



# GX560-MD

# Your advantages

Brightness and contrast of the GX560 MammoDuo allow deep black tones and a reliable DICOM<sup>®</sup> luminance characteristic curve. Two times 5 megapixels make the MammoDuo perfect for displaying mammography and breast tomosynthesis images that are true to the original source. The GX560-MD has a unique double stand that holds two monitors at the same time. This space-saving construction is particularly useful in small and cramped reading rooms. In addition, the monitor is equipped with EIZO's Work-and-Flow functionalities (Point-and-Focus and Switch-and-Go) that help, for example, to reduce the number of monitors and keyboards. The RadiForce GX560 MammoDuo is available with two combined monitors as a dual-screen configuration or single monitor.

- Two 5-megapixel LCD screens with consistently high and stable brightness for clear mammography images
- Clear perceptibility of microstructures through high contrast and Sharpness Recovery technology
- Homogenous display surface via automatic luminance distribution control (Digital Uniformity Equaliser)
- 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
- Low power consumption and heat output
- ✓ Light sensor to measure ambient light at the diagnostic station
- Presence sensor means monitor is ready for immediate use whenever the user is in front of it
- Compact dual-screen solution through a shared stand with narrow bezels and ergonomic design



### Excellent image quality for ultra-sharp details

Thanks to a high resolution of two times 5 Megapixels (greyscale), an excellent contrast ratio of 1700:1 and stable brightness of up to 2500 cd/m2, the monitor offers excellent image quality. Diagnosis in digital mammography depends on the display of the finest details. A high resolution obtains key details and prevents lower image quality with a mosaic effect, which can arise with lower resolutions. The details are presented in a differentiated manner, no matter from which viewing angle the monitor is viewed. This is a great advantage when several doctors are looking at the same screen.

### A new level of observation, without disruptive factors

With a bezel only 7.5 mm in width – the world's smallest bezel width for 5-megapixel monitors – the distance between the display areas of the two monitors is merely 15 mm. Moreover, the panel frame is only 2.5 mm above the screen, which means it sits nearly flush with the screen. This means viewers' vision goes undisrupted when looking back and forth between the monitors.



The MammoDuo consists of two monitors that are combined next to one another in a specially designed stand.

### **Easily Adjustable**

You can conveniently adjust the height, tilt, and rotation of the monitors with the dual stand, without creating gaps between the monitors.

### Perfectly Designed for Diagnostic Use

Narrow black frontal bezels make this device ideal for use in dark environments. They make it easy to visually concentrate on the display. Meanwhile, a white bezel at the sides of the monitors creates a fresh, clean look.



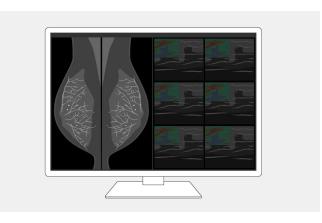
## Space-saving arrangement

The GX560-MD saves a great deal of space. This solution saves 67 mm horizontally, 36 mm vertically, and 20.5 mm in depth, compared to conventional structures built from individual monitors with this resolution arranged next to one another. In summary, this means a 22 % reduction of the total required surface. This frees up valuable space to make for a roomier working environment.



### Point-and-Focus: all eyes on the analysis

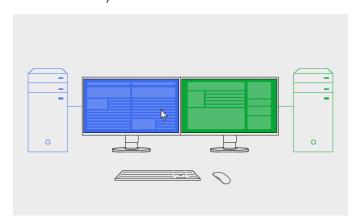
The Point-and-Focus function allows you to select and focus on relevant image areas quickly using your mouse or keyboard. By adjusting the brightness and greyscale, the interesting parts of an image are highlighted by dimming the surrounding areas.





# 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.



### 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 the RadiForce GX, RX, and MX/MS models.

### Learn more about the RadiCS application classes

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)



### Correct rendering of grey tones

The grey tone rendering is controlled by an internal 14 bit look-up table (LUT), enabling a pallet of 16369 tones of grey. This makes calibration (e.g. DICOM® characteristic curve) and control of the luminance distribution possible without losses. Up to 1024 tones of grey can be displayed simultaneously with a suitable DisplayPort signal.





Without 14 bit LUT

With 14 bit LUT

### 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 greyscales 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



### Uniform brightness over the entire screen

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





Without DUE

With DUE

# 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 510(k) validation.

The RadiForce GX560-MD is the ideal solution for visualising the finest details on breast images. The very high contrast of the monitor shows even the smallest structures. The US administration for Food and Drugs granted its FDA 510(k) validation for breast tomosynthesis and mammography.

### High-contrast to the slightest detail

The high contrast ratio means that images are mapped to a high level of detail. Greyscales and black values are highly differentiated. The result: extremely sharp rendering of greyscale images. You can even identify the finest structures.



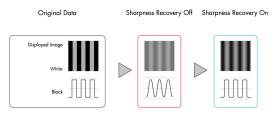


Low-contrast image

High-contrast image

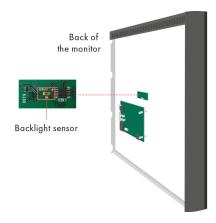
### **Blur reduction**

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.



