


For Your Diagnostic Confidence

Product Brochure



WORLD CLASS PRODUCT OF KOREA






ABOUT US

KOSTEC specializes in designing, developing and manufacturing industrial image display devices, particularly medical imaging display monitors.

Since 2006, KOSTEC has devoted its time and efforts to development of special purpose display solutions including medical imaging solutions and achieved big growth in technological development.

Founded on ultrasound imaging technologies, KOSTEC has developed a variety of imaging technologies and solutions required in various medical modalities and industrial facilities, and all the efforts, experience and R&D investment in the past years have come to a result of superb-quality display lineup from small and large open-frame solutions to 5 mega-pixel medical monitors for digital mammography.



KOSTEC is committed to providing reliable custom service and technology for the global clients and partners, and will make devotional efforts for the growth of medical industry.

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all NEW Medical Imaging Solutions

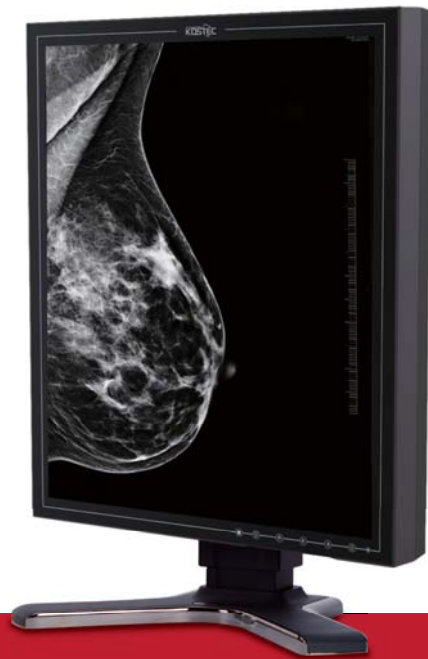
We are here today in a different shape from the past. Even now, we are becoming different, keeping ourselves renovated without cease, along with the current of medical imaging environments.

As medical system is getting more computerized and digitalized, filmless imaging solutions are more required and demand more special performance.

Under the circumstances, high-performance and multi-function medical monitors are strongly demanded and, therefore, KOSTEC designed these monitors for the sake of the solutions of the needs.

MODALION [D213 Series]

14-bit Digital Mammography & Modality Imaging Solutions



14-bit brand new diagnostic imaging solution is a unique and initiative high-resolution imaging solution, ideally designed for the needs of multi-function and high-performance modality imaging display. Equipped with extremely high density LCD panel and innovative image controller rendering 14-bit DICOM LUT compliant 16,384 shades of grayscale, these brand new monitors guarantee radiologists diagnostic confidence with accurate and crisp imaging performance.



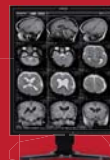
D213V5E



D213Q5E



D213Q5



D213U5E

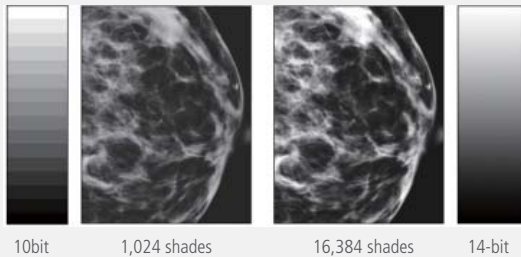


D213U5



14 BIT 14-bit LUT gray scale

Based on the high-technology 14-bit Look-up Table(LUT), KOSTEC achieved 16,384 shades of grayscale, which is ideal for human eye's recognition at the level of Just Noticeable Difference (JND), enabling accurate image display. The 14-Bit LUT is a standard feature of our new diagnostic monitors.



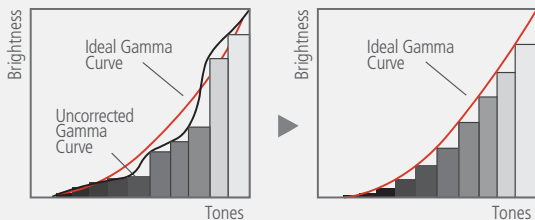
SPC 15 Mega Sub-Pixels Control (SPC)

15 Mega-pixel ultra-fine tuning by high-performance circuitry solution enables 5MP monitors with the resolution of 2048 x 2560 to display much more fine and accurate images.



DICOM DICOM GSDF

Every DICOM mode incorporated monitors are initialized with the Look-up Table(LUT) that enables ideal DICOM image display through GSDF (Grayscale Standard Display Function) conforming to the standard of DICOM Part 14 and AAPM TG18.



SHIFT Standard Color Temperature

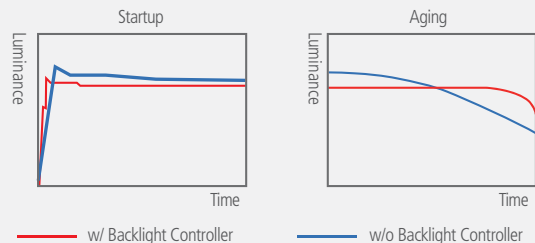
Plus to the color temperature D65 that enables graphic editing and endoscope image display at standard color tone, clear base and blue base mode in compliance with DICOM GSDF Part 14 enables CRT users to be immediately adapted to LCD monitors with no rejection symptoms.

PIVOT Auto OSD Rotation

According to the display mode change from landscape to portrait or vice versa, the on-screen display automatically rotates by the function of built-in gravity sensor.

LUMI BLT Brightness Leveling Technology (BLT)

Brightness Leveling Technology(BLT) is another luminance auto-sensing technology, which, installed at the backside of LCD module, maintains the brightness at the previously calibrated maximum luminance level(L_{max}),consistently providing JND (Just Noticeable Difference) level compliant image quality at each luminance steps and eventually reducing back light warm-up time and extending lifetime of the lamps.



IQET Image Quality Enhancement Technology

- Horizontal & vertical edge enhancement circuits
- 14-bit color gamma correction
- Brightness & luminance in RGB or YUV, contrast adjustment
- H & V edge enhancement function
- Color management function

GB Wide Range of Graphic Card Compatibility

High-grade self-calibration technology that the calibrated data is saved in the display controller board, not in the graphic board, enables the monitors to go compatible with those general graphic boards on the markets, which is much more advantageous to maintenance and cost-saving. Even at the time of computer or graphic board replacement, the monitor can be used as is without re-calibration.



Protection Glass

According to user's different reading environments, anti-reflective or anti-glare coating glass is optionally available. Anti-reflective coating glass is more desirably used in a dark environment for better image sharpness. Anti-bacteria film coating is also optionally available.



Ergonomic Design

The tilt, swivel, pivot and height adjustable stand offers ideal viewing position and comforts. VESA standard offers various mounting options.



Backlight Mode Option – Clear Base/ Blue Base

Blue base backlight is optionally available.



Warranty

KOSTEC and its authorized distributors offer a five-year or a three-year limited warranty.



Front Sensor for Smart DICOM GSDF Self-calibration (option)

The built-in front sensor communicating with the software installed in the workstation periodically senses the change of luminance and automatically calibrates the grayscale to its default value on the standard of DICOM Part 14. This smart calibration function always keeps the monitors complying with DICOM standard even without technician's service or assistance.



Network Calibration Management System

This is a web-based DICOM calibration management system designed for needs of cost and time efficient calibration system. With this centralized quality assurance management system, your monitors will be continuously ensured compliant with DICOM standards.



International Standard Conformance

KOSTEC complies with the medical device quality management system ISO13485 and all products comply with international or regional standards such as KC,FCC,CE,VCCI,CCC, FDA510(k).



Pairing Service

KOSTEC offers a pairing service for uniformity and consistency between the bundled monitors to the dual-head or multi-head users.



Ambient Light-sensing Function (ALF)

ALF (Ambient Light-sensing Function) is a technology designed to maintain readability, which may deteriorate according to the change of ambient illumination, even at dark levels by calibrating grayscale at L'min (minimum luminance)



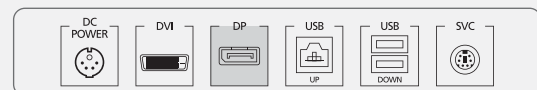
Dual Link DVI input

Dual Link DVI input system supports high-definition digital image display.



DisplayPort

DisplayPort, a digital display interface developed by the Video Electronics Standards Association (VESA). The interface is primarily used to connect a video source to the display to transmit data with true 10-bit image processing.



Specifications

MODALION [D213 Series]



5 21.3"
MP Monochrome

D213V5E

14 BIT **5yr** WARRANTY



3 21.3"
MP Monochrome

D213Q5E

14 BIT **5yr** WARRANTY

Model		D213V5E	D213Q5E
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [CMI]	21.3-inch TFT Monochrome IPS mode [NLT]
	Display Area	422.4(H)mm x 337.92(V)mm	433.152(H)mm x 324.864(V)mm
	Pixel Pitch	0.165(H)mm x 0.165(V)mm	0.2115(H)mm x 0.2115(V)mm
	Contrast Ratio	850 : 1 (Typ.)	900 : 1 (Typ.)
	Luminance (Max)	1100 (cd/m ²)/ Default– 500 (cd/m ²) or custom	1450 (cd/m ²)
	Viewing Angle	170(H) / 170(V)	176(H) / 176(V)
	Response Time	36ms (Tr +Tf) (Typ.)	27ms (Tr +Tf) (Typ.)
Performance	Resolution	2560(H) x 2048(V) pixels	2048(H) x 1536(V) pixels
	Grayscale	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray
Signals	Input Terminals	DVI, DP	DVI, DP
	USB Ports	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2
Power	Input	DC 12V 12.5A Max.	DC 12V 12.5A Max.
	Consumption	88W Max.	52W Max.
Features	Calibration mode shift	N/A	N/A
	DICOM mode shift	N/A	N/A
	Gamma mode shift	DICOM(LUTO)~LUT6	DICOM(LUTO)~LUT6
	OSD info display	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
Physical	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
	Cabinet Colors	Gray	Gray
	Dimensions(WxHxD)	With stand: 390x510x240/ Without stand: 391.6x476x107.2 (portrait)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)
	Weight	With stand: 9.5Kgs / With stand: 7Kgs	With stand: 9Kgs / With stand: 6.5Kgs
	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard
	Certification	MDD(KC, CE, FCC, VCCI, UL), FDA510(k) (in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k) (in progress)
	Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner
	Warranty	5 years	5 years

* The specifications are subject to change without notice

Diagnostic Display Specifications



3 21.3"
MP Color
D213Q5
14 **5yr**
BIT COLOR WARRANTY



2 21.3"
MP Monochrome
D213U5E
14 **5yr**
BIT GRAY WARRANTY



2 21.3"
MP Color
D213U5
14 **5yr**
BIT COLOR WARRANTY

D213Q5	D213U5E	D213U5
21.3-inch TFT Color IPS mode [NLT]	21.3-inch TFT Monochrome IPS mode [NLT]	21.3-inch TFT Color IPS mode [NLT]
433.152(H)mm x 324.864(V)mm	432.0(H)mm x 324.0(V)mm	432.0(H)mm x 324.0(V)mm
0.2115(H)mm x 0.2115(V)mm	0.270(H)mm x 0.270(V)mm	0.270(H)mm x 0.270(V)mm
750 : 1 (Typ.)	850 : 1 (Typ.)	1050 : 1 (Typ.)
800 (cd/m ²)// Default– 500 (cd/m ²) or custom	1650 (cd/m ²)	860 (cd/m ²)// Default– 500 (cd/m ²) or custom
176(H) / 176(V)	170(H) / 170(V)	176(H) / 176(V)
35ms (Tr +Tf) (Typ.)	23ms (Tr +Tf) (Typ.)	35ms (Tr +Tf) (Typ.)
2048(H) x 1536(V) pixels	1600(H) x 1200(V) pixels	1600(H) x 1200(V) pixels
14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray
DVI, DP	DVI, DP	DVI, DP
USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2
DC 24V 6.25A Max.	DC 12V 12.5A Max.	DC 24V 6.25A Max.
90W Max.	51W Max.	90W Max.
N/A	N/A	N/A
4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	N/A	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500
DICOM(LUTO)~LUT6	DICOM(LUTO)~LUT6	DICOM(LUTO)~LUT6
Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
Gray	Gray	Gray
With stand: 390x510x240 (portrait)/ Without stand: 366x473x95.6 (portrait)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)	With stand: 390x510x240 (portrait)/ Without stand: 366x473x95.6 (portrait)
With stand: 9Kgs / With stand: 6.5Kgs	With stand: 9Kgs / With stand: 6.5Kgs	With stand: 9Kgs / With stand: 6.5Kgs
100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard
MDD(KC, CE, FCC, VCCI, UL), FDA510(k) (in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k) (in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k) (in progress)
AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner
5 years	5 years	5 years

* The specifications are subject to change without notice

Specifications

[3MP]

MODALION [D213 Series]



3 MP 21.3" Monochrome

D213Q5E

14 BIT GRAY 5yr WARRANTY LED



3 MP 21.3" Color

D213Q5

14 BIT COLOR 5yr WARRANTY LED

Model		D213Q5E	D213Q5
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [NLT]	21.3-inch TFT Color IPS mode [NLT]
	Display Area	433.152(H)mm x 324.864(V)mm	433.152(H)mm x 324.864(V)mm
	Pixel Pitch	0.2115(H)mm x 0.2115(V)mm	0.2115(H)mm x 0.2115(V)mm
	Contrast Ratio	1400 : 1 (Typ.)	1400 : 1 (Typ.)
	Luminance (Max)	1700 (cd/m ²)	800 (cd/m ²)/ Default- 500 (cd/m ²) or custom
	Viewing Angle	176(H) / 176(V)	176(H) / 176(V)
	Response Time	27ms (Tr +Tf) (Typ.)	35ms (Tr +Tf) (Typ.)
Performance	Resolution	2048(H) x 1536(V) pixels	2048(H) x 1536(V) pixels
	Grayscale	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray
Signals	Input Terminals	DVI, DP	DVI, DP
	USB Ports	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2
Power	Input	DC 12V 12.5A Max.	DC 24V 6.25A Max.
	Consumption	52W Max.	90W Max.
Features	Calibration mode shift	N/A	N/A
	DICOM mode shift	N/A	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500
	Gamma mode shift	DICOM(LUTO)~LUT6	DICOM(LUTO)~LUT6
	OSD info display	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
Physical	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
	Cabinet Colors	Gray	Gray
	Dimensions(WxHxD)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)
	Weight	With stand: 9Kgs / Without stand: 6.5Kgs	With stand: 9Kgs / Without stand: 6.5Kgs
	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard
	Certification	MDD(KC, CE, FCC, VCCI, UL), FDA510(k) (in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k) (in progress)
	Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner
	Warranty	5 years	5 years

* The specifications are subject to change without notice

Diagnostic Display Specifications

[2MP]



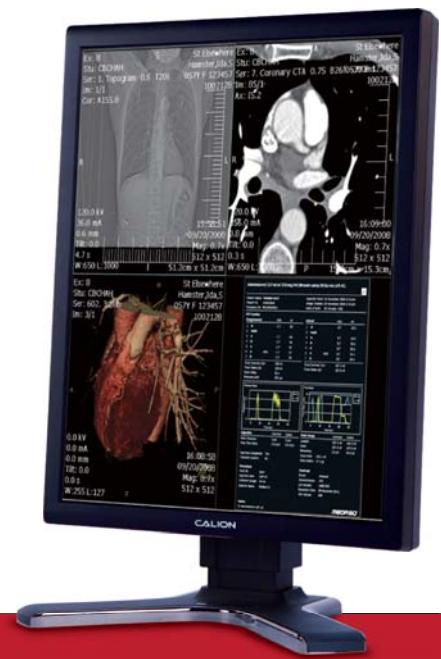
Model		D213U5E	D213U5
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [NLT]	21.3-inch TFT Color IPS mode [NLT]
	Display Area	432.0(H)mm x 324.0(V)mm	432.0(H)mm x 324.0(V)mm
	Pixel Pitch	0.270(H)mm x 0.270(V)mm	0.270(H)mm x 0.270(V)mm
	Contrast Ratio	1400 : 1 (Typ.)	1200 : 1 (Typ.)
	Luminance (Max)	1900 (cd/m ²)	760 (cd/m ²)// Default– 500 (cd/m ²) or custom
	Viewing Angle	170(H) / 170(V)	176(H) / 176(V)
	Response Time	23ms (Tr +Tf) (Typ.)	35ms (Tr +Tf) (Typ.)
Performance	Resolution	1600(H) x 1200(V) pixels	1600(H) x 1200(V) pixels
	Grayscale	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray
Signals	Input Terminals	DVI, DP	DVI, DP
	USB Ports	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2
Power	Input	DC 12V 12.5A Max.	DC 24V 6.25A Max.
	Consumption	51W Max.	90W Max.
Features	Calibration mode shift	N/A	N/A
	DICOM mode shift	N/A	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500
	Gamma mode shift	DICOM(LUTO)–LUT6	DICOM(LUTO)–LUT6
	OSD info display	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
Physical	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
	Cabinet Colors	Gray	Gray
	Dimensions(WxHxD)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)
	Weight	With stand: 9Kgs / With stand: 6.5Kgs	With stand: 9Kgs / With stand: 6.5Kgs
	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard
Certification	MDD(KC, CE, FCC, VCCI, UL), FDA510(k) (in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k) (in progress)	
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	
Warranty	5 years	5 years	

* The specifications are subject to change without notice



CALION [D213-CA Series]

12, 14-bit Digital Mammography & Modality Imaging Solutions



12, 14-bit brand new diagnostic imaging solution is a unique and initiative high-resolution imaging solution, ideally designed for the needs of multi-function and high-performance modality imaging display. Equipped with extremely high density LCD panel and innovative image controller rendering 12, 14-bit DICOM LUT, these brand new monitors guarantee radiologists diagnostic confidence with accurate and crisp imaging performance.



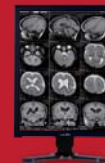
D213V5E-CA
D213V9B-CA



D213Q5E-CA
D213Q9B-CA



D213Q5-CA
D213Q9-CA



D213U5E-CA
D213U8B-CA

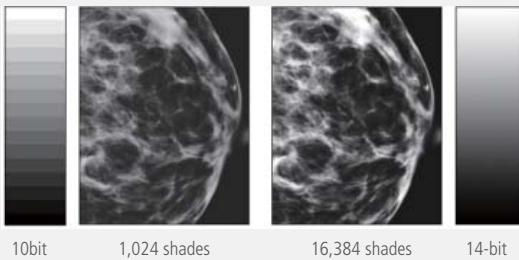


D213U5-CA
D213U8-CA



14-bit LUT gray scale (D213*5*-CA Series)

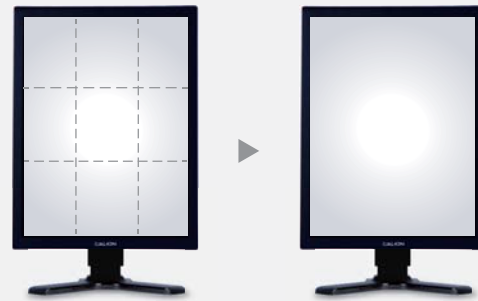
Based on the high-technology 14-bit Look-up Table(LUT), KOSTEC achieved 16,384 shades of grayscale, which is ideal for human eye's recognition at the level of Just Noticeable Difference (JND), enabling accurate image display. The 14-bit LUT is a standard feature of our new diagnostic monitors.



