RadiForce **MX315W**

Product Website

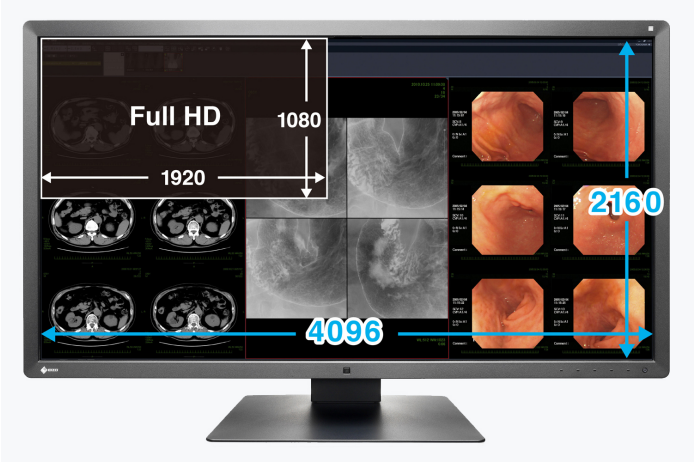
The 31.1” colour monitor impresses with 4K resolution (4,096 x 2,160 pixels) that ensure crisper details. The MX315W also shines in terms of colour purity and illumination thanks to the Digital Uniformity Equalizer. This allows the MX315W to correctly display hues and greyscale tones of radiological images across the entire screen. The DICOM display curve is preset during production and guarantees proper greyscale reproduction. The MX315W monitor features sensors for ambient light and calibration. Given its size and picture quality, the MX315W is particularly well suited for diagnosing cross-sectional imaging and viewing 3D reconstructions.

- 4K colour display with consistently high and stable brightness
- greyscales with DICOM hue curve
- integrated sensor for automatic, precise calibration of white balance and the tonal value
- automatic luminance distribution control (Digital Uniformity Equalizer)
- set up for acceptance and consistency testing in accordance with DIN 6868-157 and QS-RL
- presence sensor means monitor is ready for immediate use whenever the user is in front of it
- ergonomic, attractive design
- compact dimensions, narrow bezels, and integrated power supply

Image quality
Precise, high-contrast, bright and crisp screen

Excellent image quality for the finest details

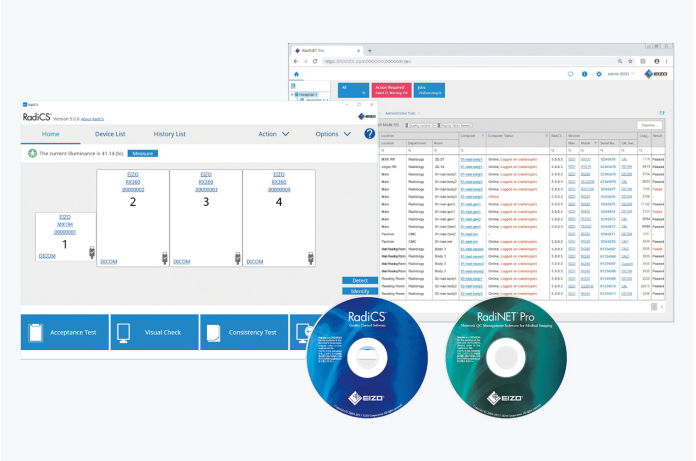
Thanks to the high 8 Megapixels (colour) resolution, a strong contrast ratio of 1300:1 and stable brightness of up to 450 cd/m^2, the monitor offers excellent image quality. Even the differences between the finest details are shown – regardless of your viewing angle. This is a great advantage if multiple physicians are looking at the screen.



