

DIVA

www.diva.com.tw

DIVA
Radiology & PACS
Medical Displays

- #ABOUT DIVA
- #COMPANY OVERVIEW
- #CORE VALUES
- #PRODUCTS & SERVICES

Overview

DIVA has over two decades of experience delivering high-quality, precision medical & industrial displays, meeting our worldwide customers' strict requirements.

2019
[AWARD]

DIVA won the "Supplier of the Year" from GE Healthcare during the Annual Supplier Summit in Waukesha, WI- May, 16, 2019



Core Values

- Quvality Watchdog
- Revision and Inventory Control Management
- Medical/Industrial LCD Designer & Manufacturer
- Engineering Service
- System Integrator

Products & Services

Monitors



Radiology displays Endo/Surgical displays Touch displays

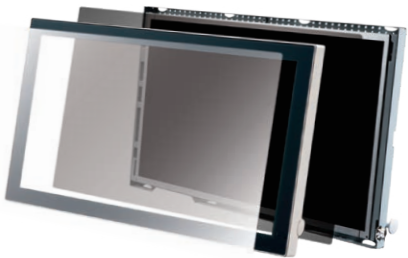
OEM/ODM Solutions

Monitor (Customized and NPI)

- *Appearances
- *Optical Bonding
- *Panel Enhancement
- *Mainboard
- *Others

AIO (All-in-One PC)

Others



Peripherals



Multi-Display Manager(MDM) SDVoE P2P Tx/Rx Extender Universal Auto Calibration Device (UACD)

Features

Features
Available

Features
Optional

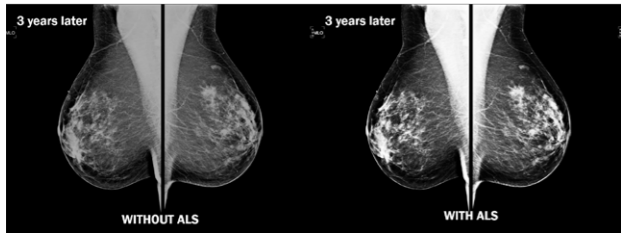
Symbols in subsequent display descriptions Available Optional

Image Quality



Features that offer fine details & precise color consistently for medical usage.

Auto Luminance Stabilizer



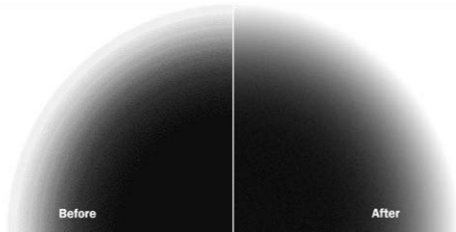
The Auto Luminance Stabilizer (ALS) is based on a built-in sensor and delivers a consistent viewing experience by maintaining the preferred luminance over display lifetime. Moreover, luminance levels are stabilized shortly after system startup.

Uniformity Compensation



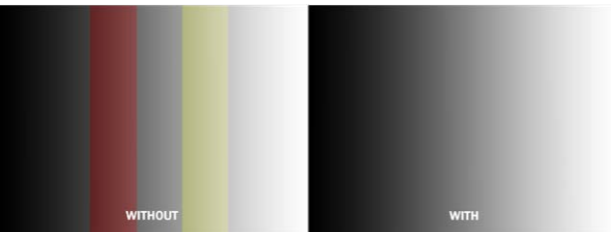
Digital Uniformity Compensation (DUC) significantly reduces differences in luminance distribution over the LCD panel. With deviations lowered to maximal 5%, thresholds defined by IEC62563-1 and DIN6868-157 are well met. Improve your diagnostic confidence through artifact-free visualization and enhancement of subtle findings.

High Bit LUT



Precise look-up tables (LUTs), powered by sophisticated algorithms, form the core of our image processing. They ensure smooth tonal transitions, accurate mid-tone reproduction and improved border delineation. Base your diagnose and evaluation on top-notch image quality

Color Tracking



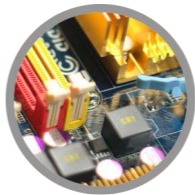
Certain display models undergo an individual factory calibration. During that process, all important display parameters are adjusted and recorded with sophisticated equipment to ensure very precise reproduction of gamma and white points according to the chosen OSD settings.

