

LG Diagnostic Monitor Tech Highlights

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31.5-inch 8MP Diagnostic Monitor | 32HL512D
21.3-inch 3MP Diagnostic Monitor | 21HK512D

LG | Business Solutions

LG Diagnostic Monitor Tech Highlights

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Enhance Your Diagnostic Confidence with LG Diagnostic Monitor

Various medical images are used for diagnosis, such as mammography, CR, CT, MRI, endoscopy, PET, and 3D-CT. Unclear images make diagnosis difficult and time consuming. Accurate diagnoses require accurate and clear images from high quality monitors.

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.

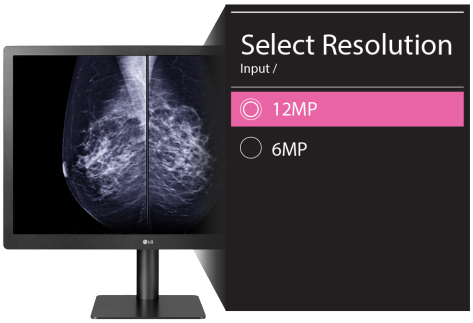
The LG Diagnostic Monitor provides superior 'Accuracy' by maintaining high quality image and resolution, fit for medical imaging. By offering optimal compatibility with various modalities, the LG Diagnostic Monitor enhances 'Work Efficiency' and ' User Convenience' to help healthcare professionals easily control conditions for diagnosis.

Accuracy

Compatible with Every Modality

Multi-resolution Mode

Diagnostic monitors often need to be connected to various modalities, all with differing resolutions. To view medical images from multiple modalities with high accuracy on one monitor, the monitor must be able to adjust to the optimal resolution for each imaging modality. Therefore, the resolution of the 31HN713D can be set to 6MP and 12MP and the 32HL512D can be set to 4MP, 6MP, and 8MP for greater compatibility across multiple modalities.

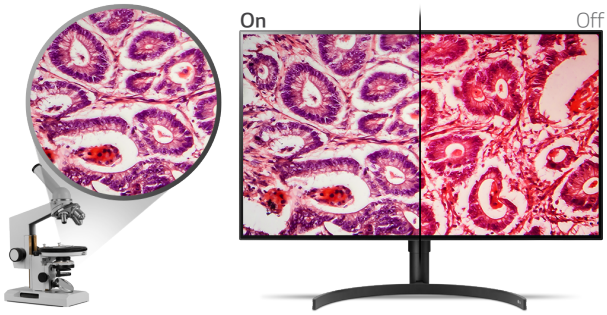


*31HN713D supports 6MP and 12MP resolution
32HL512D supports 4MP, 6MP, and 8MP resolution

True-to-Life Color Reproduction

Pathology Mode

For an accurate diagnosis, the color of blood and tissue cells under a microscope should be exactly the same on the monitor display. Inaccurate colors can lead to inaccurate diagnoses, so high color reproducibility is essential for diagnostic monitors. In clinical pathology mode, the 31HN713D and 32HL512D reproduce the same level of detail and accurate color as seen directly under a microscope, to help healthcare professionals make more accurate diagnoses.



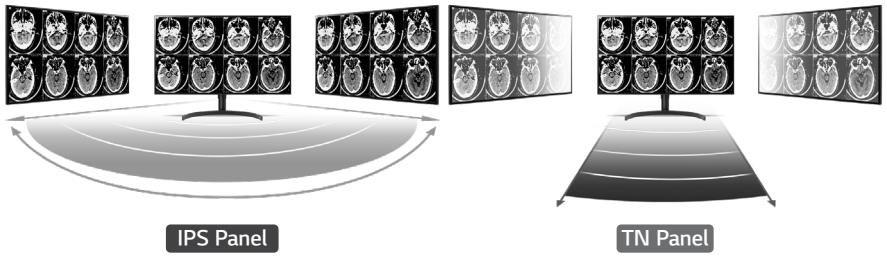
Fine Detail & Wide Viewing Angle

1080 cd/m² | IPS Panel

The brightness of a monitor is essential for distinguishing details in medical images. With high brightness levels of 1080cd/m² (31HN713D) and 1000cd/m² (21HK512D), LG Diagnostics Monitors enable medical professionals to easily distinguish even fine details and abnormalities, for a more accurate diagnosis with CT and angiography images. Also, a multiple monitor setup has become the standard for the diagnostic process. With IPS panels, the 31HN713D, 32HL512D, and 21HK512D offer a wide viewing angle to ensure images can be viewed without distortion from every angle. This helps healthcare professionals reach a more accurate diagnosis.