Consistently secure image quality

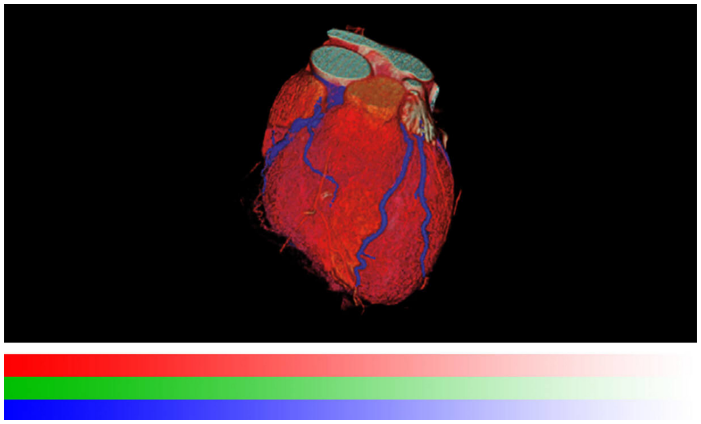
The optional EIZO RadiCS software to secure image quality enables extensive maintenance and testing of monitors and includes calibration, acceptance and constancy testing, and the archiving of all areas. If you are working on multiple stations, the use of the RadiNET Pro is recommended. This can be used to centrally control the calibration of all monitors, including data history. This saves you a significant amount of time and ensures consistently high image quality across the entire setup. The basic version RadiCS LE is already included with RadiForce monitors.

- Learn more about RadiCS LE software (included in the delivery)
- Learn more about RadiCS software (optionally available)
- Learn more about RadiNet Pro software (optionally available)

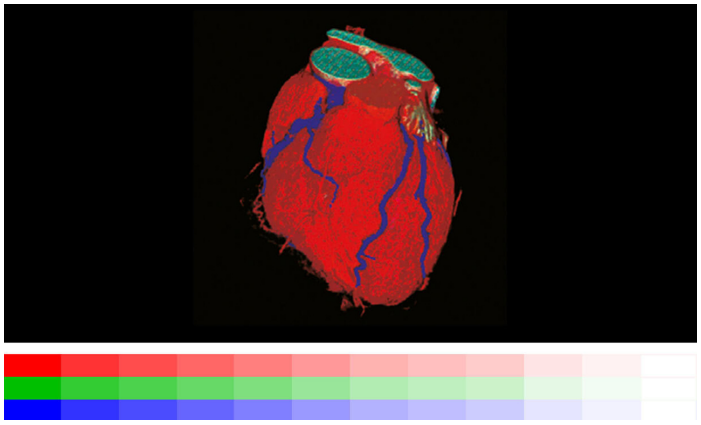


One billion color tones thanks to 13 bit LUT

Color rendering is controlled by a 13 bit look-up table (LUT), up to 10 bits of which are available in the DisplayPort connection. This produces a resolution with a maximum of 1 billion color tones. The rendering characteristic and fine structures required for diagnostics can therefore be precisely identified.



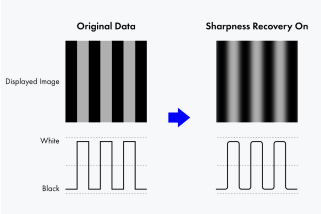
With 13 bit LUT



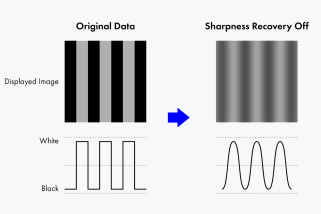
Without 13 bit LUT

Blur reduction

LCD panels with a high brightness level tend to have more blurry image rendering thanks to over-framing than would be possible in comparison with an acquired exposure. Therefore, EIZO offers blur reduction anchored in monitor hardware. It retrieves details lost in the contours on the screen, meaning that the image is rendered as clearly as possible.



Sharpness recovery on



Sharpness recovery off

Uniform brightness and high color purity

The monitor shines thanks to its high color purity and uniform illumination. This is down to the Digital Uniformity Equalizer (DUE), which corrects imbalances automatically, pixel by pixel. Gray and color tones of radiological and other medical images are correctly rendered over the entire display. This is vital for diagnostics.

With DUE

Without DUE

Consistent image quality thanks to integrated luminance sensor

The precise calibration of white point and tone value characteristic curve is provided by an integrated luminance sensor. This measures the brightness and grayscales and calibrates the monitor autonomously according to the DICOM® standard. The sensor works automatically, without restricting the field of vision of the monitor. You can save the costs, time, and effort of maintenance and rely on a consistently balanced image quality.

