EIZO®

Clinical Review Monitors

RadiForce® MX-Series

extracting the essence.

To carve out even the smallest details is essential in medical practice.

Because only people who can obtain a clear picture, and only those who can separate what is important from what is not, get clear results in medicine. Exceptional image quality, a perfectly coordinated network, support software, and excellent customer service are some of the reasons why EIZO RadiForce medical solutions can be found in leading hospitals around the world.

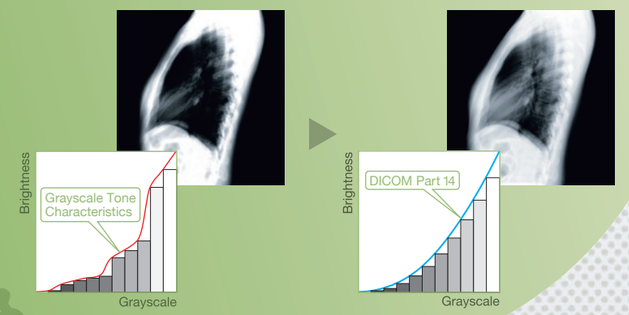
Because just like medical professionals, we always have one goal in mind:

extracting the essence.

Optimum Monitor for Clinical Review

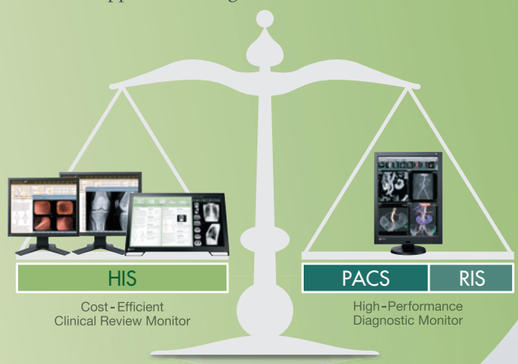
Standard Compliant

Medical images can now be reviewed with clinical record applications. When displaying medical images, it is important that you select monitors which are calibration compliant with the DICOM Part 14 offering accurate rendering and unified display between multiple monitors.



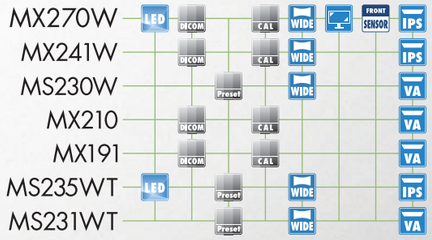
Cost Performance

It is costly for hospitals to install high-performance, DICOM calibration compatible diagnostic monitors throughout the hospital. A cost-efficient solution is demanded for clinical review application usage environment.



RadiForce® MX-Series **Clinical Review Monitors**

The RadiForce MX-Series of superior cost performance clinical review monitors deliver calibration that is compliant with DICOM Part 14. They are ideal for viewing patient charts with MRI and CT medical images in DICOM Part 14 standard. In addition, they are available in widescreen and square formats in various resolutions to meet the diverse needs of hospitals.



3.7MP **MX270W**
68 cm (27") Color LCD Monitor

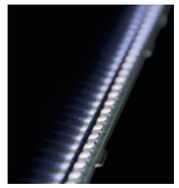
2.3MP **MX241W**
61 cm (24.1") Color LCD Monitor

2MP **MS230W**
58 cm (23") Color LCD Monitor

Features

Environmentally-Friendly LED Backlight

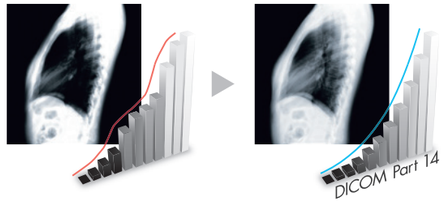
By utilizing an energy-efficient LED as a backlight, the monitor achieves a high-brightness and low power consumption at the same time. Since the LED backlight is mercury free, it will reduce any potential impact on the environment when it is disposed of.



