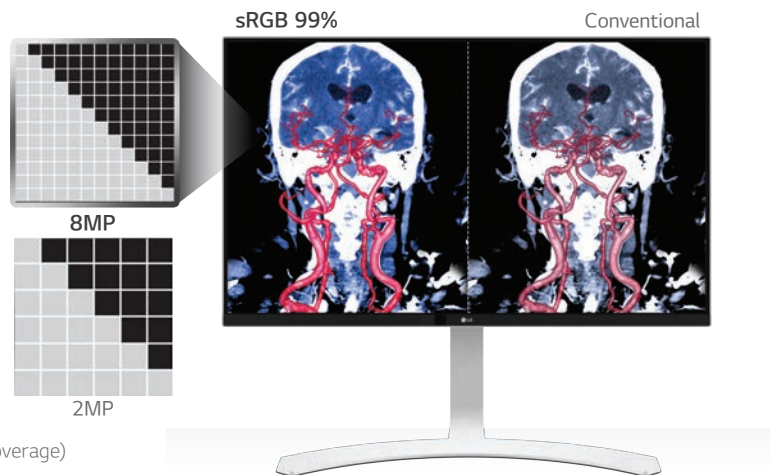


# Accuracy

## Fine Detail & Accurate Color Reproduction

8MP | sRGB 99%

The 8MP resolution monitor displays 8 megapixels of information (3840x2160), which is four times higher than general 2MP monitors. This allows you to display more types of medical images like CT and MRI with more detail and sharpness. LG Clinical Review Monitor also has 99% sRGB color gamut for outstanding picture quality that guarantees vivid color expression without any color shift for more precise clinical review.

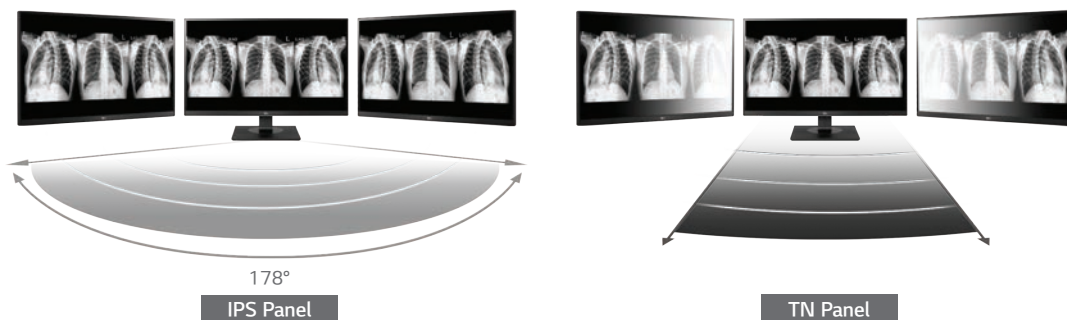


\*27HJ713C, 27HJ712C : 8MP (4K, 3840 x 2160) / sRGB over 99%(Coverage)  
19HK312C : 1.3MP (1280 x 1024) / NTSC 72%(Coverage)

## Wide Viewing Angle

IPS Panel

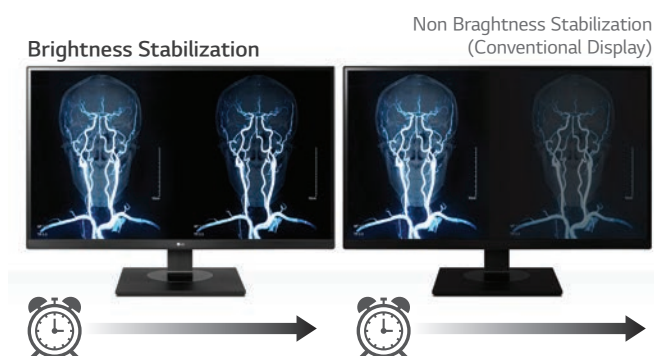
Because LG Clinical Review Monitor is based on IPS, which has a wide 178-degree viewing angle, patients and doctors can simultaneously view accurately reproduced images with minimal color distortion. This helps healthcare professionals reach a clinical review more precisely.



## Consistently Stable Medical Images

Brightness Stabilization

A sensor measures the backlight brightness stability and automatically compensates for brightness fluctuations caused by aging for a consistently stable display. Medical images can be viewed at a constant brightness without significantly affecting the life of the product, thereby increasing the accuracy of the clinical review.

