

## LG Diagnostic Monitor Tech Highlights

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



## LG Diagnostic Monitor Tech Highlights

### CONTENTS

#### Accuracy

**Compatible with Every Modality** Multi-resolution Mode (8/6/4MP)

**True-to-Life Color Reproduction** Pathology Mode

Fine Detail & Wide Viewing Angle 1000 cd/m<sup>2</sup> | IPS Panel

**Consistency in Medical Images** Brightness Stabilization | HW Calibration | Front Sensor

#### Work Efficiency

See More Signals Easily 2PBP | Dual Controller

Seamless Multi Monitor Setup 4-Side Virtually Borderless Design

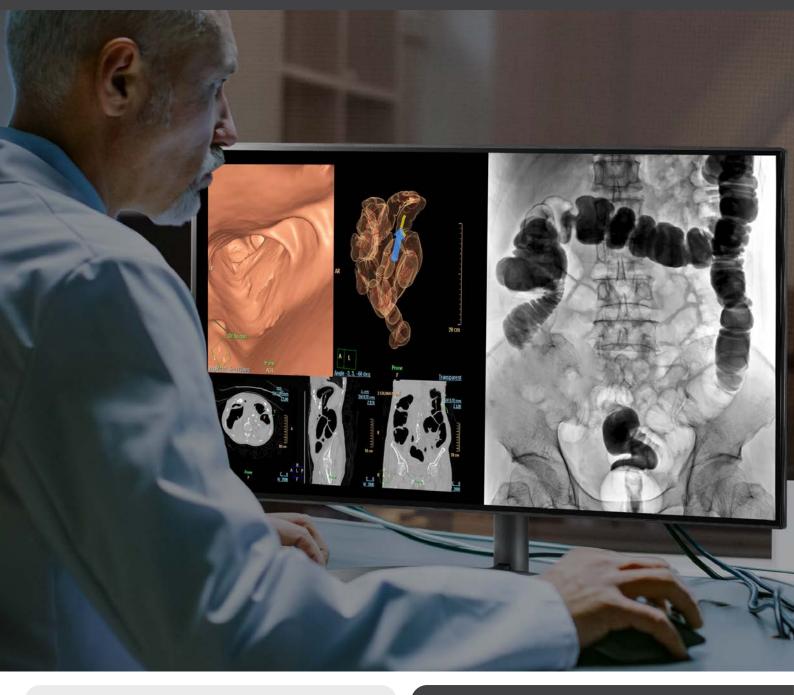
Ultimate Expandability USB 2.0 | DisplayPort | HDMI

#### **User Convenience**

Reduced Eye Fatigue Auto Luminance Sensor | Presence Sensor

Better Comfort for Diagnostic Review Ergonomic Stand

Product Brief Feature Matrix & Specification







21HK512D

# 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.

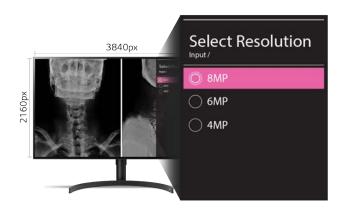
The LG Diagnostic Monitor provides superior 'Accuracy' by maintaining high quality image and resolution, fit for medical imaging. By offering optimal compatibility with various modalities, the LG Diagnostic Monitor enhances 'Work Efficiency' and 'User Convenience' to help healthcare professionals easily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

# Accuracy

### Compatible with Every Modality

Multi-resolution Mode (8/6/4MP)

Diagnostic monitors often need to be connected to various modalities, all with differing resolutions requirements. 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. The resolution on the 32HL512D can be changed from 8MP, 6MP, to 4MP for greater compatibility across multiple modalities and needs.



## Fine Detail & Wide Viewing Angle

1000 cd/m<sup>2</sup> | IPS Panel

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 the clinical pathology mode, the 32HL512D reproduces the same detail and accurate color under a microscope directly on the monitor, to help healthcare professionals make more accurate diagnoses.



The brightness of the monitor is essential for distinguishing details in medical images. The 21HK512D has a brightness of 1000 cd/m<sup>2</sup>, enabling healthcare professionals with the ability to easily distinguish even the finest details to detect anomalies, which can lead to accurate diagnoses with CT and angiography images. Also, a multiple monitor setup has become the standard for the diagnostic process. With IPS panels, the 32HL512D and 21HK512D offer a wide viewing angle to ensure same images from every angle. This helps healthcare professionals reach a diagnosis more accurately.



#### **Consistency in Medical Images**

Brightness Stabilization | HW Calibration | Front Sensor

To reduce room for error during the diagnosis process, the quality of the medical images displayed on the diagnostic monitors should be consistent. LG Diagnostic monitor features a sensor for the backlight brightness stability which automatically compensates the brightness fluctuations caused by aging. Thru the calibration software, the monitor features HW calibration which stabilizes the quality of the images. This stabilization ultimately increases productivity and efficiency, cutting down on additional operating cost or manpower. Also, 21HK512D has a sensor in front of the monitor which allows self-calibration without the need to use additional measuring equipment.