*31HN713D : 1080 cd/m² (Typ.)
21HK512D : 1000 cd/m² (Typ.)
32HL512D : 450 cd/m² (Typ.)



Consistency in Medical Images

Brightness Stabilization | HW Calibration | Front Sensor

To reduce room for error during the diagnostic process, it is essential that the quality of medical images displayed on the monitor are consistent. LG Diagnostic Monitors feature a backlight brightness stability sensor which allows the monitor to automatically compensate for fluctuations in brightness caused by aging. The monitors also feature HW Calibration, which helps to stabilize image quality. This stabilization ultimately increases productivity and efficiency, reducing the need for additional manpower and cutting operating costs. The 31HN713D and 21HK512D models also feature a front sensor, which allows for self-calibration without the need for additional measuring equipment.

*32HL512D : Brightness Stabilization / HW Calibration, 31HN713D & 21HK512D : Brightness Stabilization / HW Calibration / Front Sensor

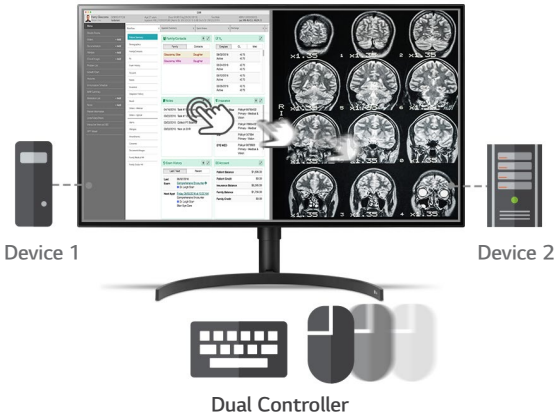
Work Efficiency

See More Signals Easily

2PBP | Dual Controller

For a more accurate and faster diagnosis, patient information from multiple sources is needed to be examined on a single screen. The PBP and dual controller features allow healthcare professionals to split the screen to display the information and images needed. For example a patient's profile, before and after comparison clinical images, or images from other modalities, can be seen all at the same time on one screen. And, managing multiple devices connected to one screen, keyboard, and mouse helps make the review process simplified and easy. With the 2PBP and dual controller features, enjoy multitasking with a multiple modality connection to a single monitor that allows you to work more efficiently.

*Only for 31HN713D and 32HL512D



Seamless Multi Monitor Setup

4-Side Virtually Borderless Design

It is very common to use multiple monitor setup in most medical facilities, due to the need for various information required for a more accurate diagnosis. When setting up multiple monitors, thicker bezels take up too much space between the connected monitors, which can be quite distracting to healthcare professionals. The 32HL512D alleviates this with a narrow bezel, for a seamless view and a workstation for more productivity.



Enhance Efficiency with Focused View

Focus View Mode

To increase work efficiency and ensure an accurate diagnosis, it is essential that medical professionals can clearly focus on the important part of an image. Therefore, the LG Diagnostics Monitor includes the Focus View Mode which allows you to review a specific part of the medical image more closely. This allows professionals to focus fully on the important part of the image for a more accurate and efficient diagnosis.

*Only for 31HN713D



Ultimate Expandability

USB 2.0 | DisplayPort | HDMI

Every diagnostic monitor needs multiple ports and connections. The LG Diagnostic Monitor provides the convenient support for various ports such as USB Upstream, USB 2.0, DisplayPort, and HDMI for multiple medical modality connection for a single display.