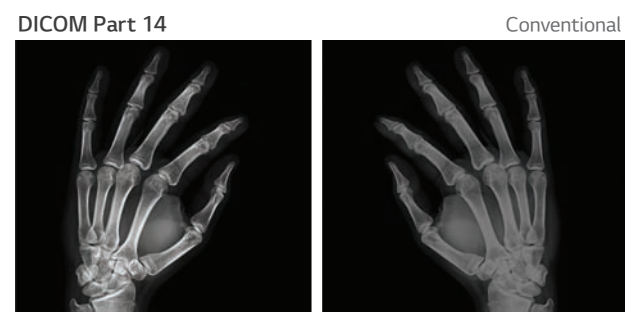


## Compliance with Medical Standards

DICOM\* Part 14

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

\*DICOM : Digital Imaging and Communications in Medicine.



# Work Efficiency

## See and Manage More Data Easily

### PBP | Dual Controller

The PBP and dual controller features allow healthcare professionals to split the screen to display the information and images needed. For example, Electronic Medical Records and other imaging modalities can be seen all at the same time on one screen. Being able to manage multiple devices connected to one screen, keyboard, and mouse also helps make the review process simpler and easier.

With the 2PBP and dual controller features, multitasking with multiple modality connections on a single monitor allows you to work more efficiently.

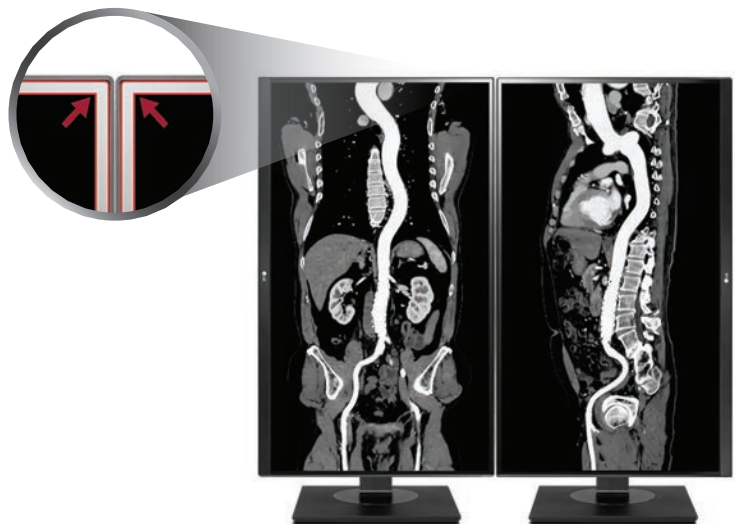


\*Only for 27HJ713C, 27HJ712C

## Seamless Multi-monitor Setup

### 3-Side Virtually Borderless Design

It is very common to use a multiple monitor setup in most medical facilities, due to the need to see various information. When setting up multiple monitors, thicker bezels take up too much space between monitors, which can be distracting to healthcare professionals. You can compare before and after images, or normal and abnormal images on each monitor — things can be explained simply and clearly to patients without the hassle of opening and turning off the image. The 3-Side Virtually Borderless Design of 27HJ712C and 27HJ713C alleviates this and helps create seamless reviews and a more productive workstation.