Auto Gamma



When viewing the grayscale color image, we have to make sure all the grayscale images meet the DICOM Part14. Through Auto Gamma function, the display can automatically execute the corresponding Gamma curve after detecting whether the input image is a grayscale image or a color image.

Reliable Operation



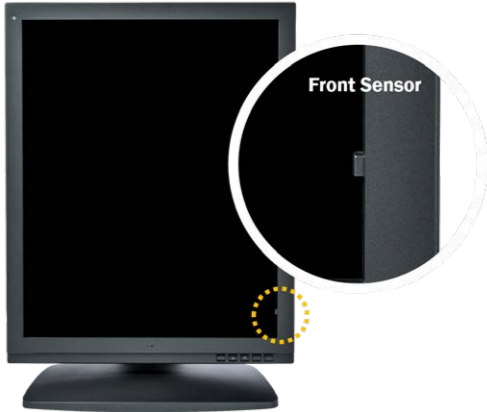
To ensure customer's operation to be uninterrupted and sustainable, defect-free, quality assured and long life cycle.

Self-Calibration



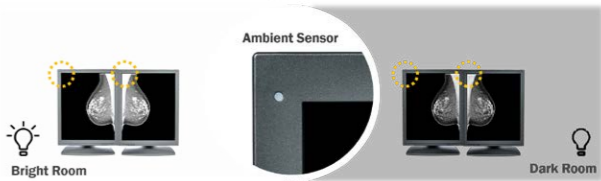
Streamline your workflow and assure high-quality diagnostic visualization through one touch calibration and reporting of luminance, color temperature, and gamma. The Self Calibration function is OSD driven and negates the need for connecting the display to a PC with accordant calibration software.

Front Sensor



An integrated front sensor can be used to measure the tonal response of the display. This allows accurate grayscale calibrations and validations in accordance with well known standards like DICOM Part 14 GSDF. The sensor also serves as reference for the Auto Luminance Stabilizer, resulting in a very stable and reliable luminance output.

Ambient Sensor



By means of an ambient sensor, the display luminance can be adjusted automatically to actual ambient light conditions. Improve your viewing experience, even under changeable room light situations, without extra effort.

Features

Features

Available

Features

Optional

Symbols in subsequent display descriptions Available Optional

Presence Sensor



The presence sensor automatically dims the backlight when the user has left his workplace. As a result, the power consumption is decreased by up to 95%, extending backlight life too. The display immediately returns to normal operation upon sensing user presence.

Medical Ready



Medical proven with medical safety/standard. Product design that fits clinician needs (clinical user-friendly).

Auto Text Mode



The human eye is more sensitive when in darker lighting places. Thus, interpretation can be more precise when making diagnosis such as Grey-Scale images for Mammography. However, when the LCD is switched from a Grey-Scale image to text reading, extreme high brightness from the display can be discomforting to the users. When the automatic text mode function is activated, the brightness of the display will be automatically reduced to a certain preset level. Making the text reading more comfortable.