LED meets EIZO medical monitors
RadiForce® LED

Diagnostic Precision with DICOM Part 14 Factory Adjustment

To ensure the most accurate and consistent shadings possible, EIZO carefully measures and sets every grayscale tones on the production line to produce a monitor compliant with DICOM Part 14.

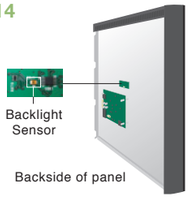


DICOM Preset Mode

MS-models feature a DICOM preset mode whose grayscale tone is preset on the production line for optimum reviewing of medical images.

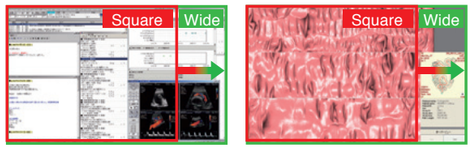
Consistency with DICOM Part 14 Simplified Calibration

With the bundled RadiCS LE quality control software, a simplified calibration compliant with the DICOM Part 14 standard can be performed to correct the brightness and gray-scale tones of the monitor by utilizing the back-light sensor.



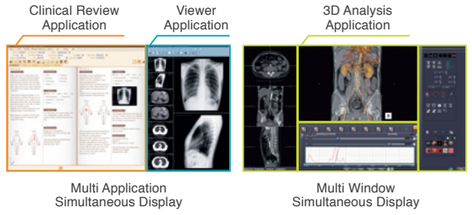
View More with Widescreen

The widescreen 16:10 or 16:9 aspect ratio provides significantly more horizontal space than the 4:3 or 5:4 aspect ratios of conventional square monitors. The screen is wide enough so that you can keep tool palettes open without covering the window you are working on.



Large Screen Size and High-Resolution

Its 27-inch large screen size and a 2560 x 1440 high-resolution are ideal for displaying multiple imaging applications or windows to improve the work efficiency of physicians and radiologists.



Easy Calibration with Integrated Front Sensor

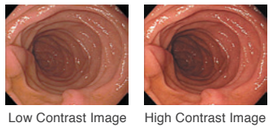
Integrated Front Sensor, housed within the front bezel, is conveniently enabled and visible only when calibration compliant to the DICOM Part 14 standard is being performed. This dramatically reduces the time and effort needed for quality control.

Wide Viewing Angles for Multiple People Use

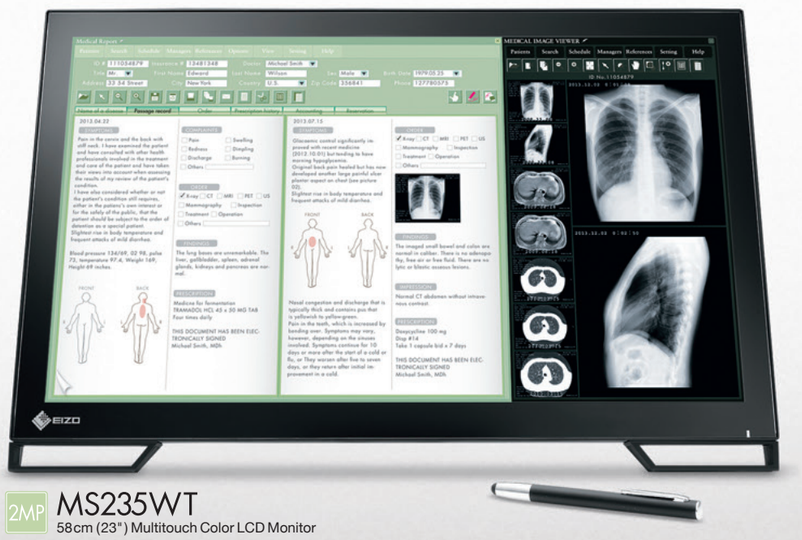
Thanks to the wide viewing angles and high contrast ratios of the panel, images can be viewed simultaneously by several people with the highest quality reproduction and minimal color shift.