10bit 1,024 shades 16,384 shades 14-bit

15 Mega Sub-Pixels Control (SPC)

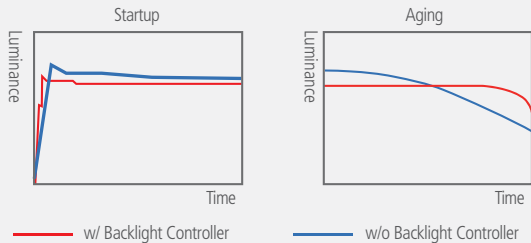
15 Mega-pixel ultra-fine tuning by high-performance circuitry solution enables 5MP monitors with the resolution of 2048 × 2560 to display much more fine and accurate images.



BEFORE AFTER

Brightness Leveling Technology (BLT)

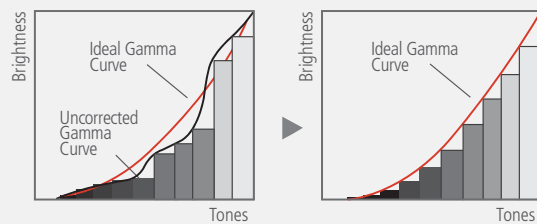
Brightness Leveling Technology(BLT) is another luminance auto-sensing technology, which, installed at the backside of LCD module, maintains the brightness at the previously calibrated maximum luminance level(L_{max}),consistently providing JND (Just Noticeable Difference) level compliant image quality at each luminance steps and eventually reducing back light warm-up time and extending lifetime of the lamps.



— w/ Backlight Controller — w/o Backlight Controller

DICOM GSDF

Every DICOM mode incorporated monitors are initialized with the Look-up Table(LUT) that enables ideal DICOM image display through GSDF (Grayscale Standard Display Function) conforming to the standard of DICOM Part 14 and AAPM TG18.



Wide Range of Graphic Card Compatibility

High-grade self-calibration technology that the calibrated data is saved in the display controller board, not in the graphic board, enables the monitors to go compatible with those general graphic boards on the markets, which is much more advantageous to maintenance and cost-saving. Even at the time of computer or graphic board replacement, the monitor can be used as is without re-calibration.

Image Quality Enhancement Technology (D213*5*-CA Series)

- Horizontal & vertical edge enhancement circuits
- 14-bit color gamma correction
- Brightness & luminance in RGB or YUV, contrast adjustment
- H & V edge enhancement function
- Color management function



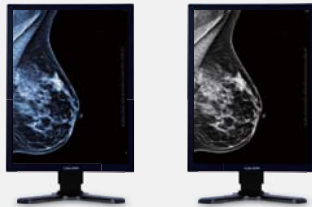
Protection Glass : Anti- Glare coating

According to user's different reading environments, anti-reflective or anti-glare coating glass is optionally available. Anti-reflective coating glass is more desirably used in a dark environment for better image sharpness. Anti-bacteria film coating is also optionally available. Overlaying the anti-glare protection film on the surface of the screen, Calion series will reduce a flexion of light on the surface of the screen for your vision.



Backlight Mode Option – Clear Base/ Blue Base

Blue base backlight is optionally available.



Ergonomic Design

The tilt, swivel, pivot and height adjustable stand offers ideal viewing position and comforts. VESA standard offers various mounting options.



Sensuous & Easy OSD Button

Depending on the application (or site requirement) further Gamma Correction may be required. In this case KOSTEC has accurate DICOM 3.14 compliant devices. Although our unit will maintain calibration, physical verification is periodically recommended.



5yr Warranty

KOSTEC and its authorized distributors offer a five-year or a three-year limited warranty.



Auto OSD Rotation (D213*5*-CA Series)

According to the display mode change from landscape to portrait or vice versa, the on-screen display automatically rotates by the function of built-in gravity sensor.



Network Calibration Management System

This is a web-based DICOM calibration management system designed for needs of cost and time efficient calibration system. With this centralized quality assurance management system, your monitors will be continuously ensured compliant with DICOM standards.



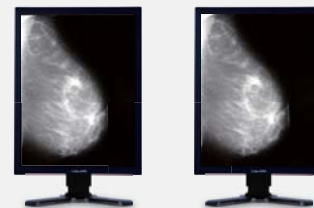
International Standard Conformance

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Paring Service

KOSTEC offers a paring service for uniformity and consistency between the bundled monitors to the dual-head or multi-head users.



Standard Color Temperature

Plus to the color temperature D65 that enables graphic editing and endoscope image display at standard color tone, clear base and blue base mode in compliance with DICOM GSDF part 14 enables CRT users to be immediately adapted to LCD monitors with no rejection symptoms.



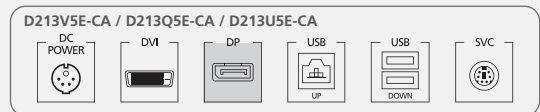
Dual Link DVI input

Dual Link DVI input system supports high-definition digital image display.



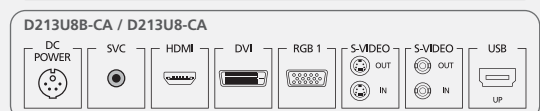
Display Port

DisplayPort, a digital display interface developed by the Video Electronics Standards Association (VESA). The interface is primarily used to connect a video source to the display to transmit data with true 10-bit image processing.



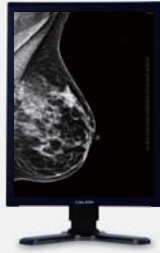
A variety of I/O Ports & USB

This clinical review monitor is designed to have the most connectivity with analog and digital signals for wide applications.



Specifications

CALION [D213-CA Series]



5 MP 21.3" Monochrome

D213V5E-CA
D213V9B-CA

12 BIT 14 BIT GRAY 5yr WARRANTY



3 MP 21.3" Monochrome

D213Q5E-CA
D213Q9B-CA

12 BIT 14 BIT GRAY 5yr WARRANTY

Model		D213V5E-CA		D213V9B-CA		D213Q5E-CA		D213Q9B-CA	
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [CMI]				21.3-inch TFT Monochrome IPS mode [NLT]			
	Display Area	422.4(H)mm x 337.92(V)mm				433.152(H)mm x 324.864(V)mm			
	Pixel Pitch	0.165(H)mm x 0.165(V)mm				0.2115(H)mm x 0.2115(V)mm			
	Contrast Ratio	850 : 1 (Typ.)				900 : 1 (Typ.)			
	Luminance (Max)	1100 (cd/m ²)// Default– 500 (cd/m ²) or custom				1450 (cd/m ²)			
	Viewing Angle	170(H) / 170(V)				176(H) / 176(V)			
	Response Time	36ms (Tr +Tf) (Typ.)				27ms (Tr +Tf) (Typ.)			
Performance	Resolution	2560(H) x 2048(V) pixels				2048(H) x 1536(V) pixels			
	Grayscale	14-bit LUT, 16,384 shades of gray		12-bit LUT, 4096 shades of gray		14-bit LUT, 4096 shades of gray		12-bit LUT, 4096 shades of gray	
Signals	Input	DVI, DP		DP, HDMI, DVI, RGB		DVI, DP		DP, HDMI, DVI, RGB	
	Output	N/A				N/A			
	USB Hub	USB2.0 upstream x1 / downstream x 2				USB2.0 upstream x1 / downstream x 2			
Power	Input	DC 12V 12.5A Max.				DC 12V 12.5A Max.			
	Consumption	88W Max.				52W Max.			
Features	DICOM mode shift	N/A				N/A			
	Gamma mode shift	DICOM				DICOM			
	OSD info display	Luminance Settings, etc				Luminance Settings, etc			
Physical	Stand	Tilt, Lift, Swivel, Pivot				Tilt, Lift, Swivel, Pivot			
	Dimensions(WxHxD)	With stand: 390x510x240 (portrait) / Without stand: 390x470x100 (portrait)				With stand: 390x510x240 (portrait)/ Without stand: 365x485x88 (portrait)			
	Weight	With stand: 9Kgs / Without stand: 6.8Kgs				With stand: 9Kgs / Without stand: 6.8Kgs			
	Mount	100mm x 100mm VESA standard				100mm x 100mm VESA standard			
Certification		MDD(KC, CE, FCC, VCCI, UL)		MDD(KC, CE)		MDD(KC, CE, FCC, VCCI, UL)		MDD(KC, CE)	
		In progress : FDA510(k)				In progress : FDA510(k)			
Accessories		AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner							

* The specifications are subject to change without notice

Diagnostic Display Specifications



3 MP 21.3" Color

D213Q5-CA
D213Q9-CA

12 BIT 14 BIT COLOR 5yr WARRANTY



2 MP 21.3" Monochrome

D213U5E-CA
D213U8B-CA

12 BIT 14 BIT GRAY 5yr WARRANTY



2 MP 21.3" Color

D213U5-CA
D213U8-CA

12 BIT 14 BIT COLOR 5yr WARRANTY

D213Q5-CA		D213Q9-CA		D213U5E-CA		D213U8B-CA		D213U5-CA		D213U8-CA	
21.3-inch TFT Color IPS mode [NLT]											
433.152(H)mm x 324.864(V)mm											
0.2115(H)mm x 0.2115(V)mm											
750 : 1 (Typ.)											
800 (cd/m ²)/ / Default– 500 (cd/m ²) or custom											
176(H) / 176(V)											
35ms (Tr +Tf) (Typ.)											
2048(H) x 1536(V) pixels											
14-bit LUT, 4096 shades of gray			12-bit LUT, 4096 shades of gray			14-bit LUT, 4096 shades of gray			12-bit LUT, 4096 shades of gray		
DVI, DP		DP, HDMI, DVI, RGB		DVI, DP		HDMI, DVI, RGB, S-video, Video (BNC)		DVI, DP		HDMI, DVI, RGB, S-video, Video (BNC)	
N/A		N/A		N/A		Video (BNC) x 1		N/A		Video (BNC) x 1	
USB2.0 upstream x1 / downstream x 2											
DC 24V 6.25A Max.											
90W Max.											
N/A		N/A		N/A		4-phased one-touch shift – DICOM		N/A		4-phased one-touch shift – DICOM	
DICOM		DICOM		DICOM		2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0		DICOM		2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	
Luminance Settings, etc											
Tilt, Lift, Swivel, Pivot											
With stand: 390x510x240 (portrait) / Without stand: 365x485x88 (portrait)											
With stand: 9Kgs / Without stand: 6.8Kgs											
100mm x 100mm VESA standard											
MDD(KC, CE, FCC, VCCI, UL)			MDD(KC, CE)			MDD(KC, CE, FCC, VCCI, UL)			MDD(KC, CE)		
In progress : FDA510(k)											
AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner											

* The specifications are subject to change without notice

Specifications

[3MP]

CALION [D213-CA Series]



3 MP 21.3" Monochrome

D213Q5E-CA
D213Q9B-CA

12 BIT 14 BIT GRAY 5yr WARRANTY LED



3 MP 21.3" Color

D213Q5-CA
D213Q9-CA

12 BIT 14 BIT COLOR 5yr WARRANTY LED

Model		D213Q5E-CA	D213Q9B-CA	D213Q5-CA	D213Q9-CA
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [NLT]		21.3-inch TFT Color IPS mode [NLT]	
	Display Area	433.152(H)mm x 324.864(V)mm		433.152(H)mm x 324.864(V)mm	
	Pixel Pitch	0.2115(H)mm x 0.2115(V)mm		0.2115(H)mm x 0.2115(V)mm	
	Contrast Ratio	1400 : 1 (Typ.)		1400 : 1 (Typ.)	
	Luminance (Max)	1700 (cd/m ²)		800 (cd/m ²) / Default- 500 (cd/m ²) or custom	
	Viewing Angle	176(H) / 176(V)		176(H) / 176(V)	
	Response Time	27ms (Tr + Tf) (Typ.)		35ms (Tr + Tf) (Typ.)	
Performance	Resolution	2048(H) x 1536(V) pixels		2048(H) x 1536(V) pixels	
	Grayscale	14-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	14-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray
Signals	Input	DVI, DP		DVI, DP	
	Output	DP, HDMI, DVI, RGB		DP, HDMI, DVI, RGB	
	USB Hub	USB2.0 upstream x1 / downstream x 2		USB2.0 upstream x1 / downstream x 2	
Power	Input	DC 12V 12.5A Max.		DC 24V 6.25A Max.	
	Consumption	52W Max.		90W Max.	
Features	DICOM mode shift	N/A		N/A	
	Gamma mode shift	DICOM		DICOM	
	OSD info display	Luminance Settings, etc		Luminance Settings, etc	
Physical	Stand	Tilt, Lift, Swivel, Pivot		Tilt, Lift, Swivel, Pivot	
	Dimensions(WxHxD)	With stand: 390x510x240 (portrait) / Without stand: 365x485x88 (portrait)		With stand: 390x510x240 (portrait) / Without stand: 365x485x88 (portrait)	
	Weight	With stand: 9Kgs / With stand: 6.8Kgs		With stand: 9Kgs / With stand: 6.8Kgs	
	Mount	100mm x 100mm VESA standard		100mm x 100mm VESA standard	
Certification		MDD(KC, CE, FCC, VCCI, UL)	MDD(KC, CE)	MDD(KC, CE, FCC, VCCI, UL)	MDD(KC, CE)
		In progress : FDA510(k)		In progress : FDA510(k)	
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner				

* The specifications are subject to change without notice

Diagnostic Display Specifications

[2MP]



2 MP 21.3" Monochrome
D213U5E-CA 1650 (cd/m²)
D213U8B-CA 1000 (cd/m²)
 12 BIT 14 BIT GRAY 5yr WARRANTY LED











2 MP 21.3" Color
D213U5-CA
D213U8-CA
 12 BIT 14 BIT COLOR 5yr WARRANTY LED

Model		D213U5E-CA	D213U8B-CA	D213U5-CA	D213U8-CA
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [NLT]		21.3-inch TFT Color IPS mode [NLT]	
	Display Area	432.0(H)mm x 324.0(V)mm		432.0(H)mm x 324.0(V)mm	
	Pixel Pitch	0.270(H)mm x 0.270(V)mm		0.270(H)mm x 0.270(V)mm	
	Contrast Ratio	1400 : 1 (Typ.)		1200 : 1 (Typ.)	
	Luminance (Max)	1900 (cd/m ²)		760 (cd/m ²)// Default– 500 (cd/m ²) or custom	
	Viewing Angle	170(H) / 170(V)		176(H) / 176(V)	
	Response Time	23ms (Tr + Tf) (Typ.)		35ms (Tr + Tf) (Typ.)	
Performance	Resolution	1600(H) x 1200(V) pixels		1600(H) x 1200(V) pixels	
	Grayscale	14-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	14-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray
Signals	Input	DVI, DP	HDMI, DVI, RGB, S-video, Video (BNC)	DVI, DP	HDMI, DVI, RGB, S-video, Video (BNC)
	Output	N/A	Video (BNC) x 1	N/A	Video (BNC) x 1
	USB Hub	USB2.0 upstream x1 / downstream x 2		USB2.0 upstream x 1 /downstream x 2	
Power	Input	DC 12V 12.5A Max.		DC 24V 6.25A Max.	
	Consumption	55W Max.		90W Max.	
Features	DICOM mode shift	N/A	4-phased one-touch shift – DICOM	N/A	4-phased one-touch shift – DICOM
	Gamma mode shift	DICOM	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM1.8/2.0	DICOM	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM1.8/2.0
	OSD info display	Operating time, Luminance Settings, Gamma, etc		Operating time, Luminance Settings, Gamma, etc	
Physical	Stand	Tilt, Lift, Swivel, Pivot		Tilt, Lift, Swivel, Pivot	
	Dimensions(WxHxD)	With stand: 390x510x240 (portrait) / Without stand: 365x485x88 (portrait)		With stand: 390x510x240 (portrait) / Without stand: 365x485x88 (portrait)	
	Weight	With stand: 9Kgs / With stand: 6.8Kgs		With stand: 9Kgs / With stand: 6.8Kgs	
	Mount	100mm x 100mm VESA standard		100mm x 100mm VESA standard	
Certification		MDD(KC, CE, FCC, VCCI, UL)	MDD(KC, CE)	MDD(KC, CE, FCC, VCCI, UL)	MDD(KC, CE)
		In progress : FDA510(k)		In progress : FDA510(k)	
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner				

* The specifications are subject to change without notice

Graphic Card Compatibility

Model	GTX550 Ti OVER D5	GTX560 Ti OVER D5	GTX560 Ti ORIGIN D5	GTX570 OVER D5	GTS450 D5	GTX560Ti HERO D5 1GB	GTX560 G6 1GB	GTX460 IGAME D51GB	GTX460se
									
Chipset	NVIDIA								
Grade	Standard								
OS System Supported	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7
Core	970MHz	900MHz	822MHz	780MHz	810MHz	820MHz	820MHz	820MHz	680MHz
Clock	4200MHz	4000MHz	4000MHz	3800MHz	3608MHz	4000MHz	4008MHz	4000MHz	3400MHz
Frame Buffer Memory	1GB	1GB	1GB	1.2GB	1GB	1GB	1GB	1GB	1GB
Bus Interface	PCI-Express 2.0 x16								
Max Resolution	2048X1536					2560x2048			
Output	DVI X2 HDMI X1					HDMI x1 DVIx2	HDMI x1 DVIx2 DP x1	HDMI x1 DVIx2	HDMI x1 DVIx2 DPx1

* The specifications are subject to change without notice

Model	Quadro FX3700	Quadro 2000D	GTX480 UDV	GTX480	GF GTX470	GF GTX275	GTX460se	GF 9800GT
								
Chipset	NVIDIA							
Grade	Premium	Middle-grade		Standard				
OS System Supported	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7	Windows XP / Vista / 7
Core	725MHz	700MHz	700MHz	725MHz	607MHz	633MHz	680MHz	600MHz
Clock	400MHz	416GB/sec	1401MHz	3696MHz	3348MHz	1792MHz	3400MHz	700MHz
Frame Buffer Memory	512MB	1GB	1.5GB	1GB	1GB	1GB	1GB	512MB
Bus Interface	PCI-Express 2.0	PCI-Express 2.0 x16						
Max Resolution	3840x2400	2560x2048						2048x1536
Output	DVix2 TV-OUT	DVix2	HDMI x1 DVix2	HDMI x1 DVix2	DVix2 DPx1 HDMI x1	HDMI x1 DVix2	HDMI x1 DVix2 DPx1	DVix2 TV-OUT

* The specifications are subject to change without notice

Special Utility Solutions for Modality Imaging



Modality imaging display solutions, which are specially designed for wide for wide applications in medical imaging sectors such as HIS, RIS, PACS and various analog and digital signal input / output terminals, it provides the radiologists or imaging designers with a fitting alternative solution in modality systems such as CT, CR, MRI, DSA, etc.