Dynamic Scaling



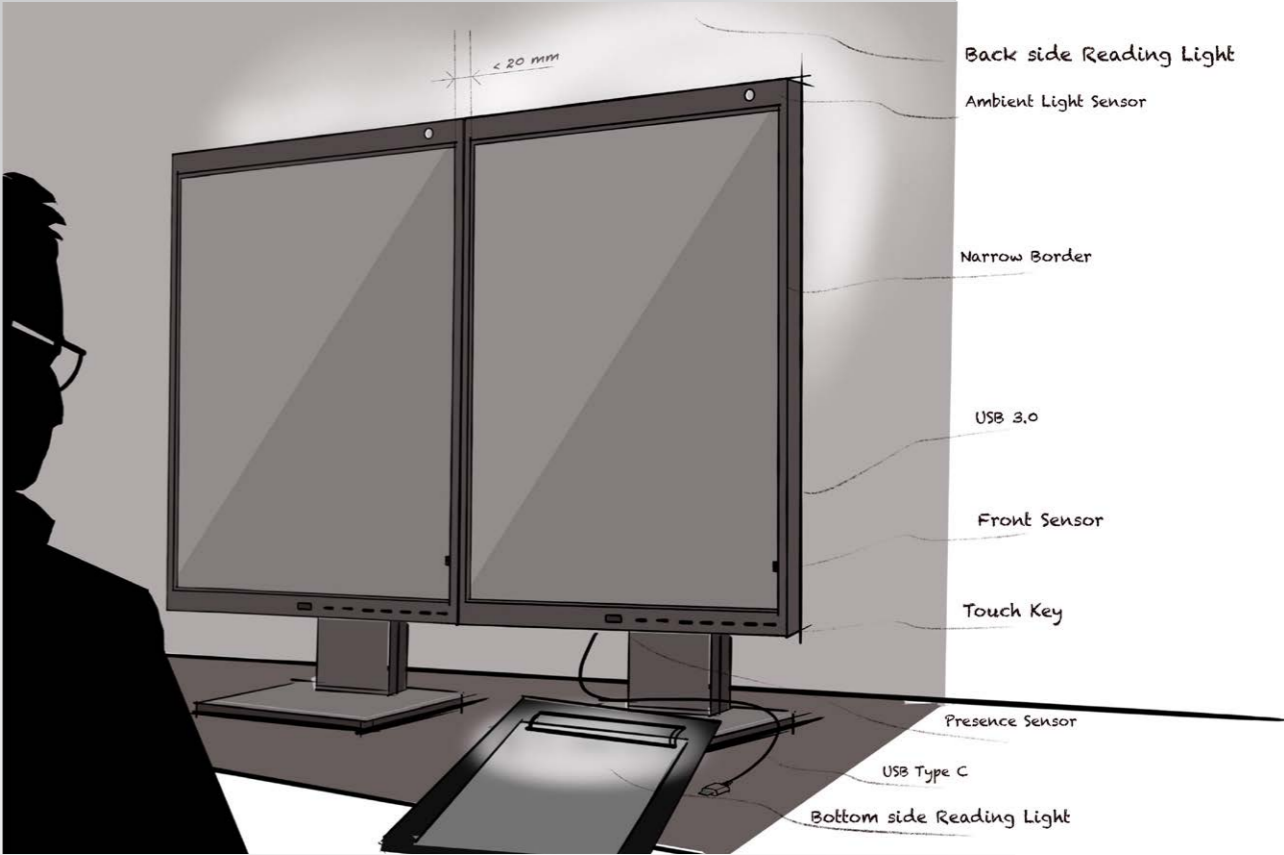
Dynamic Scaling ensures high fidelity, distortion free visualization and precise video and image representation regardless of the native picture format. Numerous adjustment options are available: Full/ Auto/ Width Fit/Height Fit/ 16:10/ 16:9/ 4:3/ 1:1 (actual options vary).

Fanless Design



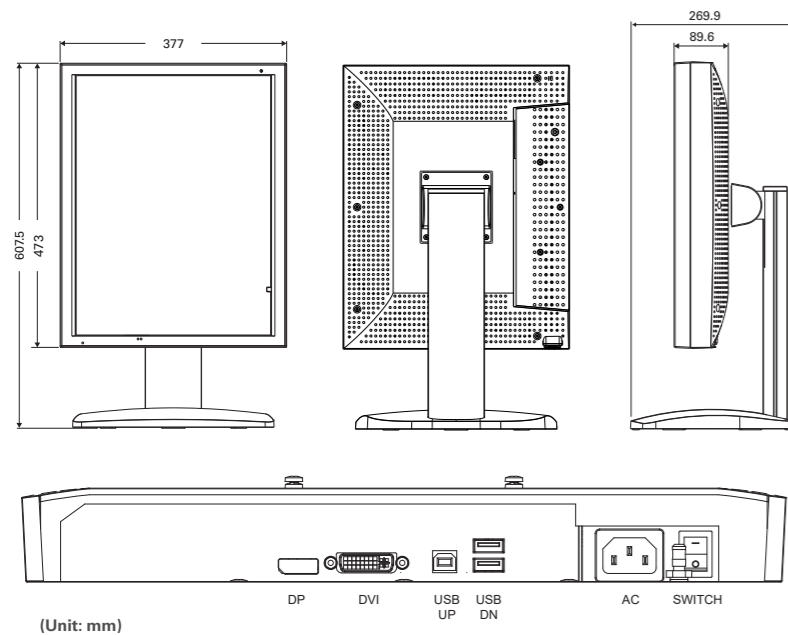
A fanless design reduces the accumulation of microscopic bacteria and dust inside the display. It also contributes to a silent working environment and increases system reliability while at the same time decreasing energy consumption.