High Contrast Ratio

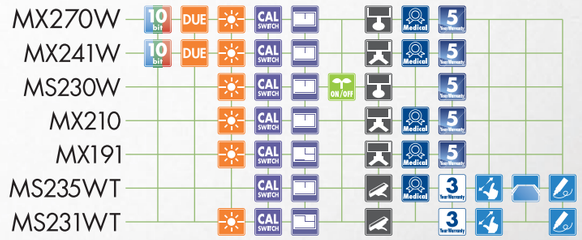
A VA panel offers high contrast ratios which displays crisp black providing vivid contrast with other colors making it easier to distinguish the detail of the medical imaging.



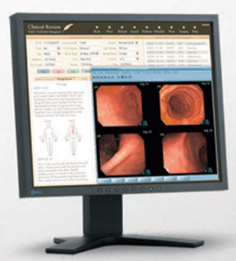
2MP **MS231WT**
58cm (23") Multitouch Color LCD Monitor



2MP **MS235WT**
58cm (23") Multitouch Color LCD Monitor



2MP **MX210**
54cm (21.3") Color LCD Monitor



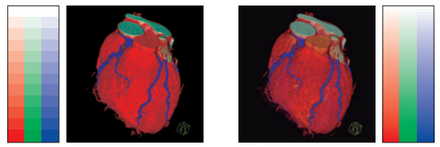
1MP **MX191**
48cm (19") Color LCD Monitor

Features

10-bit Color

Each RGB color is supported with a 10-bit input compatibility that displays more than 1 billion colors, providing smooth color tones for 3D color rendering and image fusion.

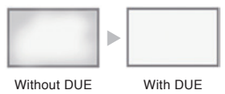
10-bit color graphics board and 10-bit color viewer software needed for 10-bit color display.



8-bit RGB Displayed Image　　10-bit RGB Displayed Image

Steadier Image Across the Screen

The Digital Uniformity Equalizer (DUE) function provides optimum backlight luminance uniformity which is difficult to attain due to the characteristics of LCD monitors, especially with larger screen size.



Without DUE　　With DUE

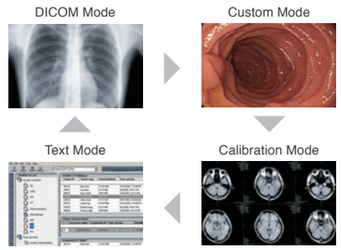
Quick Brightness Stabilization for Instant Viewing

At startup or upon wakeup, the EIZO patented drift correction function quickly stabilizes the brightness level. In addition, a sensor measures the backlight brightness and compensates for brightness fluctuations caused by the ambient temperature and the passage of time.

Mode Selection for Optimum Viewing

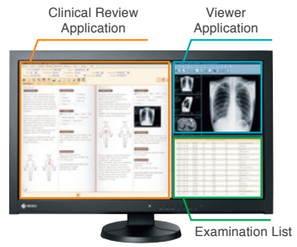
Selectable with the front panel buttons, the CAL Switch function allows for various imaging modes of different modalities such as CR, CT, and endoscope images.

Number or type of the modes vary by model.



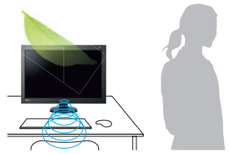
Handy Partitioning for Widescreen

EIZO ScreenSlicer is a desktop monitor software utility that allows an entire screen to be effectively used through partitioning. Multiple windows can be easily aligned and dropped into the partitioned areas in single- or multi-monitor environments for convenience.



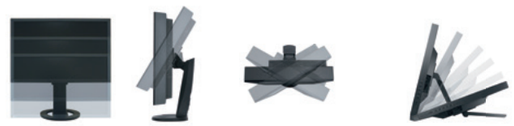
Presence Sensor for Power Savings

The presence sensor prompts the monitor to switch to power save mode when it detects the user is away from the monitor, and then resume normal operation when the user returns.



Versatile Positioning for Improved Operability

EIZO's highly versatile stand offers tilt, swivel and a wide height adjustment range enabling you to use the monitor with greater comfort. Multitouch monitors come with stands that let you tilt the monitor back ideal for touch pen use.