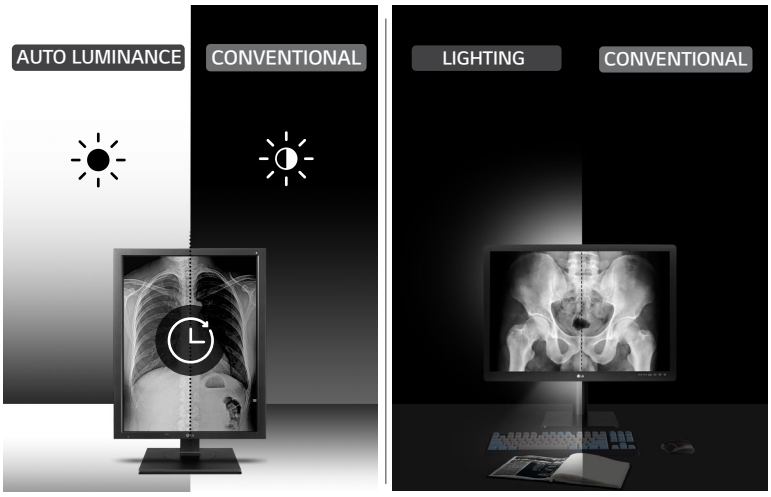
User Convenience

Optimal Reading Condition

Auto Luminance Sensor | Lighting (Down / Wall Light)

In dark clinical review rooms, if the screen and the ambient light are quite different your vision will readjust between the different lighting conditions each time you look away from the screen. That's why it can be difficult for your eyes to focus for optimal vision and you can easily suffer from eye fatigue in dark clinical review rooms. LG Diagnostic Monitors feature an Auto Luminance Sensor which automatically adjusts screen brightness according to the ambient lighting conditions. As a result, eye strain is reduced by ensuring screen brightness is always set to the optimal level.

The best way to achieve optimal ambiance is with dim lights positioned behind the monitor. Therefore, LG Diagnostic Monitors feature down and wall lighting modes, which reduce the contrast between the monitor and ambient lighting conditions. This allows you to read printed documents or view the keyboard and other tools more easily so that you can work in greater comfort.



Hassle-free Savings and Enhanced Security

Presence Sensor

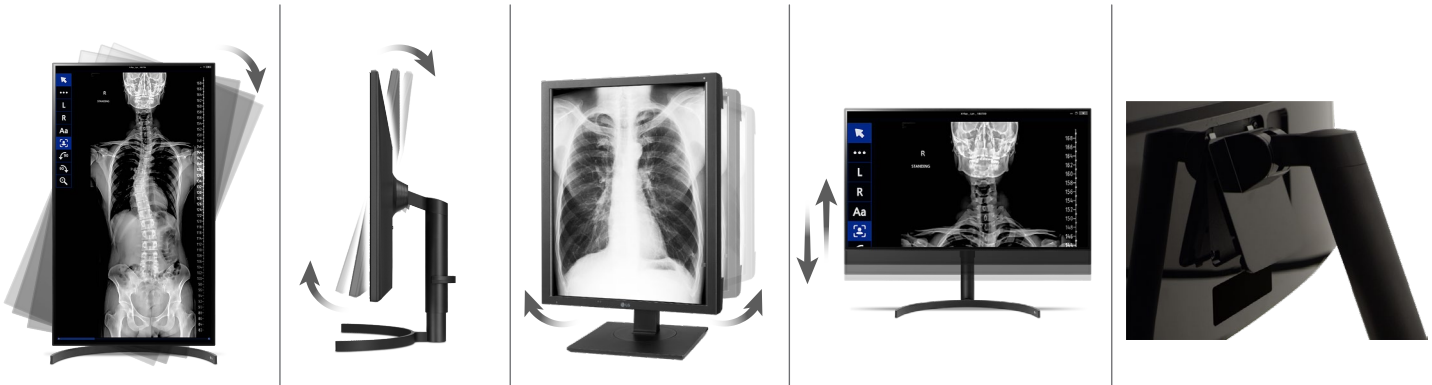
The LG Diagnostic Monitor features a presence sensor which saves power during inactive periods and removes the hassle of manually turning the monitor on and off by automatically turning off the display when no motion is detected. This reduces power consumption and ensures that patient information and other sensitive data is not exposed, improving security. Additionally, eliminating the hassle of manually turning the display on and off for creates a more efficient workflow and greater user convenience.