Coming Soon



3MP Color
DC21320

3MP Color DC21311/GUP2103CMI



Fine and detailed images for precise medical judgement

The 3MP color radiology display has a built-in ALS feature that stabilizes the brightness of LED to ensure doctors can always read fine details of images to make precise medical judgement, even if the displays were to be used for long hours. This 3MP display not only can show vivid color images, but it also meets the DICOM requirement to show true greyscale images. It is also equipped with an ambient sensor, which helps to correct the gamma curve when needed.

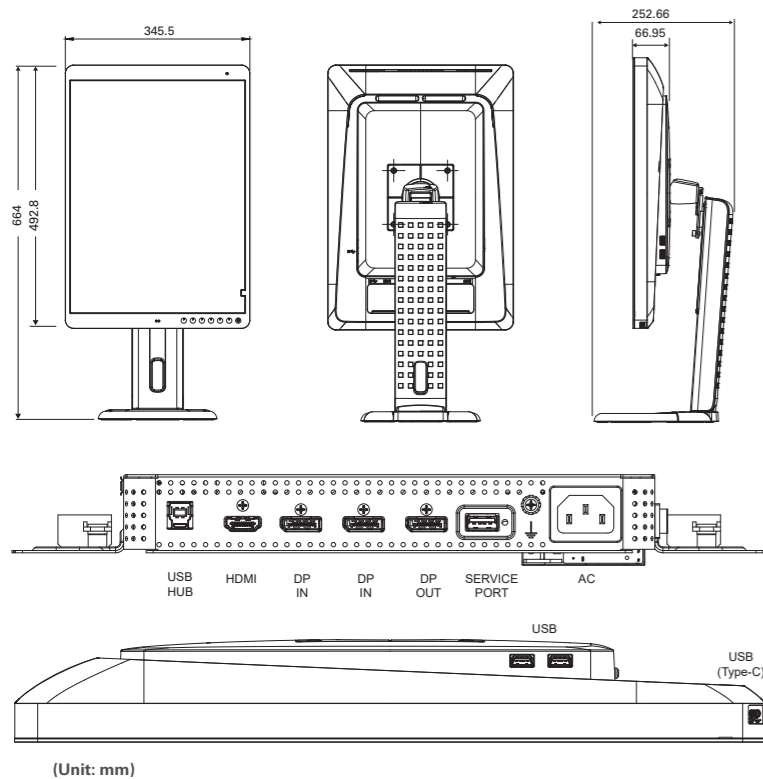
Versatile applications with FDA510K

Our 3MP color display with fine resolution is suitable for diagnostic, digital radiography, CT, MRI, and PET image review. It has obtained various international safety certifications, including FDA510K Class II.