Customer Assurance with Medical Standards

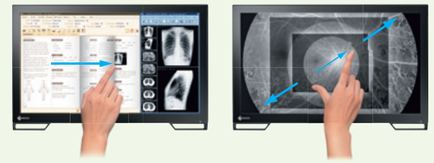
EIZO monitors meet the strictest medical, safety, and EMC emission standards.

Warranty with Safety and Trust

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

User-Intuitive Multitouch Interface

Both intuitive and enjoyable to work with, multitouch lets you tap, scroll, drag, pinch, spin, etc. with your fingers instead of a mouse and keyboard. The multitouch interface is supported by Windows 8 and 7 and works with the growing number of multitouch applications compatible with these OS.



All 4 Corners Operable Full-Flat Design

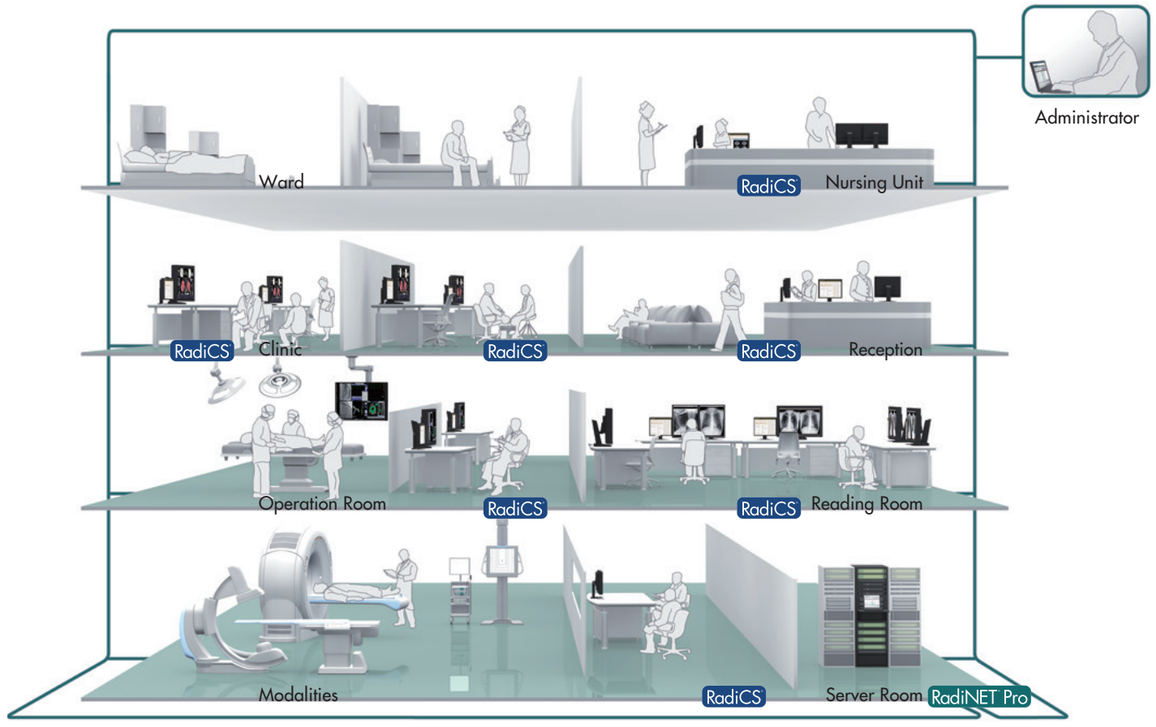
Design with perfect flat top surfaces offers you touch operation all the way to the edge or corner of the display area without being obstructed by the bezel. Smooth surface also allows easy cleaning of dust and fingerprint attached to the front of the screen.

Dedicated Touch Panel Pointer

The monitor implements touch panel technology which accepts input from a touch pen.

Monitor Quality Control Solutions

With filmless imaging spreading in the medical world, there is a growing interest in maintaining the quality of monitors displaying medical images. EIZO offers state-of-the-art solutions for the quality control of monitors which will lead to the improvement of the quality of medical care itself.