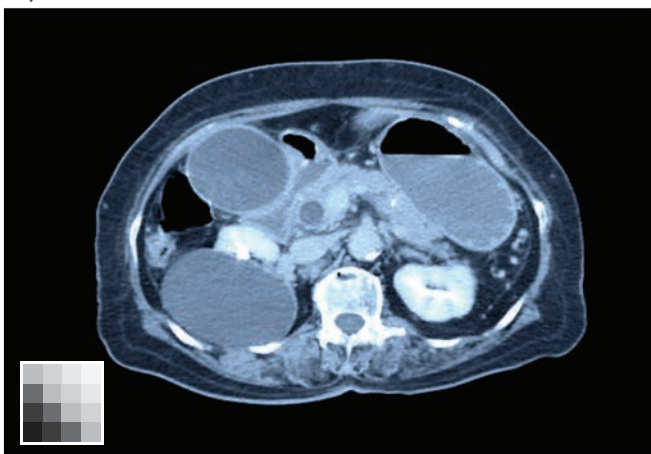


## Make Medical Image Clearer

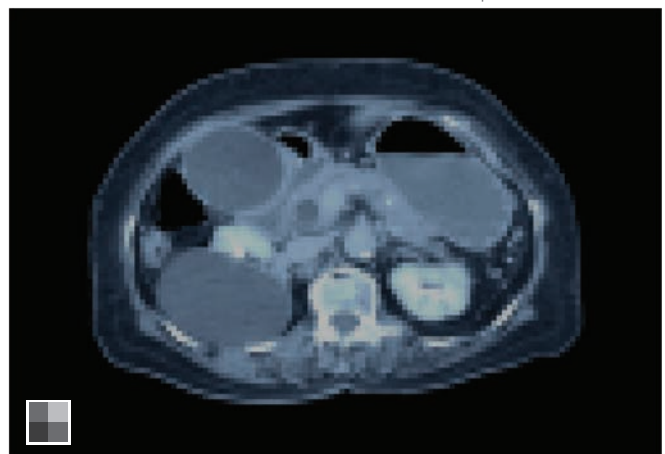
### Super Resolution+

Having clear images in all medical imaging modalities is essential for making the right decision. However, sometimes the quality of original medical images is not good enough to detect and extract essential information. Super Resolution+ is a function which sharpens details and improves image quality. This eliminates the struggle to review low-resolution medical images, upscaling image quality from the input device and allowing you to perform a diagnosis more efficiently.

Super Resolution+ On



Super Resolution+ Off



# User Convenience

## Reduced Eye Fatigue

Flicker Safe | Reader Mode

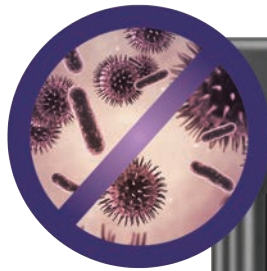
Eyes fatigue is a common problem among medical staff. Flicker Safe reduces the onscreen flicker level to almost zero, which helps minimize eye strain and visual fatigue. By combining Flicker Safe with the proven picture quality of IPS technology, users can comfortably work throughout the day. Reader Mode reduces blue light emissions that can be harmful to the eyes. It provides optimal conditions for clinical use so doctors can comfortably view the clinical review monitor even for long periods of time.

## Better Environmental Hygiene

Anti-Microbial Properties\*

Built in the Plastic Housing\*\*

Infectious diseases can be easily spread by touching a surface contaminated with disease. To mitigate this risk, the housing of the 19HK312C monitor has been fitted with anti-microbial properties. The built in plastic housing inhibits the growth of bacteria on the product and is compliant with ISO 2219 standard.



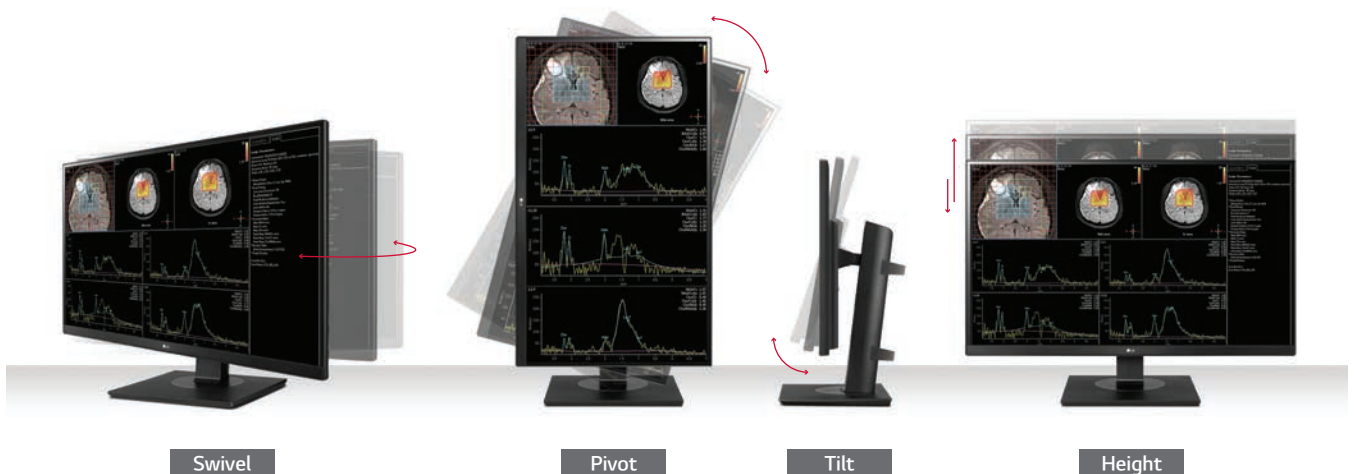
\*The antimicrobial properties do not protect users or others against bacteria, viruses, germs, or other disease organisms.