\*32HL512D : Brightness Stabilization / HW Calibration, 21HK512D : Brightness Stabilization / HW Calibration / Front Sensor

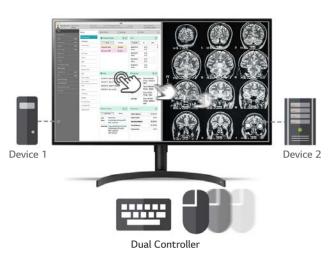
# Work Efficiency

### 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.



### 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.



### 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.



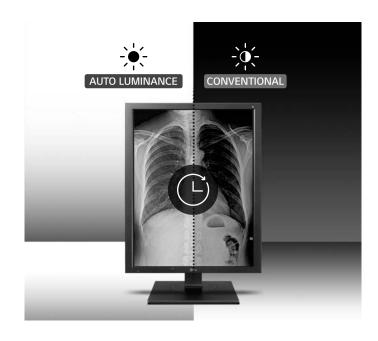
# User Convenience

### **Reduced Eye Fatigue**

Auto Luminance Sensor | Presence Sensor

In the dark clinical review rooms, the brightness level of your screen may not match with the ambient lighting level. If your screen doesn't match with the ambient lighting, it is difficult for your eye to focus which causes pupils to either dilate or contract, ultimately leading to eye fatigue. To reduce this issue, LG Diagnostic Monitors features an Auto Luminance Sensor that automatically adjusts screen brightness to the optimal ambient lighting level. In result, LG Diagnostic Monitors allows eye comfort thru providing the ideal screen brightness.

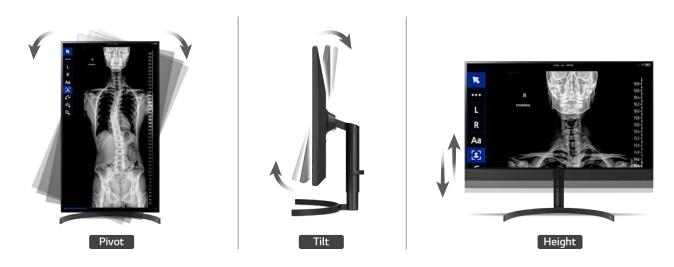
Also, LG Diagnostic Monitor has a presence sensor which turns off the display if movement is not detected. This saves power usage during the inactive periods and reduces the hassle of turning the monitors on and off.



#### Better Comfort for Diagnostic Review

#### Ergonomic Stand\*

Medical staff usually stand for long periods of time, which can quickly lead to physical fatigue. To help reduce this, it's important to have monitors that are customized to improve such working conditions with an ergonomic design. The LG Diagnostic Monitor has an ergonomic stand that allows you to easily control the tilt, swivel and height for a more comfortable display.



\*32HL512D : Pivot / Tilt / Height Adjustment, 21HK512D : Pivot / Tilt / Swivel / Height Adjustment

## **Product Brief**





### 21.3-inch 3MP Diagnostic Monitor



## Feature Matrix

### LG Diagnostic Monitors

Resolution Inch (Aspect Ratio)		8MP (3840 x 2160) 31.5-inch (16:9)	3MP (2048x 1536) 21.3-inch (4:3)
Model		32HL512D	21HK512D
Accuracy	Multi-resolution Mode (8/ 6/ 4MP)		
	Pathology Mode		
	Brightness (Typ.)	450 cd/m²	1000 cd/m²
	IPS Panel	$\checkmark$	$\bigcirc$
	HDR 10	$\bigcirc$	
	Brightness Stabilization		
	HW Calibration		
	Front Sensor		
Work Efficiency	2PBP   Dual Controller	$\bigcirc$	
	Borderless Design	(4-Side Virtually Borderless Design)	
	Connectivity	DisplayPort, HDMI, USB 2.0 (Upstream, Downstream)	DisplayPort, DVI USB 2.0 (Upstream, Downstream)
User Convenience	Auto Luminance Sensor	$\bigcirc$	
	Presence Sensor		
	Ergonomic Stand	(Pivot / Tilt / Height Adjustment)	(Pivot / Tilt / Swivel / Height Adjustment)

# Specification

### LG Diagnostic Monitors

Resolution		8MP (3840 x 2160)	3MP (2048 x 1536)
Inch (Aspect Ratio)		31.5-inch (16:9)	21.3-inch (4:3)
		32HL512D	21HK512D
	Model		
	Panel Type	IPS	IPS
	Surface Treatment	Anti-glare, 3H	Anti-glare
	Color Gamut (Typ.)	DCI-P3 98% (CIE1976)	NTSC 72% (Coverage)
Panel	Viewing Angles (CR≥10)	178° (Right/Left), 178° (Up/Down)	178° (Right/Left), 178° (Up/Down)
	Brightness (Typ.)	450 cd/m <sup>2</sup>	1000 cd/m <sup>2</sup>
	Contrast Ratio (Typ.)	1 300:1	1400:1
	Response Time	GTG* 14ms (Off- setting), GTG 5ms (Faster- setting)	On/Off 30ms (Typ.)
	DICOM Compliant	Yes	Yes
Feature	HW Calibration	Yes (PerfectLum)	Yes (PerfectLum) with Internal Front Sensor
readdre	HDR	HDR 10	No
	Display Mode	Multi-resolution Mode(8/6/4MP), Pathology Mode	No
Video Signals	Input Terminals	HDMI x1, DisplayPort x2	DVI x1, DisplayPort x1
Connectivity	USB	1 upstream, 2 downstream	1 upstream, 2 downstream
	AC Input	100-240Vac, 50-60Hz	100-240Vac, 50-60Hz
Power	Power Consumption (Max)	65W	85W
	Power Consumption (DC Off)	Less than 0.3W	Less than 6.5W
Certifications & Standards		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)	No
	Reader Mode / Flicker Safe	Yes / Yes	No / No
Physical Specifications	Weight (with stand)	7.0 kg (15.4 lb)	9.8 kg (21.6 lb)
	Borderless Design	4-Side Virtually Borderless Design	Normal
	Adjustable Stand	Tilt : -5~20°, Height Range : 110mm Pivot : ±90°	Tilt : -5~25°, Swivel : ±45° Height Range : 150mm, Pivot : ±90°

\*GTG : Gray to gray response time





LG Electronics Inc. http://www.lge.com/global/business

Copyright © 2020 LG Electronics. All Rights Reserved.