Monitor Quality Control Standards Compliance

Quality control tool RadiCS UX1 (sold separately) enables you to perform basic quality checks necessary for clinical review monitors.

Centralized Management of All Monitors

RadiNET Pro (sold separately) enables centralized management of calibration tasks, history data of multiple RadiCS clients via a network, and remote QC functions.

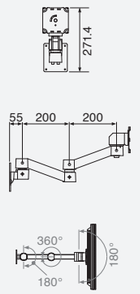
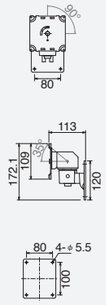
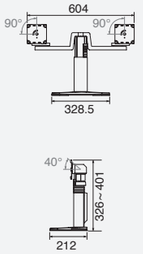
Presence Sensor for Smart QC Tasks

The presence sensor on the monitor or on the front of the Clip-On Swing Sensor G2 determines whether to start QC tasks such as calibrations automatically at scheduled times. If the user is working, the QC task stays in stand-by mode, and when the user is away from the monitor the task is performed.

QC task in stand-by mode while seated

QC task performed while away

Accessory Compatibility

	Wall Mount Arm		Dual Height Adjustable Stand	Panel Protector
	LA-030-W	LA-011-W	LS-HM1-D	Panel Protector
Available Colors	Black	Black	Black, Gray	—
Mounting Desk / Wall Requirements	130 kg min.	130 kg min.	To be used with same model only.	—
Height Adjustment Range	—	—	75 mm, 6 stages (0 / 15 / 30 / 45 / 60 / 75 mm)	—
Horizontal Slide Range	—	—	80 mm max.	—
Load Capacity	4 - 9 kg	4 - 9 kg	—	—
Weight	2.8 kg	1.4 kg	6.8 kg	—
Hole Spacing (VESA Standard)	100 x 100 mm	100 x 100 mm	100 x 100 mm	—
Surface Treatment	—	—	—	Anti-Glare Type
Light Transmission	—	—	—	More than 90%
3.7MP MX270W	○	○	—	FP-2702W*
2.3MP MX241W	○	○	—	FP-2400W
2MP MS230W	○	○	—	FP-2301W
2MP MX210	○	○	○	FP-2101
1MP MX191	○	○	○	FP-702
2MP MS235WT	—	—	—	—
2MP MS231WT	—	—	—	—
Dimensions (Unit: mm)				

Monitor Cleaning Kit
ScreenCleaner

** Integrated Front Sensor is unusable with panel protector.*

Specifications

3.7MP RadiForce MX270W

2.3MP RadiForce MX241W

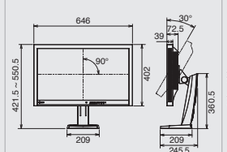
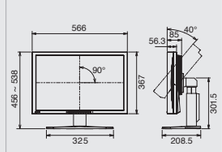
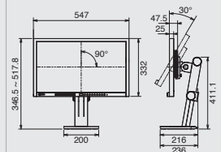
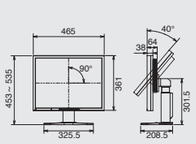
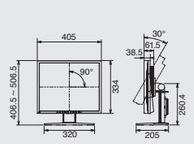
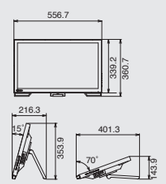
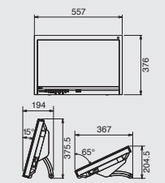
2MP RadiForce MS230W