170EX / 150EX



D190S4-HL
D190S4



D201U8

Special Utility Solutions for Modality Imaging

2
MP

D201U8 Color

Modality Imaging Solutions



D201U8 is a special edition of low-cost ownership solutions for high-quality 2mega-pixel imaging displays. Combined with a 12-bit image processing controller and a variety of display technologies and functions, the 20.1-inch 2MP color LCD with a resolution of 1600x1200 and a high brightness at 700cd/m² provides radiologists and imaging system designers with utility applications in HIS, RIS, PACS and various modalities such as CT, CR, MRI, DSA and even endoscopy imaging systems.

With the configuration of various analog and digital signal input/output terminals and user friendly functions such as one-touch calibration/DICOM mode shift, PiP/PbP, gamma shift, etc, its utility in modality applications gets maximized.



Standard Gamma Curve Calibration Mode Hotkey (CMH)

According to various applications or user's environments, available are the variety of image display modes differentiated by various gamma curves such as the standard gamma 1.8(old ver. Apple Mac), gamma 2.2 (IBM compatible & television), 2.0, 2.4, 2.6, 2.8, including custom-mode gamma. In case of diagnostic monitors or their equivalents, calibration mode hotkey(CMH) function is added to provide CR/DR mode for X-ray images including mammography, US mode for ultrasound images and CT mode. ES mode for endoscopy images is available for color displays.

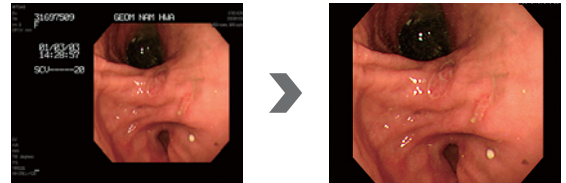
<p>CT Mode</p> <p>Brightness: 300cd/m² Grayscale: DICOM GSDF</p>	<p>CR/DR Mode</p> <p>Brightness: 500cd/m² Grayscale: DICOM GSDF</p>	<p>ES Mode</p> <p>Brightness: 300cdm² Grayscale: gamma 2.2</p>
<p>US Mode</p> <p>Brightness: 200cd/m² Grayscale: gamma 2.2</p>	<p>DSA Mode</p> <p>Brightness: 500cd/m² Grayscale: DICOM GSDF</p>	<p>Text Mode</p> <p>Brightness: 150cd/m² Grayscale: gamma 2.2</p>

* Some modes may not be available for some models.



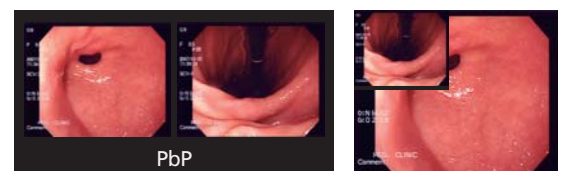
Image Size Adjustment

Image Size can be adjusted to user's preference mode. Available modes are Auto, Fill All, Fill Aspect, Zoom, one to one.



PiP / PbP

PbP & PiP function allows users to display two different images from two different sources(Digital/Analog), which is required when surgery and flexible endoscope are performed at once, or when endoscopic procedure is performed with ultrasound imaging or else.



PiP

1 **D190S4-HL Monochrome (High Luminance)**
MP **D190S4 Monochrome**

Modality Imaging Solutions

19-inch 1.3MP High-brightness Monochrome Monitor

D190S4 is a 19-inch 1.3mega-pixel monochrome imaging solution designed for the needs of modality application. Combined with a 12-bit image processing controller and a variety of display technologies and functions, the superb-quality monochrome LCD with a resolution of 1280x1024 and extremely high brightness at 1,000cd /m²(D190S4) · 1,300cd /m²(D190S4-HL) provides radiologists with high-quality monochrome image display in various radiology modalities.

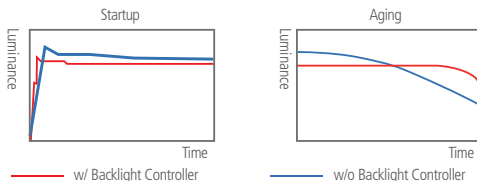


12 **12-bit LUT gray scale**
BIT

Brightness Leveling Technology by BLT sensor keeps the luminance stable and consistent at a certain desirable level over time, enabling true white balance and extension of backlight lifetime.

LUMI **Brightness Leveling Technology (BLT)**
BLT

Brightness Leveling Technology (BLT) is another luminance auto-sensing technology, which, installed at the backside of LCD module, maintains the brightness at the previously calibrated maximum luminance level(L_{max}), consistently providing JND(Just Noticeable Difference) level compliant image quality at each luminance steps and eventually reducing back light warm-up time and extending lifetime of the lamps.

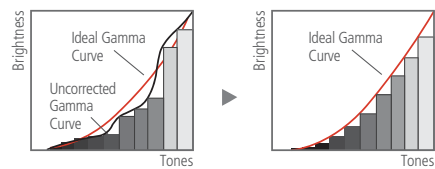


°C **Standard Color Temperature**
SHIFT

Plus to the color temperature D65 that enables graphic editing and endoscope image display at standard color tone, clear base and blue base mode in compliance with DICOM GSDF Part 14 enables CRT users to be immediately adapted to LCD monitors with no rejection symptoms.

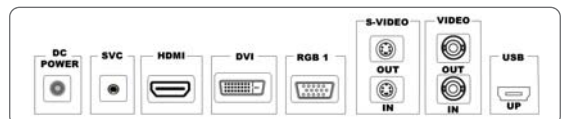
DICOM **DICOM GSDF**

Every DICOM mode incorporated monitors are initialized with the Look-up Table(LUT) that enables ideal DICOM image display through GSDF (Grayscale Standard Display Function) conforming to the standard of DICOM Part 14 and AAPM TG18.



MULTI SIGNAL **A variety of I/O Ports**

KOSTEC modality displays are designed to have the most connectivity with analog and digital signals for the user's various options.



3 yr **Warranty**
WARRANTY

KOSTEC and its authorized distributors offer a three-year limited warranty.

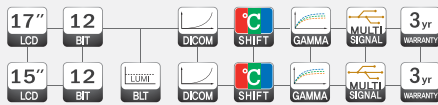
1 MP 170EX / 150EX Modality Imaging Solutions

1 MP High-brightness Color Imaging Solutions

15-inch, 17-inch 1MP color monitors are budget-efficient modality imaging solutions, which are with its comparatively higher brightness, ideal for C-arm X-ray, Angiography and Radiology imaging systems.

Incorporated with high-luminance LCD panels and versatile AD controller board processing 4,096 shades of DICOM-compliant grayscale, these monitors guarantees crisp and accurate image rendering and reliable performance.

Besides digital DVI and analog RGB signal, they are compatible with S-video and CVBS signals (BNC terminal).

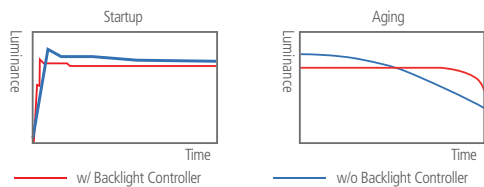


12 BIT 12-bit LUT gray scale

KOSTEC 12-bit high-performance controller is designed to achieve a crisp 4,096 shades of gray scale, reproducing perfect DICOM images.

BLT Brightness Leveling Technology (BLT)

Brightness Leveling Technology (BLT) is another luminance auto-sensing technology, which, installed at the backside of LCD module, maintains the brightness at the previously calibrated maximum luminance level (L_{max}), consistently providing JND (Just Noticeable Difference) level compliant image quality at each luminance steps and eventually reducing back light warm-up time and extending lifetime of the lamps.

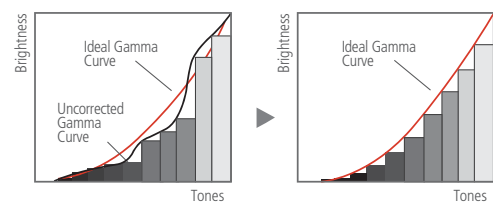


°C SHIFT Standard Color Temperature

Plus to the color temperature D65 that enables graphic editing and endoscope image display at standard color tone, clear base and blue base mode in compliance with DICOM GSDF Part 14 enables CRT users to be immediately adapted to LCD monitors with no rejection symptoms.

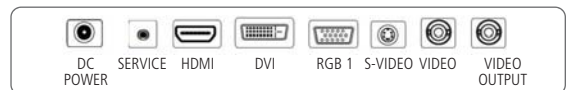
DICOM GSDF

Every DICOM mode incorporated monitors are initialized with the Look-up Table (LUT) that enables ideal DICOM image display through GSDF (Grayscale Standard Display Function) conforming to the standard of DICOM Part 14 and AAPM TG18.



MULTI SIGNAL A variety of I/O Ports

KOSTEC modality displays are designed to have the most connectivity with analog and digital signals for the user's various options.



3 yr WARRANTY Warranty

KOSTEC and its authorized distributors offer a three-year limited warranty.

Specifications



2 MP 20.1" Color D201U8 LED

Coming soon!



1 MP 19" Monochrome D190S4-HL



1 MP 19" Monochrome D190S4

Model		D201U8	D190S4-HL	D190S4
LCD Panel	Technology	20.1-inch TFT Color IPS mode [Kostec tune]	19-inch TFT Color IPS mode [CMI]	19-inch TFT Monochrome IPS mode [LG]
	Display Area	408.0(H)mm x 306.0(V)mm	376.32(H)mm x 301.056(V)mm	376.32(H)mm x 301.056(V)mm
	Pixel Pitch	0.255(H)mm x 0.255(V)mm	0.294(H)mm x 0.294(V)mm	0.294(H)mm x 0.294(V)mm
	Contrast Ratio	800 : 1 (Typ.)	1000 : 1 (Typ.)	900 : 1 (Typ.)
	Luminance (Max)	700 (cd/m ²)	1300 (cd/m ²)	1000 (cd/m ²)
	Viewing Angle	178(H) / 178(V)	-85~-85(H) / -85~-85(V)	170(H) / 170(V)
	Response Time	14ms (Tr+Tf) (Typ.)	28ms (Tr+Tf) (Typ.)	25ms (Tr+Tf) (Typ.)
Performance	Resolution	1600(H) x 1200(V) pixels	1280(H) x 1024(V) pixels	1280(H) x 1024(V) pixels
	Grayscale	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray
Signals	Input	HDMI, DVI, RGB, S-video, Video (BNC)	HDMI, Digital DVI, Analog RGB, S-Video, CVBS (BNC)	HDMI, DVI, RGB, CVBS (BNC)
	Output	Video (BNC) x 1	Video (BNC) X 1, S-Video	S-Video
	USB Hub	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x1 / downstream x 2	S-Vide, Video (BNC)
Power	Input	DC 24V 3.75A Max.	AC adapter 100V-240V 50/60Hz	DC 12V 7A Max.
	Consumption	55W (Typ.)	70W (Typ.)	43W Max.
Features	Calibration mode shift	6-phased calibration modes – CT/CR/ES/US/DSA/TEXT	4-phased calibration modes- CT/ES/US/TEXT	
	DICOM mode shift	4-phased one-touch shift – DICOM BLUE/ DICOM CLEAR/ 6500/ 9500	4-phased one touch shift – DICOM BLUE/ DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/ DICOM CLEAR/ 6500/ 9500
	Gamma mode shift	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0
Physical	OSD info display	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
	Touch Screen	Optional	Optional (P-CAP)	Optional
	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt (optional-Lift/Swivel/Pivot)
	Cabinet Color	Dark gary	Dark gary	Dark gary
	Weight	With stand: 7.5Kgs / With stand: 5.5Kgs	With stand: 7.5Kgs / With stand: 5.5Kgs	With stand: 7.5 Kgs / With stand: 5.5 Kgs
	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard
Certification	MDD(KC, CE, FCC, VCCI, UL)	TBD	MDD(KC, CE, FCC, VCCI, UL)	
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner			

* The specifications are subject to change without notice

Modality Display Specifications



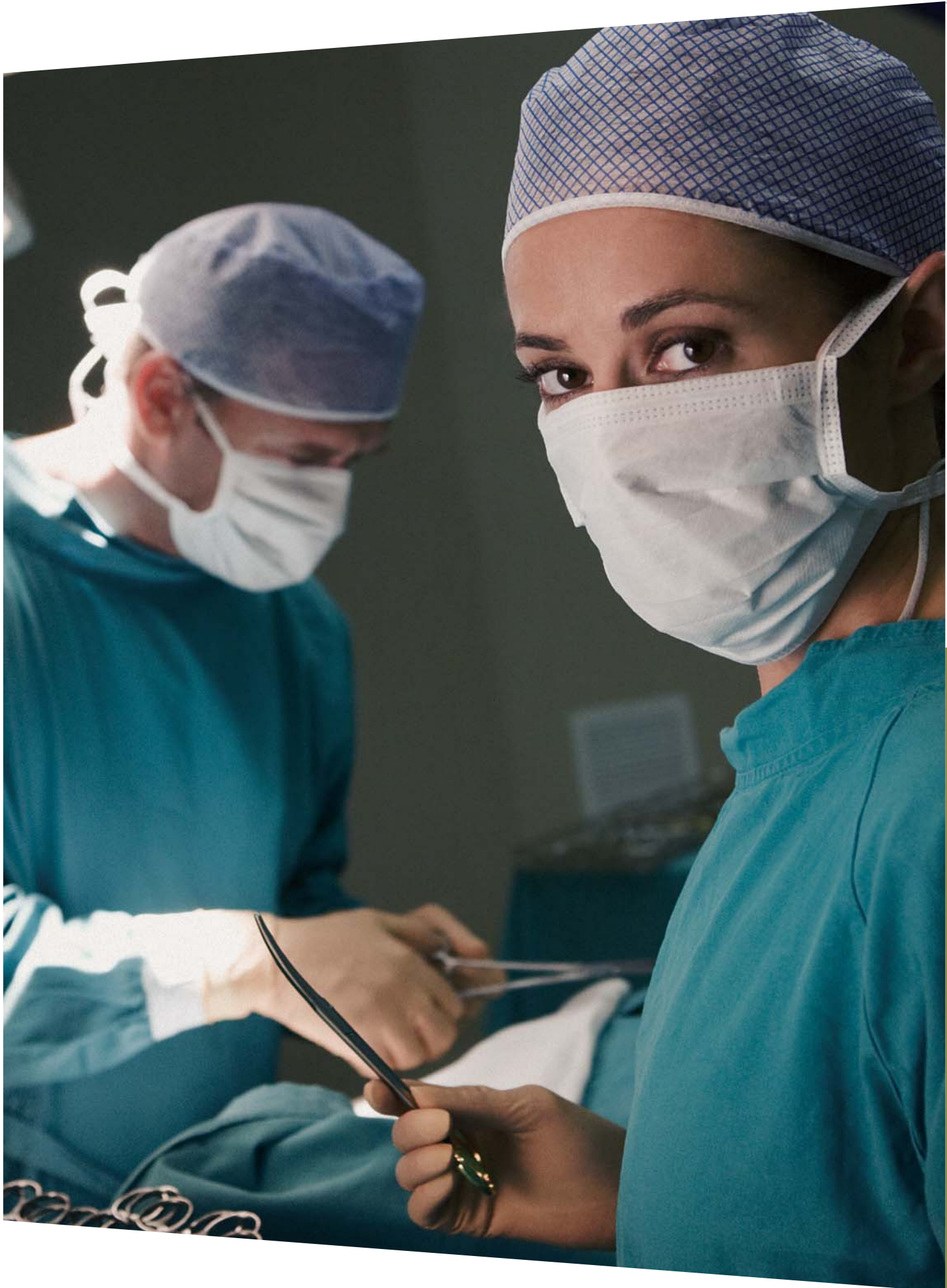
1 MP 17" Color
170EX
COLOR



1 MP 15" Color
150EX
COLOR

Model		170EX	150EX
LCD Panel	Technology	17-inch TFT Color TN mode [AUO]	15-inch TFT Color TN mode [AUO]
	Display Area	337.92(H)mm x 270.336(V)mm	304.128(H)mm x 228.096(V)mm
	Pixel Pitch	0.264(H)mm x 0.264(V)mm	0.297(H)mm x 0.297(V)mm
	Contrast Ratio	1000 : 1	500 : 1 (Typ.)
	Luminance (Max)	380 (cd/m ²)	550 (cd/m ²)
	Viewing Angle	170(H) / 160(V)	140(H) / 125(V)
	Response Time	5ms (Tr +Tf) (Typ.)	8ms (Tr+Tf) (Typ.)
Performance	Resolution	1280(H) x 1024 (V)	1024(H) x 768(V) pixels
	Grayscale	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray
Signals	Input	HDMI, DVI, RGB, S-video, Video (BNC)	HDMI, DVI, RGB, S-video, Video(BNC)
	Output	Video (BNC) x1	Video (BNC) x1
Power	Input	DC 12V 7A Max.	DC 12V 7A Max.
	Consumption	38W Max.	45W Max.
Features	DICOM mode shift	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500
	Gamma mode shift	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0
	OSD info display	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
Physical	USB Hub	N/A	N/A
	Color	Black	Black
	Stand	Tilt	Tilt
	Weight	With stand: 6.0 Kgs / With stand: 4.0 Kgs	With stand: 6.0 Kgs / With stand: 4.0 Kgs
	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard
Certification		TBD	MDD(CE)
Accessories		AC adapter, Power cord, DVI cable, Operation Manual, Warranty Certificate, Screen Cleaner	

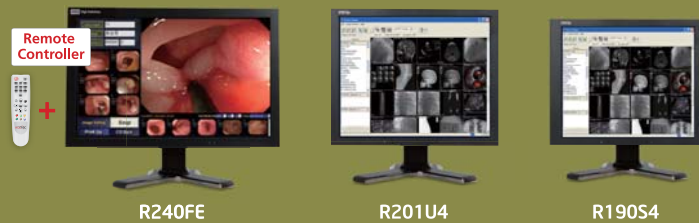
* The specifications are subject to change without notice





Clinical Review Displays

KOSTEC clinical review monitors are multi-purpose medical monitors designed for a variety of medical imaging application in most of hospital system such as Radiology, Pathology, Cardiology, Orthopedics, Emergency, outpatient Clinics, Dental Clinics, Private Clinics, etc. Incorporated with premium quality LCD panels and versatile image controller boards with a variety of digital/analog I/O ports.



R240FE

R201U4

R190S4

2 R240FE / R201U4 / R190S4 MP Clinical Review Displays



12 BIT 12-bit LUT gray scale

KOSTEC 12-bit high-performance controller is designed to achieve a crisp 4,096 shades of gray scale.

LUMI BLT Brightness Leveling Technology (BLT)

Brightness Leveling Technology (BLT) is another luminance auto-sensing technology, which, installed at the backside of LCD module, maintains the brightness at the previously calibrated maximum luminance level (L_{max}), consistently providing JND (Just Noticeable Difference) level compliant image quality at each luminance steps and eventually reducing back light warm-up time and extending lifetime of the lamps.