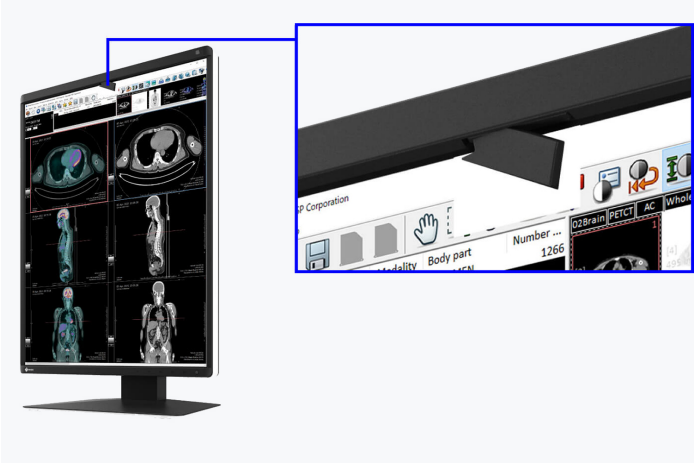


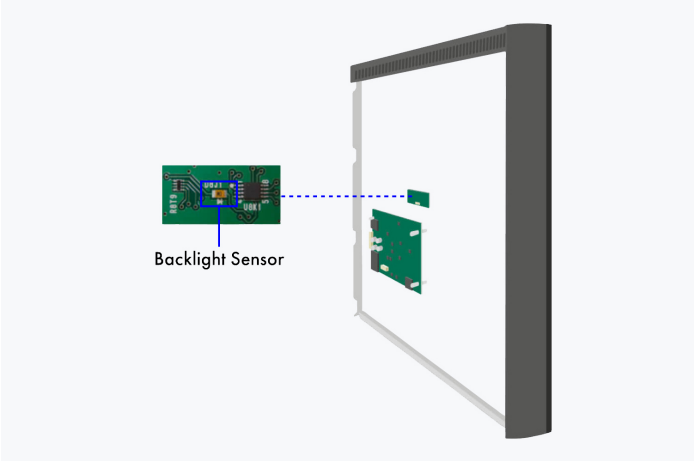
Illustration exemplary

FDA clearance

The MX315W holds the FDA-510(k)- clearance for general radiography, but it does not support display of mammography images for diagnosis.

Constant brightness during operation

A sensor for the backlight permanently determines the luminance of the monitor. The benefit: The defined and calibrated values are rendered exactly just seconds after the monitor is turned on and remain constant during the entire period of use. The sensor is invisibly integrated in the monitor.

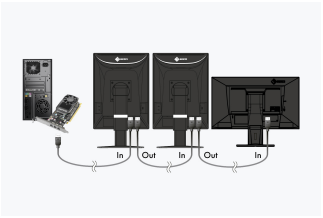


Back of the monitor

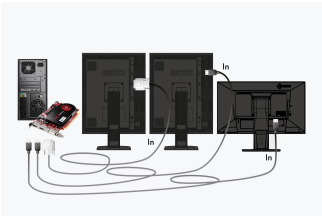
Imroved comfort
Efficiency in diagnostics

Hassle free multiscreen solution

Thanks to the signal input and output, you can link several RadiForce monitors through their DisplayPort interface. This means that you can realise multi-monitor solutions with the greatest of ease – without labourious and excessive cabling.



Daisy chain method



Conventional solution

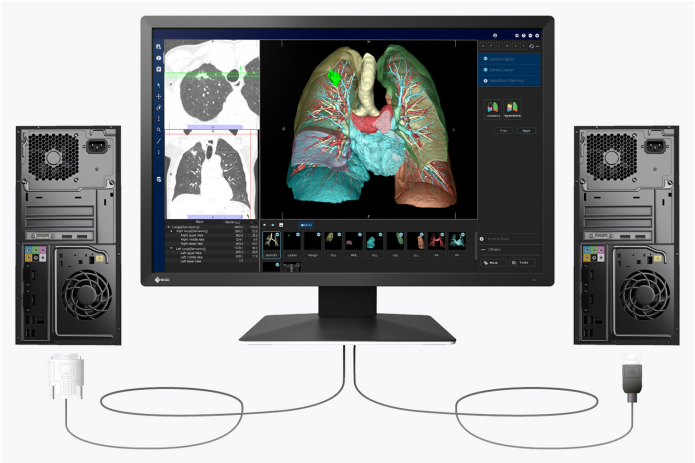
Extended durations of use thanks to automatic shut down