2MP RadiForce MX210

1MP RadiForce MX191

2MP RadiForce MS235WT

2MP RadiForce MS231WT

Cabinet Color		Black	Black, Gray	Black	Black, Gray	Black, Gray	Black, Gray	Black, Gray-Black Two-Tone
Panel	Type	TFT Color LCD Panel (IPS)	TFT Color LCD Panel (IPS)	TFT Color LCD Panel (VA)	TFT Color LCD Panel (VA)	TFT Color LCD Panel (VA)	TFT Color LCD Panel (IPS)	TFT Color LCD Panel (VA)
	Backlight	LED	CCFL	CCFL	CCFL	CCFL	LED	CCFL
	Size	68 cm / 27" (684 mm diagonal)	61 cm / 24.1" (611 mm diagonal)	58 cm / 23" (584 mm diagonal)	54 cm / 21.3" (540 mm diagonal)	48 cm / 19" (481 mm diagonal)	58 cm / 23" (584 mm diagonal)	58 cm / 23" (584 mm diagonal)
	Native Resolution	2560 x 1440 (16:9 aspect ratio)	1920 x 1200 (16:10 aspect ratio)	1920 x 1080 (16:9 aspect ratio)	1600 x 1200 (4:3 aspect ratio)	1280 x 1024 (5:4 aspect ratio)	1920 x 1080 (16:9 aspect ratio)	1920 x 1080 (16:9 aspect ratio)
	Display Size (H x V)	596.7 x 335.6 mm	518.4 x 324.0 mm	509.7 x 286.7 mm	432.0 x 324.0 mm	376.3 x 301.0 mm	509.1 x 286.4 mm	509.7 x 286.7 mm
	Pixel Pitch	0.233 x 0.233 mm	0.270 x 0.270 mm	0.2655 x 0.2655 mm	0.270 x 0.270 mm	0.294 x 0.294 mm	0.2652 x 0.2652 mm	0.2655 x 0.2655 mm
	Display Colors	10-bit colors (DisplayPort): 1.07 billion (maximum) colors 8-bit colors: 16.77 million from a palette of 68 billion colors	10-bit colors (DisplayPort): 1.07 billion (maximum) colors 8-bit colors: 16.77 million from a palette of 68 billion colors	16.77 million from a palette of 1.06 billion colors	16.77 million from a palette of 1.06 billion colors	16.77 million from a palette of 8.50 billion colors	16.77 million from a palette of 1.06 billion colors	16.77 million from a palette of 1.06 billion colors
	Viewing Angles (H / V, typical)	178°, 178°	178°, 178°	178°, 178°	178°, 178°	178°, 178°	178°, 178°	178°, 178°
	Brightness (typical)	300 cd/m^2	320 cd/m^2	300 cd/m^2	300 cd/m^2	300 cd/m^2	260 cd/m^2	250 cd/m^2
	Contrast Ratio (typical)	1000:1	1000:1	3000:1	1000:1	2000:1	1000:1	3000:1
	Response Time (typical)	12 ms (On/Off), 8 ms (Midtone)	13 ms (On/Off), 5 ms (Midtone)	25 ms (On/Off), 7 ms (Midtone)	16 ms (On/Off), 8 ms (Midtone)	20 ms (On/Off), 8 ms (Midtone)	16 ms (On/Off), 6 ms (Midtone)	25 ms (On/Off), 7 ms (Midtone)
Touch Panel	Type	–	–	–	–	–	Projected Capacitive Type	Infrared Optical Imaging
	Communication Protocol	–	–	–	–	–	USB	USB
	Surface Hardness	–	–	–	–	–	5 H	5.5 Mohs
	Compatible OS	–	–	–	–	–	Windows 8, Windows 7 (64-bit, 32-bit), Windows XP (32-bit)	Multi-touch: Windows 7 (64-bit, 32-bit) Single-touch: Windows Vista (64-bit, 32-bit)
Video Signals	Input Terminals	DVI-D x 1, DisplayPort x 1	DVI-I x 2, DisplayPort x 1	DVI-D x 1, DisplayPort x 1, D-Sub mini 15 pin x 1	DVI-I x 1, D-Sub mini 15 pin x 1	DVI-D x 1, D-Sub mini 15 pin x 1	DVI-D x 1, DisplayPort x 1, D-Sub mini 15 pin x 1	DVI-D x 1, HDMI x 1, D-Sub mini 15 pin x 1