SHIFT Standard Color Temperature

Plus to the color temperature D65 that enables graphic editing and endoscope image display at standard color tone, clear base and blue base mode in compliance with DICOM GSDF part 14 enables CRT users to be immediately adapted to LCD monitors with no rejection symptoms.

SIZE Image Size Adjustment

Image Size can be adjusted to user's preference mode. Available modes are Auto, Fill All, Fill Aspect, Zoom, one to one.

PbP PiP / PbP

PbP & PiP function allows users to display two different images from two different sources (Digital/Analog), which is required when surgery and flexible endoscope are performed at once, or when endoscopic procedure is performed with ultrasound imaging or else.

DESIGN Ergonomic Design

The tilt, swivel, pivot and height adjustable stand offers ideal viewing position and comforts. VESA standard offers various mounting options.

CAL SHIFT Standard Gamma Curve Calibration Mode Hotkey (CMH)

According to various applications or user's environments, available are the variety of image display modes differentiated by various gamma curves such as the standard gamma 1.8 (old ver. Apple Mac), gamma 2.2 (IBM compatible & television), 2.0, 2.4, 2.6, 2.8, including custom-mode gamma. In case of diagnostic monitors or their equivalents, calibration mode hotkey (CMH) function is added to provide CR/DR mode for X-ray images including mammography, US mode for ultrasound images and CT mode. ES mode for endoscopic images is available for color displays.

CT Mode	US Mode	ES Mode	Text Mode
Brightness: 300cd/m ² Grayscale: DICOM GSDF	Brightness: 200cd/m ² Grayscale: CUSTOM	Brightness: 300cd/m ² Grayscale: gamma 2.2	Brightness: 150cd/m ² Grayscale: gamma 2.2

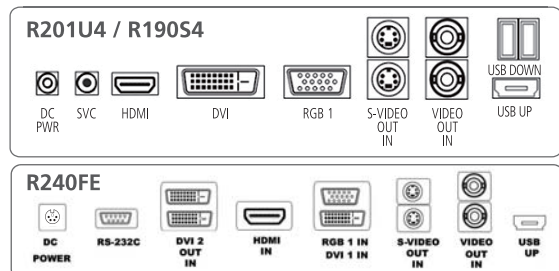
* This function is available for R201 only.

3yr WARRANTY Warranty

KOSTEC and its authorized distributors offer a three-year limited warranty.

MULTI SIGNAL A variety of I/O Ports & USB

This clinical review monitor is designed to have the most connectivity with analog and digital signals for wide applications.



Specifications

Clinical Display Specifications



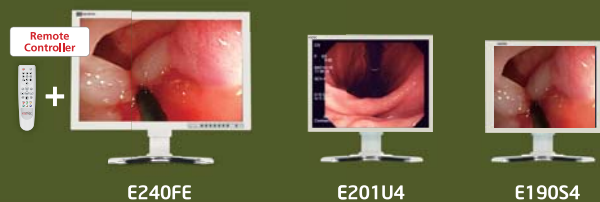
Model		R240FE	R201U4	R190S4
LCD Panel	Technology	24-inch TFT Color IPS mode [LG]	20.1-inch TFT Color IPS mode [LG]	19-inch TFT Color IPS mode [LG]
	Display Area	518.4(H)mm x 324(V)mm	408.0(H)mm x 306.0(V)mm	376.32(H)mm x 301.06(V)mm
	Pixel Pitch	0,270(H)mm x 0,270(V)mm	0,255(H)mm x 0,255(V)mm	0,294(H)mm x 0,294(V)mm
	Contrast Ratio	1000 : 1 (Typ.)	800 : 1 (Typ.)	800 : 1 (Typ.)
	Luminance (Max)	400(cd/m ²)	300(cd/m ²)	270(cd/m ²)
	Viewing Angle	178(H) / 178(V)	178(H) / 178(V)	178(H) / 178(V)
	Response Time	6ms (Gray to Gray)	8ms (Tr+Tf) (Typ.)	25ms (Tr+Tf) (Typ.)
Performance	Resolution	1920(H) x 1200(V) pixels	1600(H) x 1200(V) pixels	1280(H) x 1024(V) pixels
	Grayscale	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray
Signals	Input	HDMI, Digital DVIx2, RGB, S-Video, Video (BNC) x 1	HDMI, Digital, DVI, RGB, S-Video x 1	HDMI, Digital, DVI, RGB, S-Video, CVBS (BNC)
	Output	Video (BNC) x 1, S-Video, Digital DVI	Video (BNC) x 1, S-Video	Video (BNC) x 1, S-Video
Power	Input	DC 24V 6.25A Max.	DC 18V 5A Max.	DC 12V 7A Max.
	Consumption	98W Max.	70W Max.	42.6W Max.
Features	Calibration mode shift	N/A	4-phased calibration modes – CT/ES/US/TEXT	4-phased calibration modes – CT/ES/US/TEXT
	DICOM mode shift	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500
	Gamma mode shift	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0
	OSD info display	Operating time, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
	USB Hub	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2
	Touch Screen	Optional (Multi Touch P-cap Type)	Optional (SAW Type)	Optional (Multi Touch P-cap Type)
Physical	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
	Cabinet Color/Weight	Dark gary/Ivory / With stand : 8 Kgs / With stand : 6 Kgs	Dark gary/Ivory / With stand : 7.5 Kgs / With stand : 5.5 Kgs	Dark gary/Ivory / With stand : 7.5 Kgs / With stand : 5.5 Kgs
	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard
Certification	MDD(KC, CE, FCC, VCCI, UL), CB, FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)	
Remote Controller	Yes	N/A	N/A	
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	

* The specifications are subject to change without notice

Surgical Displays



The surgical displays have been developed for more special purposes such as rigid endoscope or surgical imaging display. According to various requirements, a variety of options such as protection level, screen filter by tempered glass or acryl board and touch screen are available.



Surgical Displays

Internal Medicine & Surgery Department

KT-E (R) series/MICS 42, 47, 55, 65, 72, 84-inch

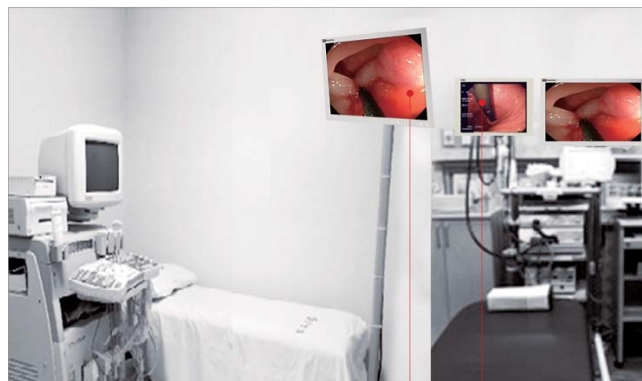
The best quality of the medical image view

Get all your needs for Internal Medicine & surgical working environment

OR & control chamber



Endoscopy and ultrasound room



• **E201U4/E190S4** •

It's just right size to be on the top of the surgical equipment tower displaying the précised surgical image in the correct resolution (1280X1024)for the single window of the surgical image.

• **E240FE** •

E240F4 designed with IPX5 water proof standard will be suitable for the operating environment and the surgeon's vision mostly requires the précised surgical image for blood vessel or internal organs.

• **M420FE/M470FE/M550FE/M650F4** •

Viewing the patient's various information in medical conference and full image display during the operation will emphasize the point of using the large screen in medical environment.

• **R240FE**

To view the PACS image with the patient's information chart at the same window, R240F4 has been designed for the operator's efficient use with convenience considering splitting windows in correct resolution.

• **R201U4**

Adopting the main purpose of use for the clinical review displays to the control chamber section, R201 will be highly recommended to view correctly the patient's diagnosed file from the diagnostic monitors in the reading room displaying patient's files in the same resolution (1600X1200) with diagnostic displays.

Medical conference & education



Clinic



2

MP

E240FE / E201U4 / E190S4

Surgical Endoscopy



12

BIT

12-bit LUT gray scale

KOSTEC 12-bit high-performance controller is designed to achieve a crisp 4,096 shades of gray scale.



Brightness Leveling Technology (BLT)

Brightness Leveling Technology(BLT) is another luminance auto-sensing technology, which, installed at the backside of LCD module, maintains the brightness at the previously calibrated maximum luminance level(L'max), consistently providing JND(Just Noticeable Difference)level compliant image quality at each luminance steps and eventually reducing back light warm-up time and extending lifetime of the lamps.



Standard Color Temperature

Plus to the color temperature D65 that enables graphic editing and endoscope image display at standard color tone, clear base and blue base mode in compliance with DICOM GSDF part 14 enables CRT users to be immediately adapted to LCD monitors with no rejection symptoms.



Image Size Adjustment

Image Size can be adjusted to user's preference mode. Available modes are Auto, Fill All, Fill Aspect, Zoom, one to one.



PiP / PbP

PbP & PiP function allows users to display two different images from two different sources (Digital/Analog), which is required when surgery and flexible endoscope are performed at once, or when endoscopic procedure is performed with ultrasound imaging or else.



Ergonomic Design

The tilt, swivel, pivot and height adjustable stand offers ideal viewing position and comforts. VESA standard offers various mounting options.



Standard Gamma Curve Calibration Mode Hotkey (CMH)

According to various applications or user's environments, available are the variety of image display modes differentiated by various gamma curves such as the standard gamma 1.8(old ver. Apple Mac), gamma 2.2 (IBM compatible & television), 2.0, 2.4, 2.6, 2.8, including custom-mode gamma. In case of diagnostic monitors or their equivalents, calibration mode hotkey(CMH) function is added to provide CR/DR mode for X-ray images including mammography, US mode for ultrasound images and CT mode. ES mode for endoscopy images is available for color displays.

CT Mode	US Mode	ES Mode	Text Mode
Brightness: 300cd/m ² Grayscale: DICOM GSDF	Brightness: 200cd/m ² Grayscale: CUSTOM	Brightness: 300cd/m ² Grayscale: gamma 2.2	Brightness: 150cd/m ² Grayscale: gamma 2.2

* This function is available for R201 only.



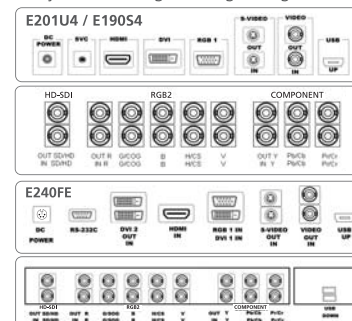
3yr Warranty

KOSTEC and its authorized distributors offer a three-year limited warranty.



A variety of I/O Ports & USB

This clinical review monitor is designed to have the most connectivity with analog and digital signals for wide applications.



Specifications

Surgical Display Specifications



Model		E240FE	E201U4	E190S4
LCD Panel	Technology	24-inch TFT Color IPS mode [LG]	20.1" Color IPS mode [LG]	19" Color IPS mode [LG]
	Display Area	518.4(H)mm x 324(V)mm	408.0(H) x 306.0(V)mm	376.32(H) x 301.06(V)mm
LCD Panel	Pixel Pitch	0.270(H)mm x 0.270(V)mm	0.255(H) x 0.255(V)mm	0.294(H) x 0.294(V)mm
	Contrast Ratio	1000 : 1 (Typ.)	800 : 1 (Typ.)	800 : 1 (Typ.)
	Luminance (Max)	400(cd/m ²)	300(cd/m ²)	270(cd/m ²)
	Viewing Angle	178(H) / 178(V)	178(H) / 178(V)	178(H) / 178(V)
Performance	Response Time	6ms (Gray to Gray)	8ms (Tr+Tf) (Typ.)	25ms (Tr+Tf) (Typ.)
	Resolution	1920(H) x 1200(V) pixels	1600(H) x 1200(V) pixels	1280(H) x 1024(V) pixels
Input Signals	Grayscale	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray
	Service	RS232C x 1 for Service port	Ear Jack x 1 for Service port	Ear Jack x 1 for Service port
	HDMI Input	HDMI Jack x 1 (typeA) for Digital RGB: TMDS Max: 1080p, 1920x1200/60Hz (WUXGA)	HDMI Jack x 1 (typeA) for Digital RGB: TMDS Max: 1080p, 1600x1200/60Hz (UXGA)	HDMI Jack x 1 (typeA) for Digital RGB: TMDS Max: 1080p, 1600x1200/60Hz (UXGA)
	DVI Input	DVI Jack x 2 (type D) for Digital RGB: TMDS Max: 1080p, 1920x1200 / 60Hz(WUXGA)	DVI Jack x 1 (type D) for Digital RGB: TMDS Max: 1080p, 1600x1200 / 60Hz(UXGA)	DVI Jack x 1 (type D) for Digital RGB: TMDS Max: 1080p, 1600x1200 / 60Hz(UXGA)
	RGB Input	D-sub Jack x 1/BNC Jax x 1for Analog RGB: 0.7V[p-p](75Ω), H/CS/V:TTL(2.2kΩ), SOG: 1V[p-p](75Ω) Max: 1920x1200 / 60Hz(WUXGA)	D-sub Jack x 1/BNC Jax x 1for Analog RGB: 0.7V[p-p](75Ω), H/CS/V:TTL(2.2kΩ), SOG: 1V[p-p](75Ω) Max: 1600x1200 / 60Hz(UXGA)	D-sub Jack x 1/BNC Jax x 1for Analog RGB: 0.7V[p-p](75Ω), H/CS/V:TTL(2.2kΩ), SOG: 1V[p-p](75Ω) Max: 1600x1200 / 60Hz(UXGA)
	HD - SDI Input	BNC Jack x 1 for Serial Input Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz	BNC Jack x 1 for Serial Input Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz	BNC Jack x1 for Serial Input Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz
	Component Input	BNC Jack x 1 for Y:1V[p-p](75Ω), Pb/Cb: 0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p	BNC Jack x 1 for Y:1V[p-p](75Ω), Pb/Cb: 0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p	BNC Jack x 1 for Y:1V[p-p](75Ω), Pb/Cb: 0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p
	S-video Input	Mini DIN Jack x 1(4pin) for Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y: 1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]	Mini DIN Jack x 1(4pin) for Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y: 1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]	Mini DIN Jack x1 (4pin) for Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y: 1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]
	Video Input	BNC Jack x 1 for 1V[p-p](75Ω) [NTSC/PAL/SECAM]	BNC Jack x 1 for 1V[p-p](75Ω) [NTSC/PAL/SECAM]	BNC Jack x 1 for 1V[p-p](75Ω) [NTSC/PAL/SECAM]
	Output Signals	DVI Output	DVI Jack x1 (type D) for Digital RGB: TMDSMax: 1080p, 1920x1200 / 60Hz(WUXGA)	N/A
RGB Output		Analog RGB: 0.7V[p-p](75Ω), H/CS/V: TTL(2.2kΩ), SOG:1V[p-p](75Ω) Max:1920x1200 /60Hz(UXGA)	Analog RGB: 0.7V[p-p](75Ω), H/CS/V : TTL(2.2kΩ), SOG:1V[p-p](75Ω) Max: 1600x1200 / 60Hz(UXGA)	Analog RGB: 0.7V[p-p](75Ω), H/CS/V : TTL(2.2kΩ), SOG:1V[p-p](75Ω) Max: 1600x1200 / 60Hz(UXGA)
HD - SDI Output		1920 Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz	Serial Input Common Mode: 2.2 V[p-p](75Ω) Max:1920x1080/60Hz	Serial Input Common Mode: 2.2 V[p-p](75Ω) Max:1920x1080/60Hz
Component Output		Y:1V[p-p](75Ω), Pb/Cb:0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p	Y:1V[p-p](75Ω), Pb/Cb:0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p	Y:1V[p-p](75Ω), Pb/Cb:0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p
S-video Output		Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y: 1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL / SECAM]	Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y:1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]	Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y:1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]
Video Output		1V[p-p](75Ω) [NTSC / PAL / SECAM]	1V[p-p](75Ω) [NTSC / PAL / SECAM]	1V[p-p](75Ω) [NTSC / PAL / SECAM]
Power	Input	DC 24V 6.25A Max.	DC 18V 5A Max.	DC 12V 7A Max.
	Consumption	98W Max.	70W Max.	43W Max.
Features	Calibration mode	N/A	Calibration mode, Gamma shift	Calibration mode, Gamma shift
	OSD info display	Operating time, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
	Touch Screen	Optional	Optional	Optional
	USB Hub	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x1 / downstream x 2
Physical	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
	Cabinet Color/Weight	White / 8kg / 6kg	White / With stand: 7.5 Kgs / Without stand: 5.5 Kgs	White / With stand: 7.5 Kgs / Without stand: 5.5 Kgs
Certification	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard
		DD(KC, CE, FCC, VCCI, UL), CB, FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner			

* The specifications are subject to change without notice





Medical Image Consulting System

Medical Image Consulting System is unique medical imaging solution designed for the needs of extra-large sized imaging display in a variety of medical environments, which are applicable to various medical environments as medical conference, PACS, surgical monitoring, medical presentation and information.

Features

Medical Image Consulting System

2
MP

Informatic M420F4 / M470F4 / M550F4 / M650F4 / M720F4 / M840Z5
Surgical M420FE / M470FE / M550FE / M650FE / M720FE / M840Z5

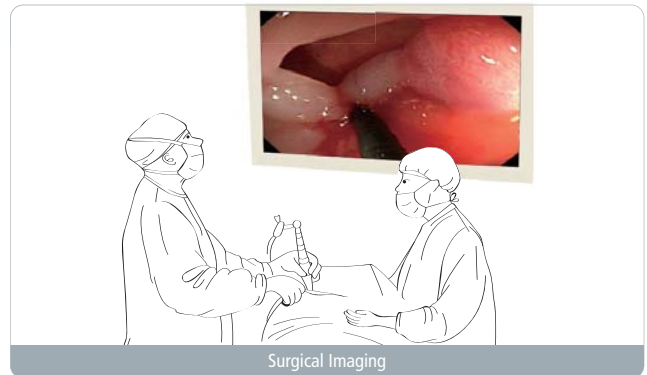
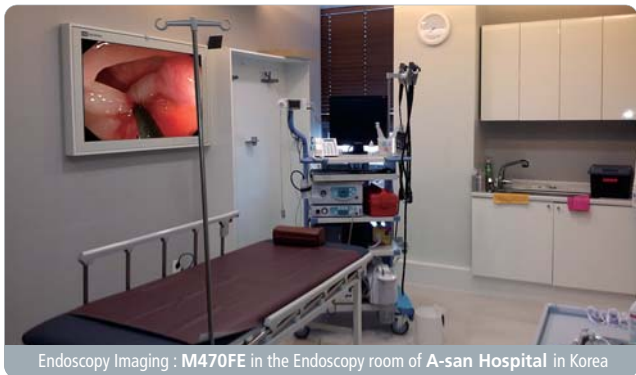
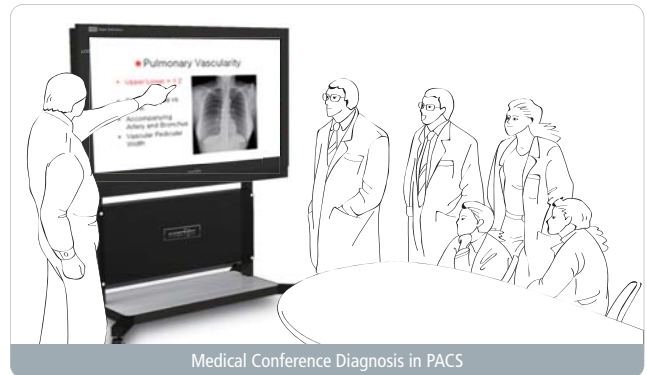
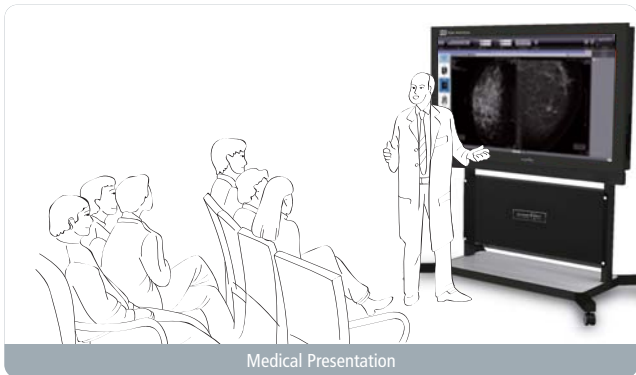
42, 47, 55, 65, 72-inch Full HD Color
84-inch UHD (Ultra High-Definition) Color

Full HD Medical Imaging Solution DICOM GSDF 12-bit LUT compliant display

Medical Image Consulting System Theater Displays are unique medical imaging solution designed for the needs of extra-large sized imaging display in a variety of medical environments, which are applicable to various medical environments as medical conference, visual / audio education, surgical monitoring, medical presentation and information, PACS image viewing system, etc. The ruggedized housing design with a built-in PC and the infrared touch operating system(optional) and the wide connectivity with a variety of analog / digital input/output terminals provide medical experts with much more applications.