The monitor has an automatic shut down option for the backlight (backlight saver). This extends the duration of use. Similar to a screen saver, the LEDs turn off when the screen is not being used.

The backlight saver is part of the RadiCS software.

Connections for two computers

DisplayPort and DVI-D input enable the connection of two image signals. You can therefore connect two computers simultaneously. You can switch between them automatically or manually, if desired.



RadiLight: Eye-friendly comfort light

EIZO offers a brand-new, easy-to-operate comfort light for radiologists who work in dark diagnosis rooms. The soft illuminance in the background of the screen reduces the strain on the eyes that frequently occurs due to constant light-dark changes between bright screens and objects in a dark environment.

Software and ease of use
Features for greater comfort

The Work-and-Flow technology

With the increasing digitisation of modalities, radiologists are confronted with a growing amount of information on their screens. EIZO's unique work-and-flow technology, with new features designed to meet the needs of radiologists, effectively counters the complexity of data. The RadiForce MX315W and RadiCS-LE software solution enable you to benefit from the Work-and-Flow functions.

More information about the Work-and-Flow functions

Point-and-Focus: all eyes on the analysis

The Point-and-Focus function allows you to select and focus on relevant image areas quickly using your mouse or keyboard. By adjusting the brightness and greyscale, the interesting parts of an image are highlighted by dimming the surrounding areas.

Hide-and-Seek: fast retrieval of information

Hide-and-Seek adds the benefit of making it possible to access reports, patient files and other information on the display quickly and efficiently without needing an additional monitor. When you move your cursor towards or away from the edge of the screen, a PinP window hides and displays information.

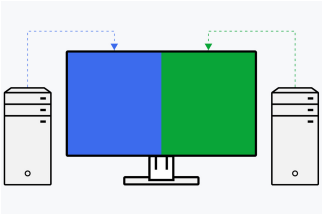
Switch-and-Go: just one keyboard and mouse for two systems

Switch-and-Go makes it possible to work using just one keyboard and mouse at diagnostic imaging stations that make use of two computers. You can switch between the two systems simply by moving your cursor from one screen to the other. This ensures greater work efficiency and allows you to maintain a clear overview of your workstation.

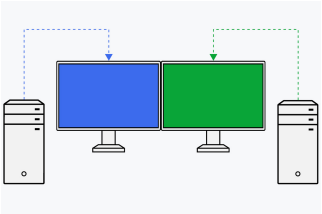
Picture-by-picture: everything at a glance

The Picture-by-Picture mode allows you to display different signal sources on one screen. You can select which signal is to be displayed on the right or left half of the screen.

Use the Picture-by-Picture mode, for example, if you want to connect two computers to one monitor, or if you want to replace two individual screens connected to one computer.



With Picture-by-Picture



Without Picture-by-Picture

Sustainability

Environmentally and socially conscious production

Socially responsible production

The MX315W is produced in a socially responsible way. It is free of child labour and forced labour. Suppliers along the supply chain have been carefully selected and they have also committed themselves to produce in a socially responsible way. This applies in particular to conflict minerals. We present a detailed report about our social responsibility annually and voluntarily.

Environmentally and climate friendly

Each MX315W is manufactured in our own factory, which implements an environmental management system in accordance with ISO 14001. This includes measures to reduce waste, wastewater and emissions, resource and energy consumption, as well as to encourage environmentally conscious behaviour among employees. We publicly report on these measures on an annual basis.

Sustainable and durable

The MX315W is designed to have a long service life and normally outlasts the warranty period by some distance. Replacement parts are available many years after production has ceased. The entire lifecycle takes into account the impact on the environment as the longevity of the product and the fact it can be repaired saves resources and protects the environment. When designing the MX315W, we took a minimalistic approach to our resources by using high-quality components and materials, as well as a careful production process.

