

## MX216-HB

### Your advantages



The MX216-HB is a 2-megapixel monitor that features factory-preset DICOM® hue curves and accurately displays greyscale tones of radiological images. Each monitor is calibrated at the factory with a brightness of 340 cd/m<sup>2</sup>. The monitor features a horizontal and vertical viewing angle of 178°. Radiological images are clear and rich in contrast. The MX216-HB also shines in terms of colour purity and illumination thanks to the Digital Uniformity Equalizer. Hues and greyscale tones of radiological images are correctly displayed across the entire screen. The monitor can be operated in portrait and landscape format.

- ✓ 2-megapixel colour screen with 340 cd/m<sup>2</sup> factory-calibrated brightness and 500 cd/m<sup>2</sup> maximum brightness
- ✓ Clear perceptibility of structures through high contrast and Sharpness Recovery technology
- ✓ Palette with 543 billion hues for precise colour reproduction (10-bit resolution max.)
- ✓ Hybrid gamma PXL functionality for precise display, down to the pixel, of greyscale and colour images with the required luminance characteristic curve
- ✓ Homogenous display surface with automatic luminance distribution control (DUE)
- ✓ Set up for calibration, acceptance and consistency testing in accordance with DIN 6868-157 and QS-RL
- ✓ Effortless quality control and built-in calibration sensor
- ✓ Ergonomic design with narrow bezels

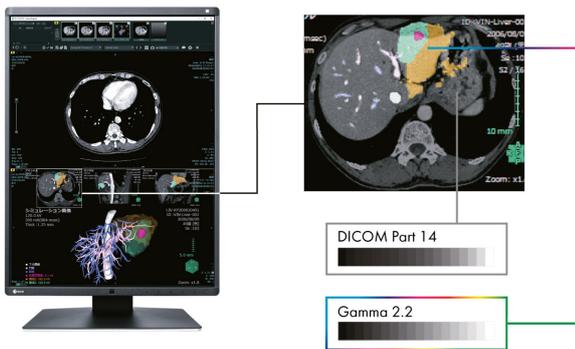
## Features

### Excellent image quality for the finest details

Thanks to the high 2 Megapixels (colour) resolution, a strong contrast ratio of 1500:1 and stable brightness of up to 500 cd/m<sup>2</sup>, 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.

### Observe monochrome and colour images on a single monitor

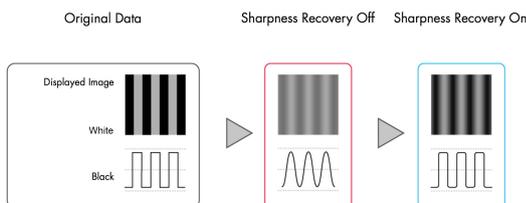
The hybrid gamma PXL functionality automatically differentiates between monochrome and colour images, pixel by pixel. This creates a hybrid display on which each pixel is displayed with the ideal tone value. In turn, this achieves a greater degree of precision and reliability than for conventional planar detection methods.



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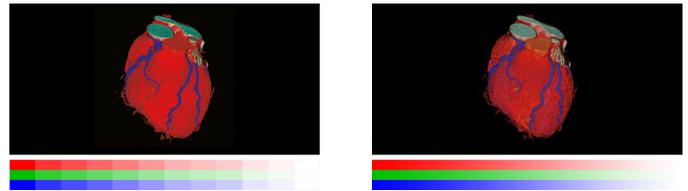
### Blur reduction

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.



### One billion colour tones thanks to 13 bit LUT

Colour 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 colour tones. The rendering characteristic and fine structures required for diagnostics can therefore be precisely identified.

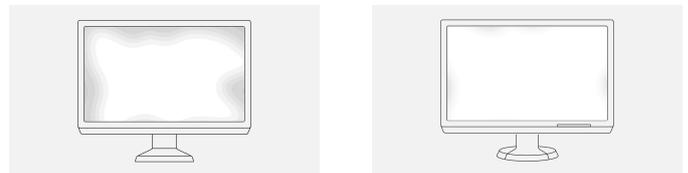


Without 13 bit LUT

With 13 bit LUT

### Uniform brightness and high colour purity

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



Without DUE

With DUE

### Balanced image quality thanks to an integrated front sensor

The precise calibration of white point and tone value characteristic curve is provided by an integrated front sensor (IFS). 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.