Applications





12-bit DICOM LUT gray scale



In compliance with the DICOM 3.14 Look-up Table, MICS is designed as a medical image viewing system that can be applied in various hospital environments such as PACS, HIS, RIS, etc.



High-brightness (700cd/m²) - (M650FE, M650F4, M720FE, M720F4)

Unlike those commercial information displays that normally use general TV panels with about 400 cd/m², MID applies a superb quality industrial-purpose LCD panel with a high-brightness at 700cd/m² so provides crisp medical images even in semi-outdoor environments in hospital.



Window PC system Inside (Optional)

Incorporated with the latest-version PC system, MICS provides a utility value as a large-sized medical image viewing system in PACS, HIS, RIS etc.



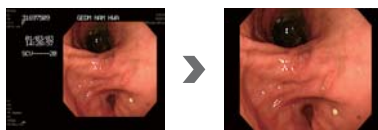
Infrared Rays Touch Screen

The infrared rays touch screen control mode maximizes the efficient value of the super-sized display machine with its unique functions such as zoon-in/out, drag, image rotation, electro writing, etc. Plus, unlike the capacitive overlay or resistive overlay mode that requires a certain level of surface pressure on the screen, the infrared rays touch screen mode is the most outstanding in the point of durability and senses even touch by gloved fingers and such objects. When it is utilized with the electro-writing application, its ultimate uses as a medical information display system, a video conference system, a presentation system and an education system is completed.



Image Size Adjustment

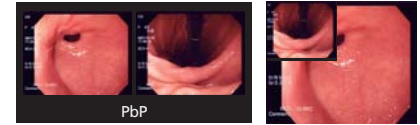
Image Size can be adjusted to user's preference mode. Available modes are Auto, Fill All, Fill Aspect, Zoom, one to one.



PiP / PbP



PbP & PiP function allow users to display two different images from two different sources (Digital/Analog), which is required when surgery and flexible endoscope are performed at once, or when endoscopic procedure is performed with ultrasound imaging or else.



Standard Color Temperature

Plus to the color temperature D65 that enables graphic editing and endoscope image display at standard color tone, clear base and blue base mode in compliance with DICOM GSDF Part 14 enables CRT users to be immediately adapted to LCD monitors with no rejection symptoms.



Warranty

KOSTEC and its authorized distributors offer a three-year limited warranty.

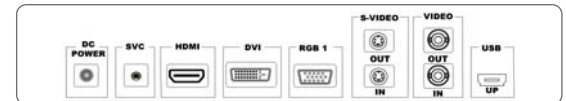


Connectivity with a variety of signal I/O ports

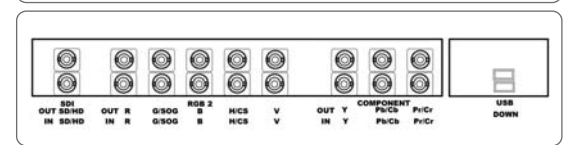
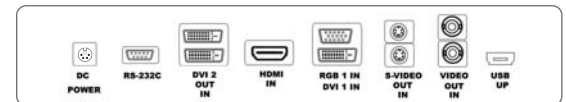


Equipped with various analog and digital signal I/O ports inclusive of the analog BNC ports for RGB, CVBS video and components, MICS can be applicable even in the modality systems such as X-ray, endoscope and ultrasound imaging system, as well as PACS, HIS and RIS.

Informatic



Surgical



WALL & STAND & CEILING MOUNT



PSW 501ST (WALL)



PC-D (CEILING)

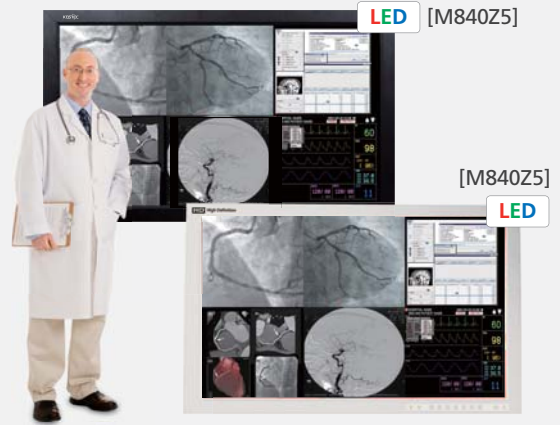


8
MP

M601Z5 / M840Z5

60.1-inch / 84-inch Ultra-High Definition Color Display

As medical environments are getting more modernized, demand for visualized information is growing bigger, and, as the visualized information is getting more diversified, extremely large sized high-resolution display management system is required for integrated multi-image consulting in every imaging environments such as vascular interventional radiology rooms, control rooms and even operating rooms.



Integrated Seamless Multi-imaging



6 split image



Video Routing System

As KOSTEC provides clients big inch screens for their more efficient use in surgical environment, the video routing system will be offered as the combination with displays to maximize the efficiency and the purpose of multi-display image process splitting windows in correct resolution.



Video Scalers



Universal Input Seamless Switcher

Applications

Vascular Interventional Radiology Imaging Solution

High-resolution Multi-image Information for Diagnostic Confidence and Operational Efficiency

Integrated high-resolution image information helps surgical experts to perform operation with more efficiency and more confidence. This multi-image consulting system integrates high-resolution images seamlessly from X-ray, CT, MRI, Ultrasound or other imaging modalities, providing interventional radiologists ever accurate diagnostic information.



Integrated Seamless Multi-image at a Single View

Various modality images seamlessly integrated in the extremely high-resolution display transfer overall information to interventional radiologists at a single glance.



Control Room Imaging Solution

Functional Extension of Control Room

This centralized multi-image information system will expand function of the control room, which will contribute to operational efficiency and result in the operation room.



Operating Room Imaging Solution

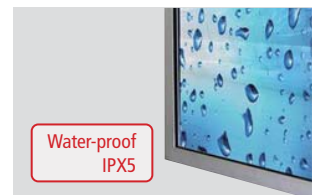
PACS Image Extension to Operating Environments

DICOM compliant modality images from PACS (Picture Archiving and Communication System) are extended to the surgical operation imaging system as a reference image information. Various modality or PACS images seamlessly split next to the surgical image will contribute for the surgeon's diagnostic confidence and operational efficiency.



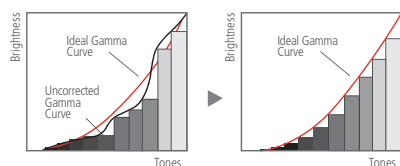
Protection Glass and Waterproof Housing

For the sake of hygienic purpose and safety, this multi-image display unit comes with anti-glare tempered glass and robust housing for protection from water drops, disinfectants and damages.

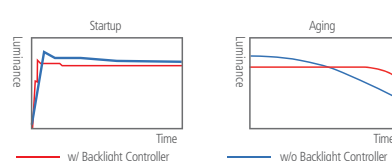


Features

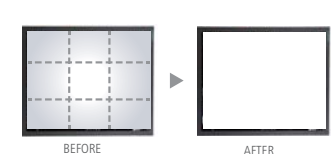
DICOM GSDF



Brightness Leveling Technology (BLT)



15 Mega Sub-Pixels Control (SPC)



CAL SHIFT GAMMA Standard Gamma Curve Calibration Mode Hotkey (CMH)

DUAL LINK DVI Dual Link DVI input

GLASS Protection Glass

LAN Network Calibration Management System

SHIFT Standard Color Temperature

Specifications

Medical Image Consulting System Specifications

Surgical + Remote Controller (M420FE / M470FE / M550FE) & Touch Screen (Option) & **PC INSIDE** (Option) & Water-proof IPX5 & LED

M420FE (42" Color) **M470FE** (47" Color) **M550FE** (55" Color)

Model	M420FE	M470FE	M550FE
Panel	42-inch TFT LCD Color Display [LG]	47-inch TFT LCD Color Display [LG]	55-inch TFT LCD Color Display [LG]
Display Mode	Transmissive mode Normally Black	Transmissive mode Normally Black	Transmissive mode Normally Black
Resolution	1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)
Contrast Ratio	1300 : 1 (Typ.)	1300 : 1 (Typ.)	1300 : 1 (Typ.)
Active Area	930.24(H) x 523.26(V)	1039.68(H) x 584.82(V)	1209.6(H) x 680.4(V)
Pixel Pitch	0.4845(H) x 0.4845(V) [mm]	0.5414(H) x 0.5414(V) [mm]	0.630(H) x 0.630(V) [mm]
Luminance (cd/m ²)	450 (cd/m ²) White Lumi @ LED	450 (cd/m ²) White Lumi @ LED	450 (cd/m ²) White Lumi @ LED
Response Time	9ms (Typ. Tr+Tf)	9ms (Typ. Tr+Tf)	9ms (Typ. Tr+Tf)
Viewing Angle	178° / 178° (H/V)	178° / 178° (H/V)	178° / 178° (H/V)
Aspect Ratio	16 : 9	16 : 9	16 : 9
Frequency	67.8 KHz (H) / 60 Hz (V)	67.8 KHz (H) / 60 Hz (V)	67.10 KHz (H) / 60 Hz (V)
Color Depth	1.06 Billion (10-bit)	1.06 Billion (10-bit)	1.06 Billion (10-bit)
Touch Screen(option)	Infrared rays detection mode Typical centroid accuracy 2mm	Infrared rays detection mode Typical centroid accuracy 2mm	Infrared rays detection mode Typical centroid accuracy 2mm
Input terminals	RS232C Jack x 1 for service port HDMI input x 1 DVI input x 2 HD - SDI input x 1 RGB input (D-sub x 1/ BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)	RS232C Jack x 1 for service port HDMI input x 1 DVI input x 2 HD - SDI input x 1 RGB input (D-sub x 1/ BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)	RS232C Jack x 1 for service port HDMI input x 1 DVI input x 2 HD - SDI input x 1 RGB input (D-sub x 1/ BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)
Output terminals	DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)	DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)	DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)
General	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (w/o stand): TBD (mm) Weight (w/o stand): TBD (Kgs)	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (w/o stand): TBD (mm) Weight (w/o stand): TBD (Kgs)	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (w/o stand): TBD (mm) Weight (w/o stand): TBD (Kgs)
Environmental Conidions	Temp.(operational/ storage):5~35 °C Humidity (operational/ storage): 35~75%	Temp.(operational/ storage):5~35 °C Humidity (operational/ storage): 35~75%	Temp.(operational/ storage): 5~35 °C Humidity (operational/ storage): 35~75%
Certification	CE	CE	CE
PC (option)	optional on buyer's requirement		

* The specifications are subject to change without notice



2 MP 65" Color M650FE



2 MP 72" Color M720FE



8 MP 84" Color M840Z5

M650FE	M720FE	M840Z5
65-inch TFT LCD Color Display [AUO]	72-inch TFT LCD Color Display [LG]	84-inch TFT LCD Color Display [LG]
Transmissive mode Normally Black	Transmissive mode Normally Black	Transmissive mode Normally Black
1920(H) x 1080(V)	1920(H) x 1080(V)	3840(H) x 2160(V)
4000 : 1 (Typ.)	1100 : 1 (Typ.)	1600 : 1 (Typ.)
1428.48(H) x 803.52(V)	1595.52(H) x 897.48(V)	1860.48(H) x 1046.52(V)
0.807(H) x 0.807(V) [mm]	0.831(H) x 0.831(V) [mm]	0.4845(H) x 0.4845(V) [mm]
700 (cd/m ²) White Lumi @ CCFL	700(cd/m ²) White Lumi @ LED	500 (cd/m ²) White Lumi @ LED
8 ms (Typ. Tr+Tf)	12 ms (Typ. Tr+Tf)	5 ms (Typ. Tr+Tf)
178° / 178° (H/V)	178° / 178° (H/V)	178° / 178° (H/V)
16 : 9	16 : 9	16 : 9
71.51KHz (H) / 63Hz (V)	71.51KHz (H) / 60Hz (V)	71.51KHz (H) / 60Hz (V)
1.07 Billion (10-bit)	16.7M (8-bit)	1.06 Billion (10-bit)
Infrared rays detection mode Typical centroid accuracy 2mm	Infrared rays detection mode Typical centroid accuracy 2mm	Infrared rays detection mode Typical centroid accuracy 2mm
RS232C Jack x 1 for service port HDMI input x 1 DVI input x 1 HD - SDI input x 1 RGB input (D-sub x 1/ BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)	RS232C Jack x 1 for service port HDMI input x 1 DVI input x 1 HD - SDI input x 1 RGB input (D-sub x 1/ BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)	DP input x 2 DVI input x 2
DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)	DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)	N/A
100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (w/o stand): TBD (mm) Weight (w/o stand): TBD (Kgs)	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (w/o stand): TBD (mm) Weight (w/o stand): TBD (Kgs)	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (w/o stand): TBD (mm) Weight (w/o stand): TBD (Kgs)
Temp.(operational/ storage) : 5~35 °C Humidity (operational/ storage) : 35~75%	Temp.(operational/ storage) : 5~35 °C Humidity (operational/ storage) : 35~75%	Temp.(operational/ storage) : 5~35 °C Humidity (operational/ storage) : 35~75%
CE	CE	CE
optional on buyer's requirement		

* The specifications are subject to change without notice

Specifications

Medical Image Consulting System Specifications

Informatic +

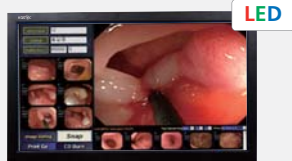


&

Touch Screen (Option)



&



2 MP 42" Color M420F4 LED



2 MP 47" Color M470F4 LED



2 MP 55" Color M550F4 LED

Model	M420F4	M470F4	M550F4
Display			
Panel	42-inch TFT LCD Color Display [LG]	47-inch TFT LCD Color Display [LG]	55-inch TFT LCD Color Display [LG]
Aspect ratio	16 : 9	16 : 9	16 : 9
Resolution	1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)
Pixel Pitch	0.4845(H) x 0.4845(V) [mm]	0.5414(H) x 0.5414(V) [mm]	0.630(H) x 0.830(V) [mm]
Displayable Colors	1.06 Billion (10-bit)	1.06 Billion (10-bit)	1.06 Billion (10-bit)
Brightness	450 (cd/m ²) White Lumi @ LED	450 (cd/m ²) White Lumi @ LED	450 (cd/m ²) White Lumi @ LED
Contrast Ratio	1300 : 1 (Typ.)	1300 : 1 (Typ.)	1300 : 1 (Typ.)
Display Mode	Transmissive mode Normally Black	Transmissive mode Normally Black	Transmissive mode Normally Black
Response Time (Typical)	9ms (Typ. Tr+Tf)	9ms (Typ. Tr+Tf)	9ms (Typ. Tr+Tf)
Viewing Angle(H/V)	178° / 178° (H/V)	178° / 178° (H/V)	178° / 178° (H/V)
Touch Screen	Optional	Optional	Optional
In / Out Terminals			
Speaker Output	External Speaker	External Speaker	External Speaker
Service	Ear Jack x 1	Ear Jack x 1	Ear Jack x 1
HDMI Input	HDMI Jack x (Type A) [For Built in PC]	HDMI Jack x (Type A) [For Built in PC]	HDMI Jack x (Type A) [For Built in PC]
DVI Input	DVI Jack x 1 (Type D)	DVI Jack x 1 (Type D)	DVI Jack x 1 (Type D)
RGB Input	D-Sub Jack x 1 BNC Jack x1	D-Sub Jack x 1 BNC Jack x1	D-Sub Jack x 1 BNC Jack x1
RGB Output	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
HD - SDI Input	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
HD - SDI Output	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
Component Input	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
Component Output	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
S-Video Input	Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)
S-Video Output	Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)
Video Input	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
Video Output	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
Audio Input	Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built in PC]	Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built in PC]	Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built in PC]
Audio Output	Ear Jack x 1	Ear Jack x 1	Ear Jack x 1
General			
Power Supply	AC 100V ~ 240V, 50/60Hz		
Power Consumption (Typical)	TBD		
Dimensions (Without Stand)[W mm x H mm x D mm]	TBD		
Weight (Without Stand)	TBD		
Environment Condition			
Temperature	Operational	5 ~ 35 °C	
	Storage	5 ~ 35 °C	
Humidity	Operational	35 ~ 75 %	
	Storage	35 ~ 75 %	
BUILT-IN PC (Optional)	Specifications	optional on buyer's requirement	
	Certifications	TBD	
Accessories	Standard	Owner's Instruction, Power Cord, Windows7(English)	
	Optional	Table Top Stand, Wall-Mount Bracket , Ceiling-Mount Bracket, HDMI Cable, DVI Cable, VGA D-SUB Cable, VGA BNC Cable, SDI BNC Cable, Component BNC Cable, S-Video Cable, Video BNC Cable, Audio Cable, Wireless Keyboard/Mouse, Speaker	