	Digital Scanning Frequency (H / V)	31 - 89 kHz / 29.5 - 61 Hz (VGA Text: 69 - 71 Hz)	31 - 76 kHz / 59 - 61 Hz (VGA Text: 69 - 71 Hz)	31 - 68 kHz / 59 - 61 Hz (VGA Text: 69 - 71 Hz)	31 - 76 kHz / 59 - 61 Hz (VGA Text: 69 - 71 Hz)	31 - 64 kHz / 59 - 61 Hz (VGA Text: 69 - 71 Hz)	31 - 68 kHz / 59 - 61 Hz (VGA Text: 69 - 71 Hz)	DVI 31 - 68 kHz / 59 - 61 Hz (VGA Text: 69 - 71 Hz), HDMI 15 - 68 kHz / 49 - 61 Hz (VGA Text: 69 - 71 Hz)
	Analog Scanning Frequency (H / V)	–	24 - 76 kHz / 49 - 86 Hz (1600 x 1200: 76 Hz, 1920 x 1200: 61 Hz) Frame synchronous mode: 59 - 61 Hz	31 - 81 kHz / 55 - 76 Hz	24 - 80 kHz / 49 - 76 Hz (1600 x 1200: 61 Hz) Frame synchronous mode: 59 - 61 Hz	24.8 - 80 kHz / 50 - 75 Hz	31 - 81 kHz / 55 - 76 Hz	31 - 81 kHz / 55 - 76 Hz Frame synchronous mode: 49 - 61 Hz
	Sync Formats	–	Separate, Composite	Separate	Separate, Composite	Separate	Separate	Separate
USB	Function	1 upstream, 2 downstream	1 upstream, 2 downstream	–	1 upstream, 2 downstream	1 upstream	1 upstream, 2 downstream	1 upstream for touch panel control
	Standard	Rev. 2.0	Rev. 2.0	–	Rev. 2.0	Rev. 2.0	Rev. 2.0	Rev. 2.0
Power	Power Requirements	AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz	AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz	AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz	AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz	AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz	AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz	AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz
	Maximum Power Consumption	82 W	95 W	45 W	70 W	43 W	56 W	45 W
	Typical Power Consumption	39 W	58 W	–	46 W	26 W	21 W	30 W
	Power Save Mode	Less than 1 W	Less than 0.9 W	Less than 1 W	Less than 2 W	Less than 0.8 W	Less than 0.5 W	Less than 1.3 W
	Power Management	DVI DMPM, DisplayPort 1.1a	Digital: DVI DMPM, DisplayPort 1.1a, Analog: VESA DPM	Digital: DVI DMPM, DisplayPort 1.1a, Analog: VESA DPM	Digital: DVI DMPM, Analog: VESA DPM	Digital: DVI DMPM, Analog: VESA DPM	Digital: DVI DMPM, DisplayPort 1.1a, Analog: VESA DPM	Digital: DVI DMPM, Analog: VESA DPM
Sensor		Backlight Sensor, Integrated Front Sensor	Backlight Sensor	Backlight Sensor, Presence Sensor, Ambient Light Sensor	Backlight Sensor	Backlight Sensor	–	Backlight Sensor, Ambient Light Sensor
OSD Languages		English, German, French, Italian, Japanese, Simplified Chinese, Spanish, Swedish, Traditional Chinese	English, German, French, Italian, Japanese, Simplified Chinese, Spanish, Swedish, Traditional Chinese	English, German, French, Italian, Japanese, Simplified Chinese, Spanish, Swedish, Traditional Chinese	English, German, French, Italian, Japanese, Spanish, Swedish	English, German, French, Italian, Japanese, Simplified Chinese, Spanish, Swedish, Traditional Chinese	English, German, French, Italian, Japanese, Simplified Chinese, Spanish, Swedish, Traditional Chinese	English, German, French, Italian, Japanese, Simplified Chinese, Spanish, Swedish, Traditional Chinese
Physical Specifications	Net Weight	11.1 kg	10.1 kg	7.1 kg	9.7 kg	7.2 kg	6.6 kg	7.7 kg
	Net Weight (Without Stand)	8.4 kg	7.1 kg	4.3 kg	6.7 kg	5.2 kg	6.0 kg	6.9 kg