Model Name		DC21311/GUP2103CMI	
ID Type		Front Bezel Plastic	
Panel Spec	Type	IPS	
	Resolution	2048(H)x1536(V)	
	Screen Size (inch)	21.3	
	Display Area (mm)	433.15(H)x324.86(V)	
	Pixel Pitch (mm)	0.2115(H)x0.2115(V)	
	Viewing Angle (degree)	178(H)/178(V)	
	Response Time (ms)	25 (On/Off)	
	Brightness (cd/m ²)	1000(typ.)	
	Contrast Ratio	1500:1(typ.)	
	Color / Mono	Color	
	Color Depth (bits)	10	
I/O Interface	DVI	DVI-D x1	
	DP	DP1.2 x1	
	VGA	N/A	
	HDMI	N/A	
	Service Interface	USB	
	USB Hub	USB Type-A x2	
Features	Color Temperature	Neutral/Warm/Cool/User/Monochrom	
	Gamma Selection	Calibration/1.8/2.0/2.2/2.4/DICOM	
	Gamma LUT (bits)	14	
	Calibrated Brightness (cd/m ²)	300/400/500	
	Luminance Stabilize Sensor	Front Sensor	
	Ambient Sensor	Yes	
	Presence Sensor	Yes	
	OSD Auto Rotation	N/A	
	Scaling Mode	Full Screen/Native/4:3/16:9/16:10	
	Multi Display Mode	PIP/PAP	
	Color Tracking	Yes	
	Uniformity Compensation	Yes	
	Self Calibration	N/A	
	Light Box Mode	Yes	
	Auto Text Mode	N/A	
	Sharpness improves	N/A	
	OSD Languages	English/Spanish/French/German/Italian/Chinese(simplified)/Japanese	
Power Requirements	Power Supply	AC 100V~240V	
	Power Consumption (W)	85W(Max)/2W(DC Off)	
Physical Characteristics	Dimensions (WxHxD) (mm)	377x607.5x269.9(w/ Stand)	
	VESA Mounting (mm)	100x100	
	Weight (Kg)	11.3 (w/ Stand)	
	ID Color	Black	
	Screen Protection	N/A	
	Tilt Range (degree)	-5 to +25	
	Swivel Range (degree)	+/- 70	
	Height Adjustment (mm)	80	
	Pivot Rotation (degree)	0 & 90	
Reliability	Operating Temperature (°C)	10 to 40	Operating Humidity (RH) 30% to 75%
	Storage Temperature(°C)	-20 to 60	Storage Humidity (RH) 10% to 90%
Certifications and Compliances		ANSI/AAMI ES60601-1;CAN/CSA-C22.2 60601-1,CB(IEC 60601-1), CE(EN 60601-1-2;EN 60601-1), FCC Part 15, VCCI, CCC, BIS, FDA 510k, ROHS, WEEE	

3MP Color DC21320/MSP2103AMI



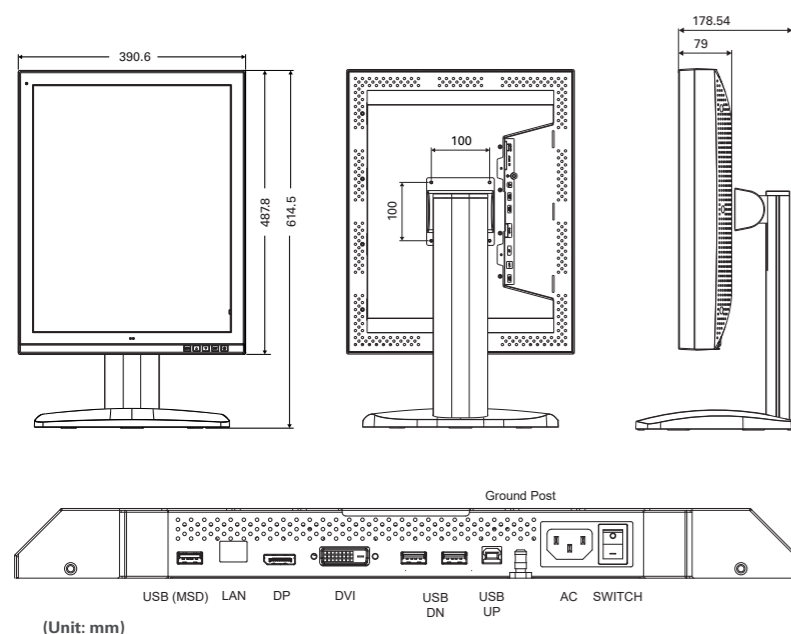
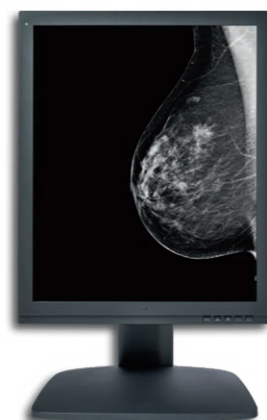
- 21.3-inch IPS panel
- High brightness 1000 nits
- High contrast 2000:1
- USB 3.0 hub Type C charging port
- DP Multi-stream
- Ultra-slim Bazel design with swivel 360-degree
- Reading/ background light attached
- Auto text mode for comfort using experience
- Self-Calibration to compliant with DICOM standard