* The specifications are subject to change without notice

Medical Image Consulting System



M650F4	M720F4	M840Z5
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65-inch TFT LCD Color Display [AUO]	72-inch TFT LCD Color Display [LG]	84-inch TFT LCD Color Display [LG]
16 : 9	16 : 9	16 : 9
1920(H) x 1080(V)	1920(H) x 1080(V)	3840(H) x 2160(V)
0.807(H) x 0.807(V) [mm]	0.802(H) x 0.802(V) [mm]	0.4845(H) x 0.4845(V) [mm]
1.07 Billion (10-bit)	16.7M (8-bit)	1.06 Billion (10-bit)
700 (cd/m ²) White Lumi @ CCFL	700(c/d/m ²) White Lumi @ LED	500(c/d/m ²) White Lumi @ LED
4000 : 1 (Typ.)	1100 : 1 (Typ.)	1600 : 1 (Typ.)
Transmissive mode Normally Black	Transmissive mode Normally Black	Transmissive mode Normally Black
8 ms (Typ. Tr+Tf)	12 ms (Typ. Tr+Tf)	5 ms (Typ. Tr+Tf)
178° / 178° (H/V)	178° / 178° (H/V)	178° / 178° (H/V)
Infrared rays Detection Typical centroid accuracy 2mm	Infrared rays Detection Typical centroid accuracy 2mm	Infrared rays Detection Typical centroid accuracy 2mm

External Speaker	External Speaker	External Speaker
Ear Jack x 1	Ear Jack x 1	
HDMI Jack x (Type A) [For Built in PC]	HDMI Jack x (Type A) [For Built in PC]	DP Jack x 2
DVI Jack x 1 (Type D)	DVI Jack x 1 (Type D)	DVI Jack x 2 (Type D)
D-Sub Jack x 1 BNC Jack x 1	D-Sub Jack x 1 BNC Jack x1	
BNC Jack x 1	BNC Jack x 1	
BNC Jack x 1	BNC Jack x 1	
BNC Jack x 1	BNC Jack x 1	
BNC Jack x 1	BNC Jack x 1	
BNC Jack x 1	BNC Jack x 1	
Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)	
Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)	
BNC Jack x 1	BNC Jack x 1	
BNC Jack x 1	BNC Jack x 1	
Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built in PC]	Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built in PC]	Ear Jack x 1 [For External Input] Ear Jack x 1 [For Built in PC]
Ear Jack x 1	Ear Jack x 1	Ear Jack x 1

AC 100V ~ 240V, 50/60Hz
TBD
TBD
TBD

5 ~ 35 °C
5 ~ 35 °C
35 ~ 75 %
35 ~ 75 %

optional on buyer's requirement	TBD
CE, CB, CCC	TBD
Remote Controller, Owner's Instruction, Power Cord, Windows7(English)	Owner's Instruction, Power Cord, Windows7(English)

Table Top Stand, Wall-Mount Bracket , Ceiling-Mount Bracket, HDMI Cable, DVI Cable, VGA D-SUB Cable, VGA BNC Cable, SDI BNC Cable, Component BNC Cable, S-Video Cable, Video BNC Cable, Audio Cable, Wireless Keyboard/Mouse, Speaker

* The specifications are subject to change without notice

Ultrasound Imaging Custom-Solution

1
MP

2
MP

GCMM Gray & Chroma Mapping Method PATENT [1-1-2010-0789429-48]

Ultrasound Imaging Custom-Solution



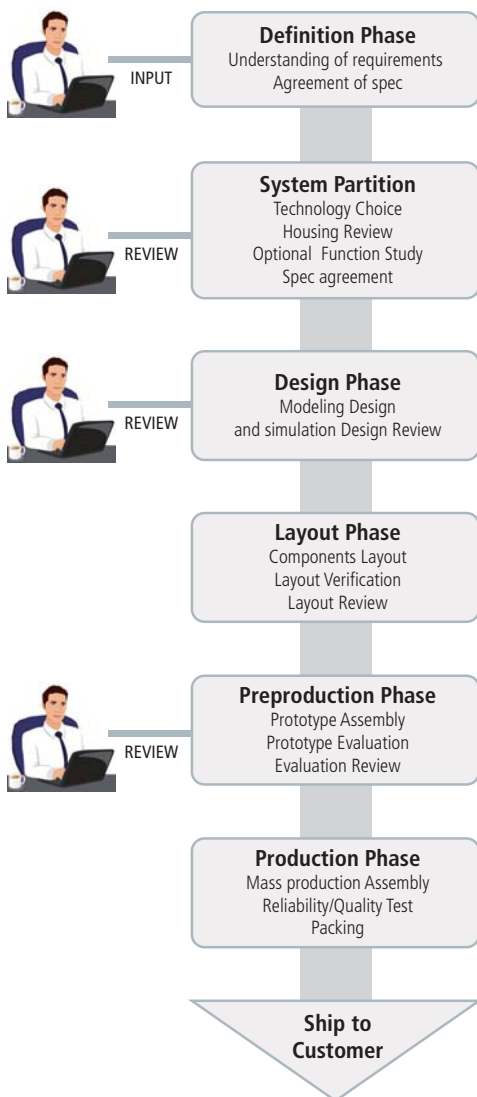
Turnkey Custom-solution; from design to manufacturing

KOSTEC provides the clients custom-made turnkey solution, which implies a series of services from design to manufacturing. In particular, custom-made solution of the main/sub display module including cabinet mold design is one of the key specializations. KOSTEC has long and wide experience in developing LCD display modules of ultrasound imaging systems.

With its well-organized domestic and global sourcing networks for major components including LCD panels and the integrated R&D capabilities for software & hardware solutions, Kostec is committed to providing high-quality custom-made services.

Just call or email us for a detailed consultation and shape up your ideas.

Workflow Diagram



Specialized Area

We have many years of successful experience in the following fields:

- Development of custom design main/sub display module for ultrasound equipment
- Development of custom design monitor for radiology modalities
- Development of open-frame display devices
- Development of ruggedized display solutions

Workflow

Every work flows on the basis of a standard time and process-based schedule and every process is thoroughly documented for accuracy and clarity of the costs and quality management. We can get involved at any stage of the standard workflow, helping the client to achieve the goal.

- Firstly, we receive the client's inquiry and understand the requirements in detail. Every information from the client is kept in confidence on a non-disclosure agreement (NDA).
- We analyze and study the requirements and, in close cooperation with the client, approach a preliminary conclusion in respect of technology, time and cost within a week.
- On agreement in terms of the specification, time and price, our R&D system gets sub-systematized in no time into a number of subsystem for the fractionation of the work process. The sub-systematized development process is integrated for a final solution.
- Every intermediate outcome is tested and verified by our quality assurance department and thus any potential problem is removed or corrected.

The only and dedicated ultrasound image calibration method for accuracy and consistency

Why GCMM ?

GCMM is a patent software-wise technical solution developed by KOSTEC for achievement of accurate ultrasound image display. As a new calibration technology dedicated for ultrasound imaging, GCMM, Gray & Chroma Mapping Method, has been developed to overcome technical limits of the existing calibration methods, ultimately creating ideal ultrasound image quality.

Product Summary

Product Summary

Diagnostic

MODALION (D213 Series)

● 213 Series(21.3 inch)



5
UP
21.3"
Monochrome
D213V5E
14
EPEAT
5yr



3
UP
21.3"
Monochrome
D213Q5E
14
EPEAT
5yr



3
UP
21.3"
Color
D213Q5
14
EPEAT
5yr



2
UP
21.3"
Monochrome
D213U5E
14
EPEAT
5yr



2
UP
21.3"
Color
D213U5
14
EPEAT
5yr

Model		D213V5E	D213Q5E	D213Q5	D213U5E	D213U5
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [CMI]	21.3-inch TFT Monochrome IPS mode [NLT]	21.3-inch TFT Color IPS mode [NLT]	21.3-inch TFT Monochrome IPS mode [NLT]	21.3-inch TFT Color IPS mode [NLT]
	Display Area	422.4(H)mm x 337.9(V)mm	433.152(H)mm x 324.864(V)mm	433.152(H)mm x 324.864(V)mm	432.0(H)mm x 324.0(V)mm	432.0(H)mm x 324.0(V)mm
	Pixel Pitch	0.165(H)mm x 0.165(V)mm	0.2115(H)mm x 0.2115(V)mm	0.2115(H)mm x 0.2115(V)mm	0.270(H)mm x 0.270(V)mm	0.270(H)mm x 0.270(V)mm
	Contrast Ratio	850 : 1 (Typ.)	900 : 1 (Typ.)	700 : 1 (Typ.)	850 : 1 (Typ.)	1050 : 1 (Typ.)
	Luminance (Max)	1100 (cd/m ²) / Default=500 (cd/m ²) or custom	1450 (cd/m ²)	800 (cd/m ²) / Default=500 (cd/m ²) or custom	1650 (cd/m ²)	860 (cd/m ²) / Default=500 (cd/m ²) or custom
	Viewing Angle	170(H) / 170(V)	176(H) / 176(V)	176(H) / 176(V)	170(H) / 170(V)	176(H) / 176(V)
Performance	Response Time	36ms (Tr +Tf) (Typ.)	27ms (Tr +Tf) (Typ.)	35ms (Tr +Tf) (Typ.)	23ms (Tr +Tf) (Typ.)	35ms (Tr +Tf) (Typ.)
	Resolution	2560(H) x 2048(V) pixels	2048(H) x 1536(V) pixels	2048(H) x 1536(V) pixels	1600(H) x 1200(V) pixels	1600(H) x 1200(V) pixels
Signals	Grayscale	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray
	Input Terminals	DVI, DP	DVI, DP	DVI, DP	DVI, DP	DVI, DP
	Output	N/A	N/A	N/A	N/A	N/A
Power	USB Ports	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 4	USB2.0 upstream x 1 / downstream x 2
	Input	DC 12V 12.5A Max.	DC 12V 12.5A Max.	DC 24V 6.25A Max.	DC 12V 12.5A Max.	DC 24V 6.25A Max.
Features	Consumption	88W Max.	52W Max.	90W Max.	51W Max.	90W Max.
	Auto Calibration	Calibrating with the internal mount sensor(front)	Calibrating with the internal mount sensor(front)	Calibrating with the internal mount sensor(front)	Calibrating with the internal mount sensor(front)	Calibrating with the internal mount sensor(front)
	Calibration mode shift	N/A	N/A	N/A	N/A	N/A
	DICOM mode shift	N/A	N/A	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	N/A	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500
	Gamma mode shift	DICOM(LUTO)–LUT6	DICOM(LUTO)–LUT6	DICOM(LUTO)–LUT6	DICOM(LUTO)–LUT6	DICOM(LUTO)–LUT6
	OSD info display	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
Physical	Touch Screen	N/A	N/A	N/A	N/A	N/A
	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
	Cabinet Colors	Gray	Gray	Gray	Gray	Gray
	Dimensions(WxHxD)	With stand: 390x510x240 Without stand: 391x476x107.2 (portrait)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)	With stand: 390x510x240 (portrait)/ Without stand: 390x490x97 (portrait)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)	With stand: 390x510x240 (portrait)/ Without stand: 390x490x97 (portrait)
	Weight	With stand: 9.5 Kgs / Without stand: 7 Kgs	With stand: 9 Kgs / Without stand: 6.5 Kgs	With stand: 9 Kgs / Without stand: 6.5 Kgs	With stand: 9 Kgs / Without stand: 6.5 Kgs	With stand: 9 Kgs / Without stand: 6.5 Kgs
Environment	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard
	Temperature	Operational 0~40°C, Storage 0~40°C				
Condition	Humidity	Operational 35~75%, Storage 35~75%				
	Certification	MDD/FDA, K.C. CE, FCC, VCCI, UL, FDA510(K)(in Progress)	MDD/FDA, K.C. CE, FCC, VCCI, UL, FDA510(K)(in Progress)	MDD/KC, CE, FCC, VCCI, UL, FDA510(K)(in progress)	MDD/KC, CE, FCC, VCCI, UL, FDA510(K)(in progress)	MDD(KC, CE, FCC, VCCI,UL) FDA510(K)(in progress)
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	
Warranty	5 years	5 years	5 years	5 years	5 years	

* The specifications are subject to change without notice

MODALION (D213 Series) (LED)

● 213 Series(21.3 inch)



Model		D213Q5E	D213Q5	D213U5E	D213U5
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [NLT]	21.3-inch TFT Color IPS mode [NLT]	21.3-inch TFT Monochrome IPS mode [NLT]	21.3-inch TFT Color IPS mode [NLT]
	Display Area	433.152(H)mm x 324.864(V)mm	433.152(H)mm x 324.864(V)mm	432.0(H)mm x 324.0(V)mm	432.0(H)mm x 324.0(V)mm
	Pixel Pitch	0.2115(H)mm x 0.2115(V)mm	0.2115(H)mm x 0.2115(V)mm	0.270(H)mm x 0.270(V)mm	0.270(H)mm x 0.270(V)mm
	Contrast Ratio	1400 : 1 (Typ.)	1400 : 1 (Typ.)	1400 : 1 (Typ.)	1200 : 1 (Typ.)
	Luminance (Max)	1700 (cd/m ²)	800 (cd/m ²) Default– 500 (cd/m ²) or custom	1900 (cd/m ²)	760 (cd/m ²) Default– 500 (cd/m ²) or custom
	Viewing Angle	176(H) / 176(V)	176(H) / 176(V)	170(H) / 170(V)	176(H) / 176(V)
	Response Time	27ms (Tr +Tf) (Typ.)	35ms (Tr +Tf) (Typ.)	23ms (Tr +Tf) (Typ.)	35ms (Tr +Tf) (Typ.)
Performance	Resolution	2048(H) x 1536(V) pixels	2048(H) x 1536(V) pixels	1600(H) x 1200(V) pixels	1600(H) x 1200(V) pixels
	Grayscale	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray	14-bit LUT, 16,384 shades of gray
Signals	Input Terminals	DVI, DP	DVI, DP	DVI, DP	DVI, DP
	Output	N/A	N/A	N/A	N/A
	USB Ports	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 4	USB2.0 upstream x 1 / downstream x 2
Power	Input	DC 12V 12.5A Max.	DC 24V 6.25A Max.	DC 12V 12.5A Max.	DC 24V 6.25A Max.
	Consumption	52W Max.	90W Max.	51W Max.	90W Max.
Features	Auto Calibration	Calibrating with the internal mount sensor(front)	Calibrating with the internal mount sensor(front)	Calibrating with the internal mount sensor(front)	Calibrating with the internal mount sensor(front)
	Calibration mode shift	N/A	N/A	N/A	N/A
	DICOM mode shift	N/A	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	N/A	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500
	Gamma mode shift	DICOM(LUTO)~LUT6	DICOM(LUTO)~LUT6	DICOM(LUTO)~LUT6	DICOM(LUTO)~LUT6
	OSD info display	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
	Touch Screen	N/A	N/A	N/A	N/A
Physical	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
	Cabinet Colors	Gray	Gray	Gray	Gray
	Dimensions(WxHxD)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)	With stand: 390x510x240 (portrait)/ Without stand: 390x490x97 (portrait)	With stand: 390x510x240 (portrait) / Without stand: 366x473x95.6 (portrait)	With stand: 390x510x240 (portrait)/ Without stand: 390x490x97 (portrait)
	Weight	With stand: 9 Kgs / Without stand: 6.5 Kgs	With stand : 9 Kgs / Without stand: 6.5 Kgs	With stand: 9 Kgs / Without stand: 6.5 Kgs	With stand: 9 Kgs / Without stand 6.5 Kgs
	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard
Environment Condition	Temperature	Operational 0~40°C, Storage 0~40°C			
	Humidity	Operational 35~75%, Storage 35~75%			
Certification	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in Progress)	MDD(KC, CE, FCC, VCCI, UL) FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL) FDA510(k)(in progress)	
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	
Warranty	5 years	5 years	5 years	5 years	

* The specifications are subject to change without notice

Diagnostic

CALION (D213-CA Series)

● 213 Series(21.3 inch)



Model		D213V5E-CA	D213V9B-CA	D213Q5E-CA	D213Q9B-CA	D213Q5-CA	D213Q9-CA	D213U5E-CA	D213U8B-CA	D213U5-CA	D213U8-CA
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [CMI]		21.3-inch TFT Monochrome IPS mode [NLT]		21.3-inch TFT Color IPS mode [NLT]		21.3-inch TFT Monochrome IPS mode [NLT]		21.3-inch TFT Color IPS mode [NLT]	
	Display Area	422.4(H)mm x 337.92(V)mm		433.152(H)mm x 324.864(V)mm		433.152(H)mm x 324.864(V)mm		432.0(H)mm x 324.0(V)mm		432.0(H)mm x 324.0(V)mm	
	Pixel Pitch	0.165(H)mm x 0.165(V)mm		0.2115(H)mm x 0.2115(V)mm		0.2115(H)mm x 0.2115(V)mm		0.270(H)mm x 0.270(V)mm		0.270(H)mm x 0.270(V)mm	
	Contrast Ratio	850 : 1 (Typ.)		900 : 1 (Typ.)		750 : 1 (Typ.)		850 : 1 (Typ.)		1050 : 1 (Typ.)	
	Luminance (Max)	1100 (cd/m ²)/ Default= 500 (cd/m ²) or custom		1450 (cd/m ²)		800 (cd/m ²)/ Default= 500 (cd/m ²) or custom		1650 (cd/m ²)		860 (cd/m ²)/ Default= 500 (cd/m ²) or custom	
	Viewing Angle	170(H) / 170(V)		176(H) / 176(V)		176(H) / 176(V)		170(H) / 170(V)		176(H) / 176(V)	
Response Time	36ms (Tr +Tf) (Typ.)		27ms (Tr +Tf) (Typ.)		35ms (Tr +Tf) (Typ.)		23ms (Tr +Tf) (Typ.)		35ms (Tr +Tf) (Typ.)		
Performance	Resolution	2560(H) x 2048(V) pixels		2048(H) x 1536(V) pixels		2048(H) x 1536(V) pixels		1600(H) x 1200(V) pixels		1600(H) x 1200(V) pixels	
	Grayscale	14-bit LUT, 4096 shades of gray		14-bit LUT, 4096 shades of gray		14-bit LUT, 4096 shades of gray		14-bit LUT, 4096 shades of gray		14-bit LUT, 4096 shades of gray	
		12-bit LUT, 4096 shades of gray		12-bit LUT, 4096 shades of gray		12-bit LUT, 4096 shades of gray		12-bit LUT, 4096 shades of gray		12-bit LUT, 4096 shades of gray	
Signals	Input Terminals	DVI, DP		DVI, DP		DVI, DP		DVI, DP		DVI, DP	
		DP, HDMI, DVI, RGB		DP, HDMI, DVI, RGB		DP, HDMI, DVI, RGB		HDMI, DVI, RGB, S-video, Video (BNC)		HDMI, DVI, RGB, S-video, Video (BNC)	
	Output	N/A		N/A		N/A		Video (BNC) x1		Video (BNC) x 1	
Power	USB Ports	USB2.0 upstream x1 / downstream x 2		USB2.0 upstream x1 / downstream x 2		USB2.0 upstream x1 / downstream x 2		USB2.0 upstream x1 / downstream x 2		USB2.0 upstream x 1 / downstream x 2	
	Input	DC 12V 12.5A Max.		DC 12V 12.5A Max.		DC 24V 6.25A Max.		DC 12V 12.5A Max.		DC 24V 6.25A Max.	
Features	Consumption	88W Max.		52W Max.		90W Max.		90W Max.		90W Max.	
	Auto Calibration	N/A		N/A		Calibrating with the internal mount sensor(front)		Calibrating with the internal mount sensor(front)		Calibrating with the internal mount sensor(front)	
	Calibration mode shift	N/A		N/A		N/A		N/A		N/A	
	DICOM mode shift	N/A		N/A		N/A		N/A		N/A	
	Gamma mode shift	DICOM		DICOM		DICOM		DICOM		DICOM	
	OSD info display	Luminance Settings, etc		Luminance Settings, etc		Luminance Settings, etc		Operating time, Luminance Settings, Gamma, etc		Operating time, Luminance Settings, Gamma, etc	
Physical	Touch Screen	N/A		N/A		N/A		N/A		N/A	
	Stand	Tilt, Lift, Swivel, Pivot		Tilt, Lift, Swivel, Pivot		Tilt, Lift, Swivel, Pivot		Tilt, Lift, Swivel, Pivot		Tilt, Lift, Swivel, Pivot	
	Cabinet Colors	Dark Blue		Dark Blue		Dark Blue		Dark Blue		Dark Blue	
	Dimensions(WxHxD)	With stand: 390x510x240 (portrait) / Without stand: 390x470x100 (portrait)		With stand: 390x510x240 (portrait)/ Without stand: 365x485x88 (portrait)		With stand: 390x510x240 (portrait)/ Without stand: 365x485x88 (portrait)		With stand: 390x510x240 (portrait)/ Without stand: 365x485x88 (portrait)		With stand: 390x510x240 (portrait)/ Without stand: 365x485x88 (portrait)	
		Weight	With stand: 9Kgs / Without stand: 6.8Kgs		With stand: 9Kgs / Without stand: 6.8Kgs		With stand: 9Kgs / Without stand: 6.8Kgs		With stand: 9Kgs / Without stand: 6.8Kgs		With stand: 9Kgs / Without stand: 6.8Kgs
Mount	100mm x 100mm VESA standard		100mm x 100mm VESA standard		100mm x 100mm VESA standard		100mm x 100mm VESA standard		100mm x 100mm VESA standard		
Environment Condition	Temperature	Operational 0~40°C, Storage 0~40°C									
	Humidity	Operational 35~75%, Storage 35~75%									
Certification		MDD(KC, CE, FCC, VCCI, UL) MDD(KC, CE)		MDD(KC, CE, FCC, VCCI, UL) MDD(KC, CE)		MDD(KC, CE, FCC, VCCI, UL) MDD(KC, CE)		MDD(KC, CE, FCC, VCCI, UL) MDD(KC, CE)		MDD(KC, CE, FCC, VCCI, UL) MDD(KC, CE)	
	In progress	: FDA510(k)		: FDA510(k)		: FDA510(k)		: FDA510(k)		: FDA510(k)	
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner		AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner		AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner		AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner		AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner		
Warranty	5 years		5 years		5 years		5 years		5 years		