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

## User-oriented Design

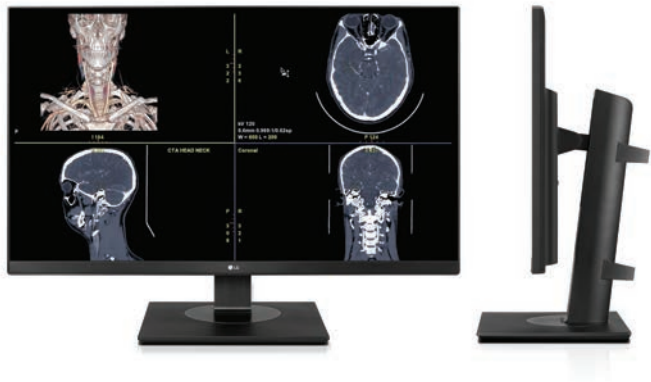
Ergonomic Stand

According to a study conducted by The MarkTech Group, 87% of radiologists experience physical discomfort caused by spending long periods of time at their workstation. In order to reduce discomfort and the risk of RSI (Repetitive Strain Injuries), it's important that monitors are created with an ergonomic design and can be customized to improve working conditions. The LG Clinical Review Monitor's ergonomic stand allows you to easily control the tilt, swivel, and height for a more comfortable display.








\*27HJ713C : Pivot / Tilt / Swivel / Height Adjustment  
27HJ712C & 19HK312C : Pivot / Tilt / Height Adjustment

# Product Brief



## 27-inch 8MP Clinical Review Monitor






| 27HJ713C |

-  27-inch 8MP (3840x2160) IPS Display
-  2PBP / Dual Controller
-  sRGB over 99% (Coverage), 350cd/m<sup>2</sup> (Typ.)
-  Brightness Stabilization
-  Ergonomic Design



## 27-inch 8MP Clinical Review Monitor






| 27HJ712C |

-  27-inch 8MP (3840x2160) IPS Display
-  2PBP / Dual Controller
-  sRGB over 99% (Coverage), 350cd/m<sup>2</sup> (Typ.)
-  Brightness Stabilization
-  Reader Mode / Flicker Safe



## 19-inch 1.3MP Clinical Review Monitor

| 19HK312C |

-  19-inch 1.3MP (1280x1024) IPS Display
-  Anti-Microbial Properties Built in the Plastic Housing
-  NTSC 72% (Coverage), 330cd/m<sup>2</sup> (Typ.)
-  Brightness Stabilization
-  Reader Mode / Flicker Safe



# Feature Matrix




## LG Clinical Review Monitors

Resolution		8MP (3840x2160)		1.3MP (1280x1024)
Inch (Aspect Ratio)		27-inch (16:9)	27-inch (16:9)	19-inch (4:5)
Model		27HJ713C	27HJ712C	19HK312C
Accuracy	Resolution	8MP (3840x2160)	8MP (3840x2160)	1.3MP (1280x1024)
	Color Gamut (Typ.)	sRGB over 99% (Coverage)	sRGB over 99% (Coverage)	NTSC 72% (Coverage)
	IPS Panel	✓	✓	✓
	Brightness Stabilization	✓	✓	✓
	DICOM Part 14	✓	✓	✓
Work Efficiency	PBP	✓ (2PBP)	✓ (2PBP)	
	Dual Controller	✓	✓	✓
	Borderless Design	✓ (3-Side Virtually Borderless Design)	✓ (3-Side Virtually Borderless Design)	Normal
	Super Resolution+	✓	✓	✓
User Convenience	Flicker Safe / Reader Mode	✓	✓	✓
	Anti-Microbial Properties Built in the Plastic Housing			✓
	Ergonomic Stand	✓ (Tilt / Swivel / Height / Pivot)	✓ (Tilt / Height / Pivot)	✓ (Tilt / Height / Pivot)