*Only for 31HN713D, 21HK512D

Easy Installation and Improved Comfort

Ergonomic Stand | One-click Stand

Medical staff often have to stand for long periods of time, quickly leading to discomfort and physical fatigue. To reduce discomfort, it is important that monitors are ergonomically designed to allow user customization and improve working conditions. The LG Diagnostic Monitor has an ergonomic stand that allows you to easily adjust the tilt, swivel, and height for a more comfortable display. What's more, 31HN713D's light weight design and One-click Stand make it possible to install the monitor easily and safely by yourself.



*31HN713D : Tilt / Swivel / Height Adjustment / One-clik Stand, 32HL512D : Pivot / Tilt / Height Adjustment / One-clik Stand
21HK512D : Pivot / Tilt / Swivel / Height Adjustment

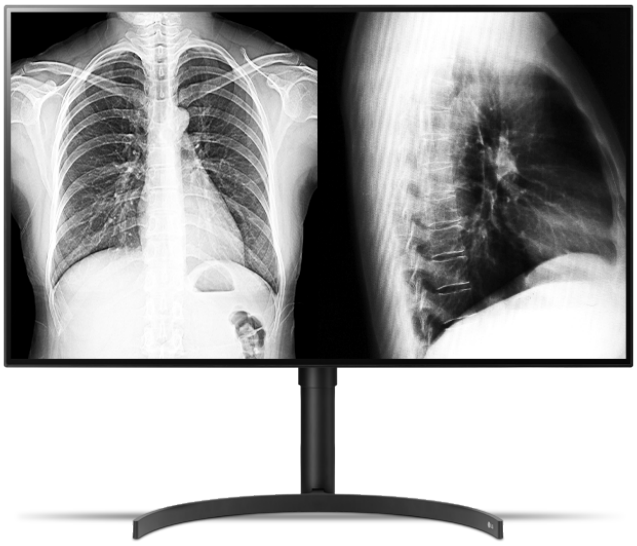
Product Brief



31-inch 12MP Diagnostic Monitor

| 31HN713D |

- 31-inch 12MP (4200x2800) IPS Display
- Multi-resolution Mode (12/6MP)
- 1080 cd/m² (Typ.)
- Pathology Mode, Focus View Mode
- Lighting (Down / Wall Lighting)



31.5-inch 8MP Diagnostic Monitor

| 32HL512D |

- 31.5-inch 8MP (3840x2160) IPS Display
- Multi-resolution Mode (8/6/4MP)
- 2PBP, Dual Controller
- Pathology Mode
- Brightness Stabilization



21.3-inch 3MP Diagnostic Monitor

| 21HK512D |

- 21.3-inch 3MP (2048x1536) IPS Display
- 1000 cd/m² (Typ.)
- DICOM Compliant
- Brightness Stabilization
- Auto Luminance Sensor

Feature Matrix

LG Diagnostic Monitors

Resolution		12MP (4200x2800)	8MP (3840 x 2160)	3MP (2048x 1536)
Inch (Aspect Ratio)		31-inch (3:2)	31.5-inch (16:9)	21.3-inch (4:3)
Model		31HN713D	32HL512D	21HK512D
Accuracy	Multi-resolution Mode	✓ (12/6 MP)	✓ (8/6/4 MP)	
	Pathology Mode	✓	✓	
	Brightness (Typ.)	1080 cd/m² (Uniformity On)	450 cd/m²	1000 cd/m²
	IPS Panel	✓	✓	✓
	HDR 10		✓	
	Brightness Stabilization	✓	✓	✓
	HW Calibration	✓	✓	✓
	Front Sensor	✓		✓
Work Efficiency	2PBP, Dual Controller	✓	✓	
	Borderless Design		✓ (4-Side Virtually Borderless Design)	
	Focus View Mode	✓		
	Connectivity	DisplayPort, Headphone out, USB 3.0 (Upstream, Downstream)	DisplayPort, HDMI, USB 2.0 (Upstream, Downstream)	DisplayPort, DVI, USB 2.0 (Upstream, Downstream)
User Convenience	Auto Luminance Sensor	✓		✓
	Lighting (Down / Wall Light)	✓		
	Presence Sensor	✓		✓
	Ergonomic Stand	✓ (Tilt / Swivel / Height Adjustment)	✓ (Pivot / Tilt / Height Adjustment)	✓ (Pivot / Tilt / Swivel / Height Adjustment)
	One-click Stand	✓	✓	