Model Name		DC21320/MSP2103AMI	Optional
ID Type		Front Bezel Plastic	-
Panel Spec	Type	IPS	-
	Resolution	2048(H)x1536(V)	-
	Screen Size (inch)	21.3	-
	Display Area (mm)	433.152(H)x324.864(V)	-
	Pixel Pitch (mm)	0.2115(H)x0.2115(V)	-
	Viewing Angle (degree)	178(H)/178(V)	-
	Response Time (ms)	20 (On/Off)	-
	Brightness (cd/m ²)	1100(typ.)	-
	Contrast Ratio	1800:1(typ.)	-
	Color / Mono	Color	-
	Color Depth (bits)	10	-
I/O Interface	DVI	N/A	-
	DP	DP1.2 in x2/out x1 (Daisy Chain)	-
	VGA	N/A	-
	HDMI	HDMI 2.0 x1	-
	Service Interface	USB	-
	USB Hub	USB 3.0 type-A x2 type-C x1	-
Features	Color Temperature	Native/Clear/Blue/User/Monochrom	-
	Gamma Selection	Native/Calibration/1.8/2.2//DICOM	Auto Gamma
	Gamma LUT (bits)	14	-
	Calibrated Brightness (cd/m ²)	Range(200~600)	-
	Luminance Stabilize Sensor	Front Sensor	-
	Ambient Sensor	Yes	-
	Presence Sensor	Yes	-
	OSD Auto Rotation	Yes	-
	Scaling Mode	Full Screen/Native/Aspect Ratio	-
	Multi Display Mode	PIP	-
	Color Tracking	Yes	-
	Uniformity Compensation	Yes	-
	Self Calibration	Yes	-
	Light Box Mode	Yes	-
	Auto Text Mode	NA	Yes(FPGA model only)
	Sharpness improves	Yes	-
	OSD Languages	English/Spanish/French/German/Simplified Chinese/Traditional Chinese/Japanese/Italian/Swedish/Korean	-
Power Requirements	Power Supply	AC100~240	-
	Power Consumption (W)	85(Max)	-
Physical Characteristics	Dimensions (WxHxD) (mm)	345.4x664x252.6(w/ Stand)	-
	VESA Mounting (mm)	100x100	-
	Weight (Kg)	8.4 (w/ Stand)	-
	ID Color	Black & White	-
	Screen Protection	N/A	-
	Tilt Range (degree)	-5 to +25	-
	Swivel Range (degree)	360	-
	Height Adjustment (mm)	130	-
	Pivot Rotation (degree)	0 & 90	-
Reliability	Operating Temperature (°C)	10 to 40	-
	Storage Temperature(°C)	30% to 75%	-
	Operating Humidity (RH)	-20 to 60	-
	Storage Humidity (RH)	10% to 90%	-
Certifications and Compliances		ANSI/AAMI ES60601-1;CAN/CSA-C22.2 60601-1, CB(IEC 60601-1), CE(EN 60601-1-2;EN 60601-1), FCC Part 15, VCCI, CCC, FDA 510k, ROHS, WEEE	-

5MP Mono

DM21510/ ZSP2105CMI



Perfect performance and resolution for mam-mography

The 5MP monochrome display has the right resolution to show fine and true image details for radiol-ogists and oncologists to diagnose their patients. The performance in its luminance uniformity and brightness is excellent; needless to say, it meets DI-COM standard. This 5MP display is especially suit-able for reviewing mammography images. It has various international safety certifications, includ-ing FDA510K Class II.