#### Constant brightness during operation

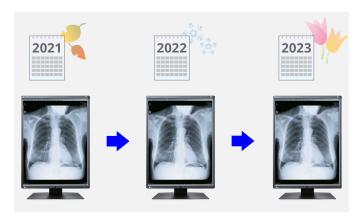
A sensor for the backlight permanently determines the luminance of the monitor. The benefit: The defined and calibrated values are rendered exactly just seconds after the monitor is turned on and remain constant during the entire period of use. The sensor is invisibly integrated in the monitor.





### Reliable brightness

EIZO is convinced of the quality of its products. The warranty for the monitors, therefore, also covers the brightness stability.



# Presence sensor: Save electricity when you are not in front of the monitor

Thanks to the presence sensor, you can save electricity and help protect the environment. The sensor registers whether someone is sitting in front of the screen or not. As soon as the person leaves the workstation, the monitor turns off automatically. When the person comes back, it turns back on – fully automatically, without touching the mouse or keyboard. It is always ready for use without a waiting period.





### 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.

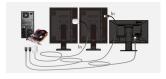
The backlight saver is part of the RadiCS software.

### One solution, many ports

It couldn't be simpler: Most of your end devices, such as PCs, laptops or cameras, can be connected directly to the monitor. The MammoDuo has a wide range of interfaces. This makes your everyday work much easier.

## Multi-monitor solutions without problems

Thanks to the signal input and output, you can link several Radi-Force 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

### **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.

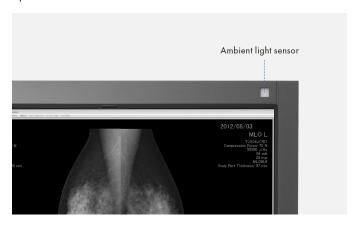
### learn more about RadiLight





### Ambient light sensor supports the constancy test

The sensor integrated in the monitor is used to measure the ambient light and can be used for constancy tests. The prevalent illumination can be determined by the ambient light sensor with the optional RadiCS software.



## For precise diagnoses: EIZO MED-XN92 graphics card

The EIZO MED-XN92 graphics card supports the properties, functions, and settings of the RadiForce GX560-MD optimally. 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-XN92



### 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 monitor technology, made from high-end materials.

\* in Belgium: including on-site replacement service





# Specification

#### General

Item no.	GX560-MD
Case color	Bicolor, black and white
Areas of application	Medicine
Product line	RadiForce
Display	
Screen size [in inches]	21,3
Screen size [in cm]	54,1
Format	4:5
Viewable image size (width x height)	338 x 422
Resolution in MP	5 Megapixels (greyscale)
Ideal and recommended resolution	2048 x 2560
Pixel pitch [mm]	0,165 x 0,165
Panel technology	IPS
Max. viewing angle horizontal	178 °
Max. viewing angle vertical	178 °
Number of colours or greyscale	1024 grey scales (DisplayPort, 10 Bit), 256 grey scales (DisplayPort, 8 Bit), 256 grey scales (DVI, 8 Bit)
Colour palette/look-up table	16,369 grey tones / 14 Bit
Max. brightness (typical) [in cd/m²]	2500
Recommended brightness warranty	1000
Factory-calibrated brightness [in cd/m²]	1000

1700:1

LED

### Features & control

Backlight

Max. dark room contrast (typical)

Preset colour/greyscale modes	DICOM, CAL1, CAL2
DICOM tone curve	✓
RadiCS application classes	I, II, III, IV, V, VI, VII, VIII
Hardware calibration of brightness and light density characteristic curve	✓
Digital Uniformity Equalizer (homogeneity correction)	<b>✓</b>
Hybrid Gamma	✓
Blur reduction	✓
Sensors	Backlight Sensor, Integrated Front Sensor, Presence sensor, Ambient Light Sensor
OSD language	de, en, fr, es, it, se, ja, zh
Adjustment options	Brightness, Gamma, DICOM tonal value, OSD language, Off Timer
Integrated power unit	✓

# Ports

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

### Electric data

Frequency	Digital: 31-135 kHz/23-61 Hz; Frame sync mode: 23,5-25,5 Hz/47-51 Hz
Power consumption (typical) [in watt]	28
Maximum Power Consumption [in watt]	79
Power Save Mode [in watt]	1
Power consumption off [in watt]	0
Power supply	AC 100-240V, 50/60Hz

### Dimensions & weights

Dimensions [mm]	709 x 476-566 x 225
Weight [in kilograms]	17,1
Weight without stand [in kilograms]	8
Housing dimension details	Dimension drawing (PDF)
Swivel	70 °
Incline forward/backward	5 ° / 25 °
Pivot	90°
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, EAC

#### Software & accessories

Accompanying software and other ac- cessories are available for download	RadiCS LE, ScreenManager PRO Medical
Additional supply	2x Power cord, 4x Signal cable DisplayPort - DisplayPort, Short DisplayPort signal cable – DisplayPort, 2x USB 2.0 cable
Accessories	RadiCS (The RadiCS software provides extensive validations and automatic adjustment to ensure constant and consistent image reproduction on all RadiForce screens.), RadiNET Pro (EIZO software for network-based quality management in large facilities – with remote functionality for monitors)
Recommended graphics card	MED-XN92

### Warranty

Warranty and service 5 years warranty*
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#### Terms

\*) The length of the warranty for the product is five years from the date of purchase. In addition, the warranty includes the normal wear and tear of the backlight if it is operated at a recommended brightness of 1000 cd/sq m. EIZO guarantees this brightness for the term of five years from the date of purchase.