# Specification

## LG Clinical Review Monitors

Resolution		8MP (3840x2160)		1.3MP (1280x1024)
Inch (Aspect Ratio)		27-inch (16:9)	27-inch (16:9)	19-inch (4:5)
Model		27HJ713C	27HJ712C	19HK312C
				
Panel	Panel Type	IPS	IPS	IPS
	Surface Treatment	Anti-glare, 3H	Anti-glare, 3H	Anti-glare, 3H
	Color Gamut (Typ.)	sRGB over 99% (Coverage)	sRGB over 99% (Coverage)	NTSC 72% (Coverage)
	Viewing Angles (CR≥10)	178° (Right/Left), 178° (Up/Down)	178° (Right/Left), 178° (Up/Down)	178° (Right/Left), 178° (Up/Down)
	Brightness (Typ.)	350 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>	330 cd/m <sup>2</sup>
	Contrast Ratio (Typ.)	1000:1	1000:1	900:1
	Response Time (GTG*)	14ms (Off- setting), 5ms (Faster- setting)	14ms (Off- setting), 5ms (Faster- setting)	14ms (Off- setting), 5ms (Faster- setting)
Feature	DICOM Compliant	Yes	Yes	Yes
	HW Calibration	Yes (True Color Pro)	Yes (True Color Pro)	Yes (True Color Pro)
Video Signals	Input Terminals	HDMI x2, DisplayPort x1	HDMI x2, DisplayPort x1	D-Sub x1, DVI x1, HDMI x1, DisplayPort x1
Connectivity	USB	1 upstream, 2 downstream	1 upstream, 2 downstream	1 upstream, 2 downstream
Power	AC Input	100-240Vac, 50/60Hz	100-240Vac, 50/60Hz	100-240Vac, 50/60Hz
	Power Consumption (Max.)	65W	65W	50W
	Power Consumption (DC Off)	Less than 0.3W	Less than 0.3W	Less than 0.5W
Certifications & Standards		IEC(IEC 60601-1 / IEC 60601-1-2), EN(EN 60601-1 / EN 60601-1-2), IEC(IEC 60950-1 / IEC 55032, 55024), EN (EN 60950-1 / EN 55032, 55024) cUL (ANSI/AAMI ES 60601-1, CSA CAN/CSA-C22.2 NO. 60601-1) FCC (FCC part 15 Class A), FDA (Registration (Class I)), RoHS, REACH, WEEE	IEC(IEC 60601-1 / IEC 60601-1-2), EN(EN 60601-1 / EN 60601-1-2), IEC(IEC 60950-1 / IEC 55032, 55024), EN (EN 60950-1 / EN 55032, 55024) cUL (ANSI/AAMI ES 60601-1, CSA CAN/CSA-C22.2NO. 60601-1) FCC (FCC part 15 Class A), FDA (Registration (Class I)), RoHS, REACH, WEEE	IEC(IEC 60601-1 / IEC 60601-1-2), EN(EN 60601-1 / EN 60601-1-2), IEC(IEC 60950-1 / IEC 55032, 55024), EN (EN 60950-1 / EN 55032, 55024) cUL (ANSI/AAMI ES 60601-1, CSA CAN/CSA-C22.2NO. 60601-1) FCC (FCC part 15 Class A), FDA (Registration (Class I)), RoHS, REACH, WEEE
User Convenience	PBP / Dual Controller	Yes (2PBP) / Yes	PBP (2PBP) / Yes	No / Yes
	Reader Mode / Flicker Safe	Yes / Yes	Yes / Yes	Yes / Yes
Physical Specifications	Weight (without Stand)	4.7 kg (10.4 lb)	4.7 kg (10.4 lb)	2.9 kg (6.4 lb)
	Weight (with Stand)	7.5 kg (16.5 lb)	6.2 kg (13.7 lb)	5.1 kg (11.2 lb)
	Borderless Design	3-Side Virtually Borderless Design	3-Side Virtually Borderless Design	Normal
	Adjustable Stand	Tilt : -5~25°, Swivel : ±45°, Height Range : 150mm, Pivot : ±90°	Tilt : -3~20°, Height Range : 110mm, Pivot : +90°	Tilt : -5~35°, Swivel : ±177.5°, Height Range : 130mm, Pivot : ±90°

\*GTG : Gray to gray response time



**LG Electronics Inc.**

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