* The specifications are subject to change without notice

CALION (D213-CA Series) (LED)

● 213 Series(21.3 inch)



Model		D213Q5E-CA	D213Q9B-CA	D213Q5-CA	D213Q9-CA	D213U5E-CA	D213U8B-CA	D213U5-CA	D213U8-CA
LCD Panel	Technology	21.3-inch TFT Monochrome IPS mode [NLT]		21.3-inch TFT Color IPS mode [NLT]		21.3-inch TFT Monochrome IPS mode [NLT]		21.3-inch TFT Color IPS mode [NLT]	
	Display Area	433.152(H)mm x 324.864(V)mm		433.152(H)mm x 324.864(V)mm		432.0(H)mm x 324.0(V)mm		432.0(H)mm x 324.0(V)mm	
	Pixel Pitch	0.2115(H)mm x 0.2115(V)mm		0.2115(H)mm x 0.2115(V)mm		0.270(H)mm x 0.270(V)mm		0.270(H)mm x 0.270(V)mm	
	Contrast Ratio	1400: 1 (Typ.)		1400 : 1 (Typ.)		1400: 1 (Typ.)		1200 : 1 (Typ.)	
	Luminance (Max)	1700 (cd/m ²)		800 (cd/m ²)/ Default=500 (cd/m ²) or custom		1900 (cd/m ²)		760 (cd/m ²)/ Default=500 (cd/m ²) or custom	
	Viewing Angle	176(H) / 176(V)		176(H) / 176(V)		170(H) / 170(V)		176(H) / 176(V)	
	Response Time	27ms (Tr +Tf) (Typ.)		35ms (Tr +Tf) (Typ.)		23ms (Tr +Tf) (Typ.)		35ms (Tr +Tf) (Typ.)	
Performance	Resolution	2048(H) x 1536(V) pixels		2048(H) x 1536(V) pixels		1600(H) x 1200(V) pixels		1600(H) x 1200(V) pixels	
	Grayscale	14-bit LUT, 4096 shades of gray		14-bit LUT, 4096 shades of gray		14-bit LUT, 4096 shades of gray		14-bit LUT, 4096 shades of gray	
		12-bit LUT, 4096 shades of gray		12-bit LUT, 4096 shades of gray		12-bit LUT, 4096 shades of gray		12-bit LUT, 4096 shades of gray	
Signals	Input Terminals	DVI, DP		DVI, DP		DVI, DP		DVI, DP	
		DP, HDMI, DVI, RGB		DP, HDMI, DVI, RGB		HDMI, DVI, RGB, S-video, Video (BNC)		HDMI, DVI, RGB, S-video, Video (BNC)	
	Output	N/A		N/A		N/A		N/A	
Power	USB Ports	USB2.0 upstream x1 / downstream x 2		USB2.0 upstream x1 / downstream x 2		USB2.0 upstream x1 / downstream x 2		USB2.0 upstream x1 / downstream x 2	
	Input	DC 12V 12.5A Max.		DC 24V 6.25A Max.		DC 12V 12.5A Max.		DC 24V 6.25A Max.	
Features	Consumption	52W Max.		90W Max.		90W Max.		90W Max.	
	Auto Calibration	N/A		Calibrating with the internal mount sensor(front)		Calibrating with the internal mount sensor(front)		Calibrating with the internal mount sensor(front)	
	Calibration mode shift	N/A		N/A		N/A		N/A	
	DICOM mode shift	N/A		N/A		N/A		N/A	
	Gamma mode shift	DICOM		DICOM		DICOM		DICOM	
	OSD info display	Luminance Settings, etc		Luminance Settings, etc		2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0		2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	
Physical	Touch Screen	N/A		N/A		N/A		N/A	
	Stand	Tilt, Lift, Swivel, Pivot		Tilt, Lift, Swivel, Pivot		Tilt, Lift, Swivel, Pivot		Tilt, Lift, Swivel, Pivot	
	Cabinet Colors	Dark Blue		Dark Blue		Dark Blue		Dark Blue	
	Dimensions(WxHxD)	With stand: 390x510x240 (portrait)/ Without stand: 365x485x88 (portrait)		With stand: 390x510x240 (portrait)/ Without stand: 365x485x88 (portrait)		With stand: 390x510x240 (portrait)/ Without stand: 365x485x88 (portrait)		With stand: 390x510x240 (portrait)/ Without stand: 365x485x88 (portrait)	
		Weight	With stand: 9Kgs / Without stand: 6.8Kgs		With stand: 9Kgs / Without stand: 6.8Kgs		With stand: 9Kgs / Without stand: 6.8Kgs		With stand: 9Kgs / Without stand: 6.8Kgs
Mount	100mm x 100mm VESA standard		100mm x 100mm VESA standard		100mm x 100mm VESA standard		100mm x 100mm VESA standard		
Environment Condition	Temperature	Operational 0~40°C, Storage 0~40°C							
	Humidity	Operational 35~75%, Storage 35~75%							
Certification		MDD(KC, CE, FCC, VCCI, UL) MDD(KC, CE)		MDD(KC, CE, FCC, VCCI, UL) MDD(KC, CE)		MDD(KC, CE, FCC, VCCI, UL) MDD(KC, CE)		MDD(KC, CE, FCC, VCCI, UL) MDD(KC, CE)	
		In progress : FDA510(k)		In progress : FDA510(k)		In progress : FDA510(k)		In progress : FDA510(k)	
Accessories		AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner		AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner		AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner		AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	
Warranty		5 years		5 years		5 years		5 years	

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Modality

X-Ray

● 201 Series(20.1 inch)

● 190 Series(19 inch)

● 170 Series(17 inch)

● 150 Series(15 inch)



Model		D201U8	D190S4-HL	D190S4	170EX	150EX
LCD Panel	Technology	20.1-inch TFT Color IPS mode [Kostec tune]	19-inch TFT Monochrome IPS mode [CMI]	19-inch TFT Monochrome IPS mode [LG]	17-inch TFT Color TN mode [AUO]	15-inch TFT Color TN mode [AUO]
	Display Area	408.0(H)mm x 306.0(V)mm	376.32(H)mm x 301.056(V)mm	376.32(H)mm x 301.056(V)mm	337.92(H)mm x 270.336(V)mm	304.128(H)mm x 228.096(V)mm
	Pixel Pitch	0.255(H)mm x 0.255(V)mm	0.294(H)mm x 0.294(V)mm	0.294(H)mm x 0.294(V)mm	0.264(H)mm x 0.264(V)mm	0.297(H)mm x 0.297(V)mm
	Contrast Ratio	800 : 1 (Typ.)	1000 : 1 (Typ.)	900 : 1 (Typ.)	1000 : 1 (Typ.)	500 : 1 (Typ.)
	Luminance (Max)	700 (cd/m ²)	1300 (cd/m ²)	1000 (cd/m ²)	380 (cd/m ²)	550 (cd/m ²)
	Viewing Angle	178(H) / 178(V)	-85~85(H) / -85~85(V)	170(H) / 170(V)	170(H) / 170(V)	140(H) / 125(V)
Response Time	14ms (Tr + Tf) (Typ.)	28ms (Tr + Tf) (Typ.)	25ms (Tr + Tf) (Typ.)	5ms (Tr + Tf) (Typ.)	8ms (Tr + Tf) T (Typ.)	
Performance	Resolution	1600(H) x 1200(V) pixels	1280(H) x 1024(V) pixels	1280(H) x 1024(V) pixels	1280(H) x 1024 (V)	1024(H) x 768(V) pixels
	Grayscale	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray
Signals	Input Terminals	HDMI, DVI, RGB, S-video, Video (BNC)	HDMI, Digital, DVI, Analog RGB, S-Video, CVBS (BNC)	HDMI, Digital, DVI, Analog RGB, S-Video, CVBS (BNC)	HDMI, DVI, RGB, S-video, Video (BNC)	HDMI, DVI, RGB, S-video, Video (BNC) Video (BNC) x 1
	Output	S-video x 1, Video (BNC) x 1	S-Video x 1, Video (BNC) x 1	S-Video x 1, Video (BNC) x 1	Video (BNC) x1	Video (BNC) x 1
	USB Ports	USB2.0 upstream x1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2	N/A	N/A
Power	Input	DC 24V 3.75A Max.	AC adapter 100V-240V 50/60Hz	DC 12V 7A Max.	DC 12V 7A Max.	DC 12V 7A Max.
	Consumption	55W (Typ.)	43W Max.	43W Max.	38W Max.	45W Max.
Features	Auto Calibration	N/A	N/A	N/A	N/A	N/A
	Calibration mode shift	CR/CT/ES/US/TEXT	Calibration mode – CR/CT/US/TEXT	Calibration mode – CR/CT/US/TEXT	N/A	N/A
	DICOM mode shift	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500
	Gamma mode shift	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0
	OSD info display	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
	Touch Screen	Optional	Optional	Optional	N/A	N/A
Physical	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt	Tilt
	Cabinet Colors	Dark Gray	Dark Gray	Dark Gray	Black	Black
	Dimensions(WxHxD)	With stand: 449x367x220 (portrait) / Without stand: 449x347x80.5 (portrait)	With stand: 449x367x220 (portrait) / Without stand: 449x347x80.5 (portrait)	With stand: 449x367x220 (portrait) / Without stand: 449x347x80.5 (portrait)	TBD	TBD
	Weight	With stand: 7.5 Kgs / Without stand: 5.5 Kgs	With stand: 7.5 Kgs / Without stand: 5.5 Kgs	With stand: 7.5 Kgs / Without stand: 5.5 Kgs	With stand: 6.0 Kgs / Without stand: 4.0 Kgs	With stand: 6.0 Kgs / Without stand: 4.0 Kgs
	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard
Environment Condition	Temperature	Operational 0~40°C, Storage 0~40°C				
	Humidity	Operational 35~75%, Storage 35~75%				
Certification	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)	TBD	MDD(CE)	
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, Operation Manual, Warranty Certificate, Screen Cleaner	AC adapter, Power cord, DVI cable, Operation Manual, Warranty Certificate, Screen Cleaner	
Warranty	3 years	3 years	3 years	3 years	3 years	

* The specifications are subject to change without notice

Clinical Review

X-Ray

● 240 Series(24 inch)

● 201 Series(20.1 inch)

● 190 Series(19 inch)



24" Color R240FE



20.1" Color R201U4



19" Color R190S4

Model		R240FE	R201U4	R190S4
LCD Panel	Technology	24-inch TFT Color IPS mode [LG]	20.1-inch TFT Color IPS mode [LG]	19-inch TFT Color IPS mode [LG]
	Display Area	518.4(H)mm x 324(V)mm	408.0(H)mm x 306.0(V)mm	376.32(H)mm x 301.06(V)mm
	Pixel Pitch	0.270(H)mm x 0.270(V)mm	0.255(H)mm x 0.255(V)mm	0.294(H)mm x 0.294(V)mm
	Contrast Ratio	1000 : 1 (Typ.)	800 : 1 (Typ.)	800 : 1 (Typ.)
	Luminance (Max)	400(cd/m ²)	300(cd/m ²)	270(cd/m ²)
	Viewing Angle	178(H) / 178(V)	178(H) / 178(V)	178(H) / 178(V)
Performance	Response Time	6ms (Gray to Gray)	8ms (Tr+Tf) (Typ.)	25ms (Gray to Gray Avg)
	Resolution	1920(H) x 1200(V) pixels	1600(H) x 1200(V) pixels	1280(H) x 1024(V) pixels
Signals	Grayscale	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray
	Input Terminals	HDMI, Digital DVlx2, RGB, S-Video, Video (BNC) x 1	HDMI, Digital, DVI, Analog RGB,S-Video, CVBS (BNC)	HDMI, Digital, DVI, Analog RGB,S-Video, CVBS (BNC)
	Output	Video (BNC) x 1, S-Video, Digital DVI	S-Video x 1, Video (BNC)x1	S-Video x 1, Video (BNC) x 1
Power	USB Ports	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2	USB2.0 upstream x 1 / downstream x 2
	Input	DC 24V 6.25A Max.	DC 18V 5A Max.	DC 12V 7A Max.
Features	Consumption	98W Max.	70W Max.	42.6W Max.
	Auto Calibration	N/A	N/A	N/A
	Calibration mode shift	N/A	CR/CT/ES/US/TEXT	CR/CT/ES/US/TEXT
	DICOM mode shift	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500	4-phased one-touch shift – DICOM BLUE/DICOM CLEAR/ 6500/ 9500
	Gamma mode shift	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0	2.2(default)/2.4/2.6/2.8/DICOM/CUSTOM/1.8/2.0
	OSD info display	Operating time, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
Physical	Touch Screen	Optional (Multi Touch P-cap Type)	Optional	Optional
	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
	Cabinet Colors	Dark gray / Ivory	Dark gray / Ivory	Dark gray / Ivory
	Dimensions(WxHxD)	TBD	With stand: 449x367x220 (portrait) / Without stand: 449x347x80.5 (portrait)	With stand: 449x367x220 (portrait) / Without stand: 449x347x80.5 (portrait)
	Weight	With stand: 8 Kgs / Without stand: 6 Kgs	With stand: 7.5 Kgs / Without stand: 5.5 Kgs	With stand: 7.5 Kgs / Without stand: 5.5 Kgs
Environment Condition	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard
	Temperature	Operational 0~40°C, Storage 0~40°C		
Accessories	Humidity	Operational 35~75%, Storage 35~75%		
	Certification	MDD(KC, CE, FCC, VCCI, UL), CB, FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL) FDA510(k)(in progress)	
	Warranty	3 years	3 years	3 years

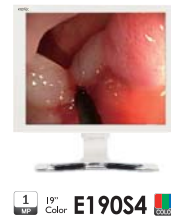
* The specifications are subject to change without notice

**Surgical
Endoscopy**

● 240 Series(24 inch)

● 201 Series(20.1 inch)

● 190 Series(19 inch)