Without IFS

With IFS

## Features

### Secure image quality thanks to AAPM/Euref/DIN compliance

The display properties, in particular brightness and contrast, are suited to the creation of image rendering systems compliant with DIN 6868-157. The DICOM® GSDF characteristic is already precisely configured in the factory. This means that greyscales are consistent, which is vital for diagnostics.

[Overview RadiCS application classes I to VIII](#)



### FDA clearance

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

### 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.



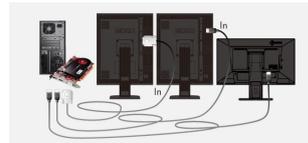
### RadiCS LE

Brightness and DICOM® characteristic curve can be checked using the [RadiCS LE software](#) and automatically calibrated according to the factory default settings. The integrated sensor in

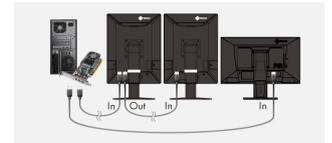
the device takes care of this. The calibration of other tone value curves, such as CIE, is also possible with RadiCS LE.

### Multi-monitor solutions without problems

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.



Conventional solution: messy cabling

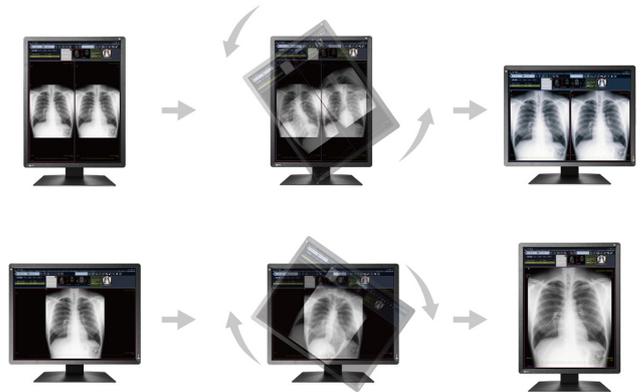


Daisy-chain compatibility via DisplayPort interface: tidied-up cables

### Always in the right position

The MX216-HB can be operated in both portrait and landscape format. The 'Image Rotation Plus' function, included in the RadiCS LE software provided, rotates the displayed image automatically depending on the position of the monitor. (This function only works if supported by the graphics board.)

In addition, the flexible stand guarantees optimal ergonomics. You can tilt the monitor or lower it down to desk level.



Thanks to the Image Rotation Plus function, the displayed image rotates automatically into portrait or landscape format, depending on the position of the monitor.

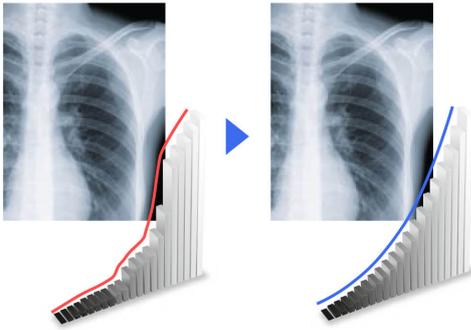
### One monitor, many ports

It doesn't get easier than this: You can connect most of your devices, such as PC, laptop or cameras directly to the monitor because the monitor has a number of different ports. That makes your daily work easier.

## Features

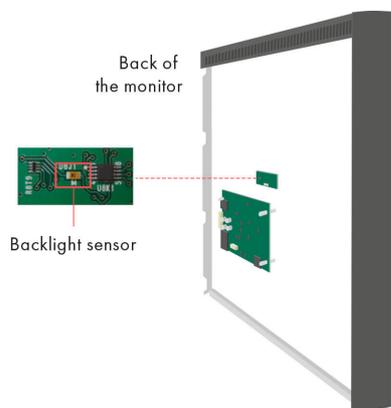
### Display of DICOM® characteristic at the press of a button

EIZO measures and adjusts each tone of grey carefully so that the monitors comply with the DICOM® standard when delivered from the factory. The result is a particularly consistent gradation of grey tones, allowing for optimal radiological clinical reviews.