Warranty
Highest investment security

Five-year warranty

EIZO grants a five-year warranty. This is possible thanks to the highly developed production process based on a simple principle of success: sophisticated and innovative technology, made from high-end materials.

Graphics board recommendation
For precise diagnostics

The EIZO graphics card supports the properties, functions, and settings of the RadiForce MX315W optimally. It enables precise diagnosis and can control several monitors simultaneously. EIZO offers technical support and warranty service for the graphics card.

Technical data

GENERAL

Item no.	MX315W
Case colour	Bicolor, black and white
Solution area	Healthcare
Product line	RadiForce
Areas of application	Computed tomography/MR imagine, Pathology, Non-destructive-testing

DISPLAY

Screen size [in inches]	31,1
Screen size [in cm]	79
Format	17:9
Viewable image size (width x height)	697,9 x 368
Resolution in mega pixel	8 Megapixels (colour)
Ideal and recommended resolution	4096 x 2160 (4K DCI)
Pixel pitch [mm]	0,1704 x 0,1704
Panel technology	IPS
Max. viewing angle horizontal	178
Max. viewing angle vertical	178
Number of colours or greyscale	1.07 billion colors (DisplayPort, 10 Bit), 16.7 million colors (DVI, 8 Bit), 16.7 million colors (DisplayPort, 8 Bit)
Colour palette/look-up table	543 billion colour tones / 13 bit
Max. brightness (typical) [in cd/m²]	450
Preset factory calibrated brightness [in cd/m²]	270
Max. dark room contrast (typical)	1300:1
Reaction time black-white-black-change (typical)	20
Backlight	LED

FEATURES & OPERATION

Preset colour/greyscale modes	2x manual memory locations, Text, sRGB, Paper, DICOM
DICOM tone curve	✓
Hardware calibration Healthcare	✓
Digital Uniformity Equalizer (homoge-neity correction)	✓
Sensors (Healthcare)	Ambient Light Sensor, Integrated luminance sensor, Backlight Sensor, Presence sensor
Input signal identification	✓
Picture-by-Picture	✓
OSD language	de, en, fr, es, it, se
Integrated power unit	✓

CONNECTIONS

Video Input	2x DisplayPort (HDCP 1.3), DVI-D (HDCP 1.4)
Connection Interface Signal	1x DisplayPort (HDCP 1.2)
Daisy chain compatibility	✓
USB specification	USB 2
USB upstream ports	2 x type B
USB downstream ports	2x type A
Video signal	DisplayPort, DVI Dual Link (TMDS)

ELECTRICAL DATA

Frequency	Digital: 31-134 kHz/14-61 Hz
Power consumption (typical) [in watt]	67
Maximum Power Consumption [in watt]	125 (at maximum brightness with all signal inputs and USB ports in use)
Power Save Mode [in watt]	1.6
Power consumption off [in watt]	0
Power supply	AC 100-240V, 50/60Hz

DIMENSIONS & WEIGHT

Weight [in kilograms]	11.7
Weight without stand [in kilograms]	7.5
Link technical drawing	Dimension drawing (PDF)
Swivel	70
dimensionTilt	5 / 30
Hole spacing	100 x 100

CERTIFICATION AND STANDARDS

Certification	CE (Medical Device), ANSI/AAMI ES60601-1, CSA C22.2 Nr. 601-1, EN60601-1, IEC60601-1, RCM, FCC-B, CAN ICES-3 (B), VCCI-B, RoHS, WEEE, China RoHS, CCC, EAC

SOFTWARE & ACCESSORIES

Software	RadiCS LE
Additional supply	2x Signal cable DisplayPort - DisplayPort, 1x short signal cable DisplayPort – DisplayPort, Signal cable DVI-D - DVI-D, USB cable (Type A - Type B), Manual via download, Power cord
Accessories	RadiNET Pro, RadiCS
Graphics Boards	MED-XN72

WARRANTY

Warranty duration	5 years

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