Model		E240FE	E201U4	E190S4
LCD Panel	Technology	24-inch TFT Color IPS mode [LG]	20.1" Color IPS mode [LG]	19" Color IPS mode [LG]
	Display Area	518.4(H)mm x 324(V)mm	408.0(H) x 306.0(V)mm	376.32(H) x 301.06(V)mm
	Pixel Pitch	0.270(H)mm x 0.270(V)mm	0.255(H) x 0.255(V)mm	0.294(H) x 0.294(V)mm
	Contrast Ratio	1000 : 1 (Typ.)	800 : 1 (Typ.)	800 : 1 (Typ.)
	Luminance (Max)	400(cdi/m ²)	300(cdi/m ²)	270(cdi/m ²)
	Viewing Angle	178(H) / 178(V)	178(H) / 178(V)	178(H) / 178(V)
Performance	Response Time	6ms (Gray to Gray)	8ms (Tr+Tf) (Typ.)	25ms (Tr+Tf) (Typ.)
	Resolution	1920(H) x 1200(V) pixels	1600(H) x 1200(V) pixels	1280(H) x 1024(V) pixels
Input Signals	Grayscale	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray	12-bit LUT, 4096 shades of gray
	Service	RS232C x 1 for Service port	Ear Jack x 1 for Service port	Ear Jack x 1 for Service port
	HDMI Input	HDMI Jack x 1 (typeA) for Digital RGB: TMDS Max: 1080p, 1920x1200/60Hz (WUXGA)	HDMI Jack x 1 (typeA) for Digital RGB: TMDS Max: 1080p, 1600x1200/60Hz (UXGA)	HDMI Jack x 1 (typeA) for Digital RGB: TMDS Max: 1080p, 1600x1200/60Hz (UXGA)
	DVI Input	DVI Jack x 2 (type D) for Digital RGB: TMDS Max: 1080p, 1920x1200 / 60Hz(WUXGA)	DVI Jack x 1 (type D) for Digital RGB: TMDS Max: 1080p, 1600x1200 / 60Hz(UXGA)	DVI Jack x 1 (type D) for Digital RGB: TMDS Max: 1080p, 1600x1200 / 60Hz(UXGA)
	RGB Input	D-sub Jack x 1 / BNC Jax x 1for Analog RGB: 0.7V[p-p](75Ω), H/CS/V:TTL(2.2kΩ), SOG: 1V[p-p](75Ω) Max:1920x1200 /60Hz(WUXGA)	D-sub Jack x 1 / BNC Jax x 1for Analog RGB: 0.7V[p-p](75Ω), H/CS/V:TTL(2.2kΩ), SOG: 1V[p-p](75Ω) Max:1600x1200 /60Hz(UXGA)	D-sub Jack x 1 / BNC Jax x 1for Analog RGB: 0.7V[p-p](75Ω), H/CS/V:TTL(2.2kΩ), SOG: 1V[p-p](75Ω) Max:1600x1200 /60Hz(UXGA)
	HD- SDI Input	BNC Jack x 1 for Serial Input Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz	BNC Jack x 1 for Serial Input Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz	BNC Jack x 1 for Serial Input Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz
	Component Input	BNC Jack x 1 for Y:1V[p-p](75Ω), Pb/Cb: 0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p	BNC Jack x 1 for Y:1V[p-p](75Ω), Pb/Cb: 0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p	BNC Jack x 1 for Y:1V[p-p](75Ω), Pb/Cb: 0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p
	S-video Input	Mini DIN Jack x 1(4pin) for Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y:1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]	Mini DIN Jack x 1(4pin) for Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y:1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]	Mini DIN Jack x 1(4pin) for Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y:1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]
	Video Input	BNC Jack x 1 for 1V[p-p](75Ω) [NTSC/PAL/SECAM]	BNC Jack x 1 for 1V[p-p](75Ω) [NTSC/PAL/SECAM]	BNC Jack x 1 for 1V[p-p](75Ω) [NTSC/PAL/SECAM]
	Output Signals	DVI Output	DVI Jack x 1 (type D) for Digital RGB: TMDS Max: 1080p, 1920x1200 / 60Hz(WUXGA)	N/A
RGB Output		Analog RGB: 0.7V[p-p](75Ω), H/CS/V:TTL(2.2kΩ), SOG:1V[p-p](75Ω) Max:1920x1200 /60Hz(UXGA)	Analog RGB: 0.7V[p-p](75Ω), H/CS/V:TTL(2.2kΩ), SOG:1V[p-p](75Ω) Max:1600x1200 /60Hz(UXGA)	Analog RGB: 0.7V[p-p](75Ω), H/CS/V:TTL(2.2kΩ), SOG:1V[p-p](75Ω) Max:1600x1200 /60Hz(UXGA)
HD- SDI Output		1920 Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz	Serial Input Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz	Serial Input Common Mode: 2.2 V[p-p](75Ω) Max: 1920x1080/60Hz
Component Output		Y:1V[p-p](75Ω), Pb/Cb:0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p	Y:1V[p-p](75Ω), Pb/Cb:0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p	Y:1V[p-p](75Ω), Pb/Cb:0.7V[p-p](75Ω), Pr/Cr: 7V[p-p](75Ω), 480i, 576i, 480p, 576p, 720p, 1080i, 1080p
S-video Output		Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y:1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]	Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y:1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]	Y:1V[p-p](75Ω), C:0.286V[p-p](75Ω)[NTSC] Y:1V[p-p](75Ω), C:0.300V[p-p](75Ω)[PAL/SECAM]
Video Output		1V[p-p](75Ω) [NTSC/PAL/SECAM]	1V[p-p](75Ω) [NTSC/PAL/SECAM]	1V[p-p](75Ω) [NTSC/PAL/SECAM]
Power	Input	DC 24V 6.25A Max.	DC 18V 5A Max.	DC 12V 7A Max.
	Consumption	98W Max.	70W Max.	43W Max.
Features	Calibration mode	N/A	Calibration mode, Gamma shift	Calibration mode, Gamma shift
	OSD info display	Operating time, Gamma, etc	Operating time, Luminance Settings, Gamma, etc	Operating time, Luminance Settings, Gamma, etc
	Touch Screen	Optional	Optional	Optional
	USB Hub	USB2.0 upstream x1 / downstream x 2	USB2.0 upstream x 1/downstream x 2	USB2.0 upstream x 1 / downstream x 2
Physical	Stand	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot	Tilt, Lift, Swivel, Pivot
	Cabinet Color/Weight	White / With stand: 8 Kgs / Without stand: 6 Kgs	White / With stand: 7.5 Kgs / Without stand: 5.5 Kgs	White / With stand: 7.5 Kgs / Without stand: 5.5 Kgs
	Mount	100mm x 100mm VESA standard	100mm x 100mm VESA standard	100mm x 100mm VESA standard
Certification	MDD(KC, CE, FCC, VCCI, UL), CB, FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)	MDD(KC, CE, FCC, VCCI, UL), FDA510(k)(in progress)	
Accessories	AC adapter, Power cord, DVI cable, USB cable, Operation Manual, Warranty Certificate, Screen Cleaner			

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Medical Image Consulting System

Surgical (LED)

● 420 Series(42 inch)

● 470 Series(47 inch)

● 550 Series(55 inch)



Model	M420FE	M470FE	M550FE
Panel	42-inch TFT LCD Color Display [LG]	47-inch TFT LCD Color Display [LG]	55-inch TFT LCD Color Display [LG]
Display Mode	Transmissive mode Normally Black	Transmissive mode Normally Black	Transmissive mode Normally Black
Resolution	1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)
Contrast Ratio	1300 : 1 (Typ.)	1300 : 1 (Typ.)	1300 : 1 (Typ.)
Active Area	930.24(H) x 523.26(V)	1039.68(H) x 584.82(V)	1209.6(H) x 680.4(V)
Pixel Pitch	0.4845(H) x 0.4845(V) [mm]	0.5414(H) x 0.5414(V) [mm]	0.630(H) x 0.630(V) [mm]
Luminance (cd/m ²)	450 (cd/m ²) White Lumi @ LED	450 (cd/m ²) White Lumi @ LED	450 (cd/m ²) White Lumi @ LED
Response Time	9ms (Typ. Tr+Tf)	9ms (Typ. Tr+Tf)	9ms (Typ. Tr+Tf)
Viewing Angle	178° / 178° (H/V)	178° / 178° (H/V)	178° / 178° (H/V)
Aspect Ratio	16 : 9	16 : 9	16 : 9
Frequency	67.8 KHz (H) / 60 Hz (V)	67.8 KHz (H) / 60 Hz (V)	67.10KHz (H) / 60Hz (V)
Color Depth	1.06 Billion (10-bit)	1.06 Billion (10-bit)	1.06 Billion (10-bit)
Touch Screen(option)	Infrared rays detection mode Typical centroid accuracy 2mm	Infrared rays detection mode Typical centroid accuracy 2mm	Infrared rays detection mode Typical centroid accuracy 2mm
Input terminals	RS232C Jack x 1 for service port HDMI input x 1 DVI input x 2 HD - SDI input x 1 RGB input (D-sub x 1 / BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)	RS232C Jack x 1 for service port HDMI input x 1 DVI input x 2 HD - SDI input x 1 RGB input (D-sub x 1 / BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)	RS232C Jack x 1 for service port HDMI input x 1 DVI input x 2 HD - SDI input x 1 RGB input (D-sub x 1 / BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)
Output terminals	DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)	DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)	DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)
General	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (Without stand): TBD (mm) Weight (Without stand): TBD (Kgs)	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (Without stand): TBD (mm) Weight (Without stand): TBD (Kgs)	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (Without stand): TBD (mm) Weight (Without stand): TBD (Kgs)
Environmental Conidions	Temp.(operational/ storage): 5~35 °C Humidity (operational/ storage): 35~75%	Temp.(operational/ storage):5~35 °C Humidity (operational/ storage): 35~75%	Temp.(operational/ storage): 5~35 °C Humidity (operational/ storage): 35~75%
Certification	CE	CE	CE
PC (option)	optional on buyer's requirement		

* The specifications are subject to change without notice

Medical Image Consulting System

Informatic

● 650 Series(65 inch)

● 720 Series(72 inch)

● 840 Series(84 inch)



2 MP 65" Color **M650FE** COLOR



2 MP 72" Color **M720FE** COLOR LED



8 MP 84" Color **M840Z5** COLOR LED

Model	M650FE	M720FE	M840Z5
Panel	65-inch TFT LCD Color Display [AUO]	72-inch TFT LCD Color Display [LG]	84-inch TFT LCD Color Display [LG]
Display Mode	Transmissive mode Normally Black	Transmissive mode Normally Black	Transmissive mode Normally Black
Resolution	1920(H) x 1080(V)	1920(H) x 1080(V)	3840(H) x 2160(V)
Contrast Ratio	4000 : 1 (Typ.)	1100 : 1 (Typ.)	1600 : 1 (Typ.)
Active Area	1428.48(H) x 803.52(V)	1595.52(H) x 897.48(V)	1860.48(H) x 1046.52(V)
Pixel Pitch	0.807(H) x 0.807(V) [mm]	0.831(H) x 0.831(V) [mm]	0.4845(H) x 0.4845(V) [mm]
Luminance (cd/m ²)	700 (cd/m ²) White Lumi @ CCFL	700(cd/m ²) White Lumi @ LED	500 (cd/m ²) White Lumi @ LED
Response Time	8 ms (Typ. Tr+Tf)	12 ms (Typ. Tr+Tf)	5 ms (Typ. Tr+Tf)
Viewing Angle	178° / 178° (H/V)	178° / 178° (H/V)	178° / 178° (H/V)
Aspect Ratio	16 : 9	16 : 9	16 : 9
Frequency	71.51KHz (H) / 63Hz (V)	71.51KHz (H) / 60Hz (V)	71.51KHz (H) / 60Hz (V)
Color Depth	1.07 Billion (10-bit)	16.7M (8-bit)	1.06 Billion (10-bit)
Touch Screen(option)	Infrared rays detection mode Typical centroid accuracy 2mm	Infrared rays detection mode Typical centroid accuracy 2mm	Infrared rays detection mode Typical centroid accuracy 2mm
Input terminals	RS232C Jack x 1 for service port HDMI input x 1 DVI input x 1 HD - SDI input x 1 RGB input (D-sub x 1 / BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)	RS232C Jack x 1 for service port HDMI input x 1 DVI input x 1 HD - SDI input x 1 RGB input (D-sub x 1 / BNC x 1) Component Input (BNC x 1) S-video input (4-pin Mini DIN Jack x 1) Video input (BNC x 1)	DP x 2 DVI input x 2
Output terminals	DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)	DVI output x 1 HD - SDI output x 1 Video output (BNC x 1)	N/A
General	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (Without stand): TBD (mm) Weight (Without stand): TBD (Kgs)	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (Without stand): TBD (mm) Weight (Without stand): TBD (Kgs)	100V~240V AC, 50/60Hz Power Consumption: TBD Dimension (Without stand): TBD (mm) Weight (Without stand): TBD (Kgs)
Environmental Conidions	Temp.(operational/ storage): 5~35 °C Humidity (operational/ storage): 35~75%	Temp.(operational/ storage): 5~35 °C Humidity (operational/ storage): 35~75%	Temp.(operational/ storage): 5~35 °C Humidity (operational/ storage): 35~75%
Certification	CE	CE	CE
PC (option)	optional on buyer's requirement		

* The specifications are subject to change without notice

Medical Image Consulting System Informatic

● 420 Series(42inch)

● 470 Series(47inch)

● 550 Series(55inch)



Model	M420F4	M470F4	M550F4
Display			
Panel	42-inch TFT LCD Color Display [LG]	47-inch TFT LCD Color Display [LG]	55-inch TFT LCD Color Display [LG]
Aspect ratio	16 : 9	16 : 9	16 : 9
Resolution	1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)
Pixel Pitch	0.4845(H) x 0.4845(V) [mm]	0.5414(H) x 0.5414(V) [mm]	0.630(H) x 0.830(V) [mm]
Displayable Colors	1.06 Billion (10-bit)	1.06 Billion (10-bit)	1.06 Billion (10-bit)
Brightness	450 (cd/m ²) White Lumi @ LED	450 (cd/m ²) White Lumi @ LED	450 (cd/m ²) White Lumi @ LED
Contrast Ratio	1300 :1 (Typ.)	1300 :1 (Typ.)	1300:1 (Typ.)
Display Mode	Transmissive mode Normally Black	Transmissive mode Normally Black	Transmissive mode Normally Black
Response Time (Typical)	9ms (Typ. Tr+Tf)	9ms (Typ. Tr+Tf)	9ms (Typ. Tr+Tf)
Viewing Angle(H/V)	178° / 178° (H/V)	178° / 178° (H/V)	178° / 178° (H/V)
Touch Screen	Optional	Optional	Optional
In / Out Terminals			
Speaker Output	External Speaker	External Speaker	External Speaker
Service	Ear Jack x 1	Ear Jack x 1	Ear Jack x 1
HDMI Input	HDMI Jack x (Type A) [For Built in PC]	HDMI Jack x (Type A) [For Built in PC]	HDMI Jack x (Type A) [For Built in PC]
DVI Input	DVI Jack x 1 (Type D)	DVI Jack x 1 (Type D)	DVI Jack x 1 (Type D)
RGB Input	D-Sub Jack x 1 BNC Jack x 1	D-Sub Jack x 1 BNC Jack x 1	D-Sub Jack x 1 BNC Jack x 1
RGB Output	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
HD - SDI Input	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
HD - SDI Output	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
Component Input	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
Component Output	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
S-Video Input	Mini DIN Jack x1 (4 pin)	Mini DIN Jack x1 (4 pin)	Mini DIN Jack x1 (4 pin)
S-Video Output	Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)
Video Input	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
Video Output	BNC Jack x 1	BNC Jack x 1	BNC Jack x 1
Audio Input	Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built - in PC]	Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built - in PC]	Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built in PC]
Audio Output	Ear Jack x 1	Ear Jack x 1	Ear Jack x 1
General			
Power Supply	AC 100V ~ 240V, 50/60Hz		
Power Consumption (Typical)	TBD		
Dimensions (Without Stand)[W mm x H mm x D mm]	TBD		
Weight (Without Stand)	TBD		
Environment Condition			
Temperature	Operational	5 ~ 35 °C	
	Storage	5 ~ 35 °C	
Humidity	Operational	35 ~ 75 %	
	Storage	35 ~ 75 %	
BUILT-IN PC (Optional)	Specifications	optional on buyer's requirement	
	Certifications	TBD	
Accessories	Standard	Owner's Instruction, Power Cord, Windows7(English)	
	Optional	Table Top Stand, Wall-Mount Bracket, Ceiling-Mount Bracket, HDMI Cable, DVI Cable, VGA D-SUB Cable, VGA BNC Cable, SDI BNC Cable, Component BNC Cable, S-Video Cable, Video BNC Cable, Audio Cable, Wireless Keyboard/Mouse, Speaker	

* The specifications are subject to change without notice

Medical Image Consulting System Informatic

● 650 Series(65 inch)

● 720 Series(72 inch)

● 840 Series(84 inch)



Model	M650F4	M720F4	M840Z5
Display			
Panel	65-inch TFT LCD Color Display [AUO]	72-inch TFT LCD Color Display [LG]	84-inch TFT LCD Color Display [LG]
Aspect ratio	16 : 9	16 : 9	16 : 9
Resolution	1920(H) x 1080(V)	1920(H) x 1080(V)	3840(H) x 2810(V)
Pixel Pitch	0.807(H) x 0.807(V) [mm]	0.802(H) x 0.802(V) [mm]	0.4845(H) x 0.4845(V) [mm]
Displayable Colors	1.07 Billion (10-bit)	16.7M (8-bit)	1.06 Billion (10-bit)
Brightness	700 (cd/m ²) White Lumi @ CCFL	700(c d/m ²) White Lumi @ LED	500(c d/m ²) White Lumi @ LED
Contrast Ratio	4000 : 1 (Typ.)	1100 : 1 (Typ.)	1600 : 1 (Typ.)
Display Mode	Transmissive mode Normally Black	Transmissive mode Normally Black	Transmissive mode Normally Black
Response Time (Typical)	8 ms (Typ. Tr+Tf)	12 ms (Typ. Tr+Tf)	5 ms (Typ. Tr+Tf)
Viewing Angle(H/V)	178° / 178° (H/V)	178° / 178° (H/V)	178° / 178° (H/V)
Touch Screen	Infrared rays Detection Typical centroid accuracy 2mm	Infrared rays Detection Typical centroid accuracy 2mm	Infrared rays Detection Typical centroid accuracy 2mm
In / Out Terminals			
Speaker Output	External Speaker	External Speaker	External Speaker
Service	Ear Jack x 1	Ear Jack x 1	
HDMI Input	HDMI Jack x (Type A) [For Built in PC]	HDMI Jack x (Type A) [For Built in PC]	DP Jack x 2
DVI Input	DVI Jack x 1 (Type D)	DVI Jack x 1 (Type D)	DVI Jack x 2 (Type D)
RGB Input	D-Sub Jack x 1 BNC Jack x 1	D-Sub Jack x 1 BNC Jack x1	
RGB Output	BNC Jack x 1	BNC Jack x 1	
HD - SDI Input	BNC Jack x 1	BNC Jack x 1	
HD - SDI Output	BNC Jack x 1	BNC Jack x 1	
Component Input	BNC Jack x 1	BNC Jack x 1	
Component Output	BNC Jack x 1	BNC Jack x 1	
S-Video Input	Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)	
S-Video Output	Mini DIN Jack x 1 (4 pin)	Mini DIN Jack x 1 (4 pin)	
Video Input	BNC Jack x 1	BNC Jack x 1	
Video Output	BNC Jack x 1	BNC Jack x 1	
Audio Input	Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built - in PC]	Ear Jack x 3 [For External Input] Ear Jack x 1 [For Built - in PC]	N/A
Audio Output	Ear Jack x 1	Ear Jack x 1	Ear Jack x 1
General			
Power Supply	AC 100V ~ 240V, 50/60Hz		
Power Consumption (Typical)	TBD		
Dimensions (Without Stand)[W mm x H mm x D mm]	TBD		
Weight (Without Stand)	TBD		
Environment Condition			
Temperature	Operational	5 ~ 35 °C	
	Storage	5 ~ 35 °C	
Humidity	Operational	35 ~ 75 %	
	Storage	35 ~ 75 %	
BUILT-IN PC (Optional)	Specifications	optional on buyer's requirement	
Accessories	Certifications	CE, CB, CCC	TBD
	Standard	Remote Controller, Owner's Instruction, Power Cord, Windows7(English)	
	Optional	Table Top Stand, Wall-Mount Bracket , Ceiling-Mount Bracket, HDMI Cable, DVI Cable, VGA D-SUB Cable, VGA BNC Cable, SDI BNC Cable, Component BNC Cable, S-Video Cable, Video BNC Cable, Audio Cable, Wireless Keyboard/Mouse, Speaker	

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KOSTEC is committed to providing reliable custom service and technology for the global clients and partners, and will make devotional efforts for the growth of medical industry.



2-108, Medical Industry Technocenter 1720-26, Taejang-dong, Wonju-si, Gangwon-do, 220-962 Korea
Tel: +82 33 747 9672 Fax: +82 33 747 9673 E-mail: kostec@n-kostec.co.kr www.n-kostec.co.kr