	Hole Spacing (VESA Standard)	100 x 100 mm	100 x 100 mm	100 x 100 mm	100 x 100 mm	100 x 100 mm	100 x 100 mm	100 x 100 mm
Certifications & Standards (Please contact the EIZO group company or distributor in your country for the latest information.)		CE (Medical Device Directive), EN60601-1, UL60601-1, CSA C22.2 No. 601-1, IEC60601-1, VCCI-B, FCC-B, Canadian ICES-003-B, C-tick, RoHS, China RoHS, WEEE, CCC, GOST-R	CE (Medical Device Directive), EN60601-1, UL60601-1, CSA C22.2 No. 601-1, IEC60601-1, VCCI-B, FCC-B, Canadian ICES-003-B, C-tick, RoHS, China RoHS, WEEE, CCC, GOST-R	J60950, ISO9241-307, prEN 50279, EN 60950-1, EK1-ITB2000, CE (Low Voltage Directive, EMC Directive), UL60950-1, CSA C22.2 No. 60950-1, IEC60950-1, VCCI-B, FCC-B, Canadian ICES-003-B, C-tick, RoHS, China RoHS, WEEE, CCC, GOST-R	CE (Medical Device Directive), EN60601-1, UL60601-1, CSA C22.2 No. 601-1, IEC60601-1, VCCI-B, FCC-B, Canadian ICES-003-B, C-tick, RoHS, China RoHS, WEEE, CCC, GOST-R	CE (Medical Device Directive), EN60601-1, UL60601-1, CSA C22.2 No. 601-1, IEC60601-1, VCCI-B, FCC-B, Canadian ICES-003-B, C-tick, RoHS, China RoHS, WEEE, CCC, GOST-R	CE (Medical Device Directive), EN60601-1, UL60601-1, CSA C22.2 No. 601-1, IEC60601-1, VCCI-B, FCC-B, Canadian ICES-003-B, C-tick, RoHS, China RoHS, WEEE, CCC, GOST-R	J60950, EN60950-1, CE (Low Voltage Directive, EMC Directive), UL60950-1, CSA C22.2 No. 60950-1, IEC60950-1, VCCI-B, FCC-B, Canadian ICES-003-B, C-tick, RoHS, China RoHS, WEEE, CCC, GOST-R
FDA 510 (k) Clearance *		Yes (for General Radiography)	Yes (for General Radiography)	–	–	–	–	–
Supplied Accessories		AC power cord, signal cables (DVI-D - DVI-D, DisplayPort - DisplayPort), USB cable, Utility Disk (RadiCS LE, ScreenManager Pro for Medical, user's manual)	AC power cord, signal cables (DVI-D - DVI-D, DisplayPort - DisplayPort), USB cable, Utility Disk (RadiCS LE, ScreenManager Pro for Medical, user's manual)	AC power cord, signal cables (DVI-D - DVI-D, DisplayPort - DisplayPort), Utility Disk (user's manual)	AC power cord, signal cable (DVI-D - DVI-D), USB cable, Utility Disk (RadiCS LE, ScreenManager Pro for Medical, user's manual)	AC power cord, signal cable (DVI-D - DVI-D), USB cable, Utility Disk (RadiCS LE, ScreenManager Pro for Medical, user's manual)	AC power cord, signal cables (DVI-D - DVI-D, DisplayPort - DisplayPort), USB cable, audio cable, touch pen, holder for touch pen, Utility Disk (user's manual), cleaning cloth	AC power cord, signal cables (DVI-D - DVI-D, D-Sub mini 15 pin - D-Sub mini 15 pin), USB cable, audio cable, touch pen, Utility Disk (Touch panel driver, user's manual), cleaning cloth, 4 screws for mount option
Warranty		Five Years	Five Years	Five Years	Five Years	Five Years	Three Years	Three Years
Dimensions (Unit: mm) MX270W, MS230W : Other : • *Swivel not supported with MS235WT, MS231WT*									

** Use FDA 510(k) Clearance monitor for diagnosis.*

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