Self-calibration function for easy DICOM curve checking

Our 5MP monochrome display has an easy way for users to check whether the images meet the requirement of DICOM. Users can press the OSD preset button for self-calibration so that the dis-play will automatically check and correct its DICOM curve for true images to be reproduced. Users can do this without any computers or software, and that is extremely convenient.



Model Name		DM21510/ZSP2105CMI	
ID Type		Front Bezel Plastic Rear Cover Metal	
Panel Spec	Type	IPS	
	Resolution	2560(H)x2048(V)	
	Screen Size (inch)	21.3	
	Display Area (mm)	422.4(H)x337.92(V)	
	Pixel Pitch (mm)	0.165(H)x0.165(V)	
	Viewing Angle (degree)	178(H)/178(V)	
	Response Time (ms)	25 (On/Off)	
	Brightness (cd/m ²)	1200(typ.)	
	Contrast Ratio	1200:1(typ.)	
	Color / Mono	Mono	
I/O Interface	Color Depth (bits)	10	
	DVI	DVI-D x1	
	DP	DP1.1 x1	
	VGA	N/A	
	HDMI	N/A	
	Service Interface	RS232(D-sub 9pin)	
	USB Hub	USB Type-A x2	
Features	Color Temperature	N/A	
	Gamma Selection	Calibration/1.8/2.0/2.2/DICOM	
	Gamma LUT (bits)	18	
	Calibrated Brightness (cd/m ²)	300/400/500/600/Auto/Range	
	Luminance Stabilize Sensor	Front Sensor	
	Ambient Sensor	Yes	
	Presence Sensor	Yes	
	OSD Auto Rotation	Yes	
	Scaling Mode	Full Screen/Native/2x Zoom	
	Multi Display Mode	N/A	
	Color Tracking	Yes	
	Uniformity Compensation	Yes	
	Self Calibration	Yes	
	Light Box Mode	N/A	
	Auto Text Mode	N/A	
	Sharpness improves	N/A	
	OSD Languages	English/Spanish/French/German/Italian/Chinese(simplified)/Japanese	
Power Requirements	Power Supply	AC 100V~240V	
	Power Consumption (W)	70W(Max)/3.5W(DC Off)	
Physical Characteristics	Dimensions (WxHxD) (mm)	390.6x614.5x270(w/ Stand)	
	VESA Mounting (mm)	100x100	
	Weight (Kg)	12 (w/ Stand)	
	ID Color	Black	
	Screen Protection	N/A	
	Tilt Range (degree)	-5 to +25	
	Swivel Range (degree)	+/- 70	
	Height Adjustment (mm)	80	
	Pivot Rotation (degree)	0 & 90	
Reliability	Operating Temperature (°C)	5 to 35	Operating Humidity (RH) 30% to 75%
	Storage Temperature(°C)	-20 to 60	Storage Humidity (RH) 10% to 90%
Certifications and Compliances		ANSI/AAMI ES60601-1;CAN/CSA-C22.2 60601-1, CB(IEC 60601-1), CE(EN 60601-1-2 ;EN 60601-1), FCC Part 15, VCCI, CCC, BIS, FDA 510k, BSMI, ROHS, WEEE	

DIVA Laboratories

Headquarters

DIVA Laboratories, Ltd. (Taiwan)

TEL: +886 2 2226 8631

Mail: divamkt@diva.com.tw

9F., No.351, Sec. 2, Zhongshan Road,
Zhonghe District, New Taipei City 235029,
Taiwan

Europe

DIVA Laboratories GmbH (Germany)

America

DIVA Laboratories U.S., LLC (NH, USA)

China

Suzhou Diva Lab. Inc. (SZ, China)

TEL: +86-512-6288-8268

416A, Boji.Suyinzhezao, No.39, Qihong Rd.,
SIP, Suzhou, Jiangsu, China

v20230420

DIVA

www.diva.com.tw

RADIOLOGY