### 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.



### For precise diagnoses: EIZO graphics card MED-XN51LP

The EIZO graphics card MED-XN51LP optimally supports the features, functions and settings of the RadiForce MX216-HB. It enables precise diagnosis and can control several monitors simultaneously. EIZO offers technical support and warranty service for the graphics card.

[Display the specifications of the MED-XN51LP](#)



### 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.

[learn more about RadiLight](#)



# Specification

## General

Item no.	MX216-HB
Case color	Black
Areas of application	Medicine
Product line	RadiForce
EAN	4995047054610

## Display

Screen size [in inches]	21
Screen size [in cm]	54
Format	3:4
Viewable image size (width x height)	324 x 432
Resolution in MP	2 Megapixels (colour)
Ideal and recommended resolution	1200 x 1600
Pixel pitch [mm]	0.270 x 0.270
Panel technology	IPS
Max. viewing angle horizontal	178 °
Max. viewing angle vertical	178 °
Number of colours or greyscale	1.07 billion colours (DisplayPort, 10 Bit), 16.7 million colours (DisplayPort, 8 Bit), 16.7 million colours (DVI, 8 Bit)
Colour palette/look-up table	543 billion colour tones / 13 Bit
Max. brightness (typical) [in cd/m <sup>2</sup> ]	500
Factory-calibrated brightness [in cd/m <sup>2</sup> ]	340
Max. dark room contrast (typical)	1500:1
Backlight	LED

## Features & control

Preset colour/greyscale modes	CAL1, CAL2, Custom, sRGB, DICOM
DICOM tone curve	✓
RadiCS application classes	II, III, IV, V, VI, VII, VIII
Hardware calibration of brightness and light density characteristic curve	✓
Digital Uniformity Equalizer (homogeneity correction)	✓
Hybrid Gamma PXL	✓
Blur reduction	✓
Sensors	Integrated front sensor, Backlight Sensor, Ambient Light Sensor
OSD language	de, en, fr, es, it, se, ja, zh
Adjustment options	Brightness, gamma, colour saturation and temperature, resolution, DICOM <sup>®</sup> tone value characteristic, OSD language (de, uk, fr, es, it, se), interpolation, off timer
Integrated power unit	✓

## Ports

Signal inputs	1x DisplayPort, 1x DVI-D
Signal outputs/Daisy chain compatibility	1x DisplayPort 1.2
USB specification	USB 2.0
USB upstream ports	1 x type B
USB downstream ports	2 x type A
Video signal	DisplayPort, DVI (TMDS)

## Electric data

Power consumption (typical) [in watt]	26
Maximum Power Consumption [in watt]	55
Power Save Mode [in watt]	0.6
Power consumption off [in watt]	0
Power supply	AC 100-240V, 50/60Hz

## Warranty

Warranty and service	5 years warranty
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## Dimensions & weights

Dimensions [mm]	357 x 482-572 x 200
Weight [in kilograms]	7.6
Weight without stand [in kilograms]	4.7
Housing dimension details	<a href="#">Dimension drawing (PDF)</a>
Pivot	✓ Ja
Hole spacing	VESA standard 100 x 100 mm

## Certification & standards

Certification	CE (Medical Device), EN 60601-1, ANSI/AAMI ES60601-1, CSA C22.2 Nr. 601-1, IEC60601-1, VCCI-B, FCC-B, CAN ICES-3 (B), RCM, RoHS, China RoHS, WEEE, CCC
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## Software & accessories

Accompanying software and other accessories are available for download	RadiCS LE
Additional supply	Power cord, Signal cable DisplayPort - DisplayPort, USB 2.0 cable, EIZO LCD Utility Disk (incl. PDF manual)
Accessories	RadiLight (Comfort Light for Reading Rooms - Easily attachable light for RadiForce medical LCD monitors.), PP100-K (Short DisplayPort connection cable, 100 cm)
Recommended graphics card	MED-XN51LP