Specification

LG Diagnostic Monitors

Resolution		12MP (4200 x 2800)	8MP (3840 x 2160)	3MP (2048 x 1536)
Inch (Aspect Ratio)		31-inch (3:2)	31.5-inch (16:9)	21.3-inch (4:3)
Model		31HN713D	32HL512D	21HK512D
				
Panel	Panel Type	IPS	IPS	IPS
	Surface Treatment	Anti-glare, 3H	Anti-glare, 3H	Anti-glare
	Color Gamut (Typ.)	sRGB over 97% (Coverage)	DCI-P3 98% (CIE1976)	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.)	1080 cd/m^2	450 cd/m^2	1000 cd/m^2
	Contrast Ratio (Typ.)	1500:1	1300:1	1400:1
	Response Time	GTG* 14ms (Off-setting), GTG 5ms (Faster-setting)	GTG* 14ms (Off-setting), GTG 5ms (Faster-setting)	On/Off 30ms (Typ.)
Feature	DICOM Compliant	Yes	Yes	Yes
	HW Calibration	Yes (PerfectLum) with Internal Front Sensor	Yes (PerfectLum)	Yes (PerfectLum) with Internal Front Sensor
	HDR	No	HDR 10, HDR Effect	No
	Display Mode	Multi-resolution Mode (12/6MP), Pathology Mode, Focus View Mode	Multi-resolution Mode (8/6/4MP), Pathology Mode	No
	Super Resolution+	Yes	Yes	No
Video Signals	Input Terminals	DisplayPort x2	HDMI x1, DisplayPort x2	DVI x1, DisplayPort x1
Connectivity	USB	1 Upstream, 3 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.)	180W	65W	85W
	Power Consumption (DC Off)	Less than 0.3W	Less than 0.3W	Less than 6.5W
Certifications & Standards		IEC(IEC 60601-1 / IEC 60601-1-2), EN(EN 60601-1 / EN 60601-1-2), IEC(IEC 60950-1 / CISPR32 / 35), EN (EN 60950-1 / EN 55032, 55035), cUL (ANSI/AAMI ES 60601-1, CSA CAN/CSA-C22.2 NO. 60601-1), FCC (FCC part 15 Class A), FDA (510(k) (Class II)), RoHS, REACH, WEEE	IEC / EN(EN 60601-1 / EN 60601-1-2), IEC / 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 (510(k) (Class II)), RoHS, REACH, WEEE	IEC / EN(EN 60601-1 / EN 60601-1-2), IEC / 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 (510(k) (Class II)), RoHS, REACH, WEEE
User Convenience	PBP	Yes (2PBP)	Yes (2PBP)	No
	Reader Mode / Flicker Safe	Yes (Text Mode) / Yes	Yes / Yes	No / No
	Lighting	Yes (Down / Wall)	No	No
	Presence Sensor	Yes	No	Yes
	Auto Luminance Sensor	Yes	No	Yes
Physical Specifications	Weight (with stand)	14.0 kg (30.9 lb)	7.0 kg (15.4 lb)	9.8 kg (21.6 lb)
	Borderless Design	Normal	4-Side Virtually Borderless Design	Normal
	Adjustable Stand	Swivel : ±15°, Tilt : -5~15° Height Range : 110mm	Pivot : ±90°, Tilt : -5~20° Height Range : 110mm	Pivot : ±90°, Swivel : ±45°, Tilt : -5~25° Height Range : 150mm

*GTG : Gray to gray response time



LG Electronics Inc.
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