



Product Website

## 5-megapixel medical monitor

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
- Still 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
- 5-year warranty for highest investment security



### Image quality

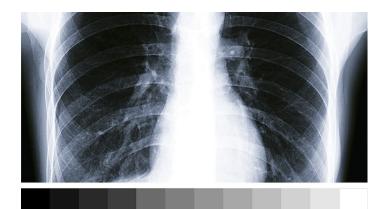
## Precise, high-contrast, bright and crisp screen

## Excellent image quality for the finest details

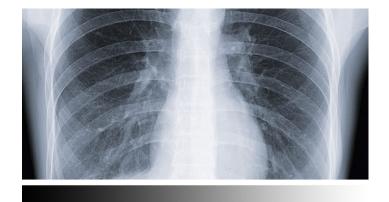
Thanks to a high resolution of two times 5 Megapixels (greyscale), an excellent contrast ratio of 1700:1 and stable brightness of up to  $2500 \text{ cd/m}^2$ , the monitor offers excellent image quality. Diagnosis in digital mammography depends on the display of the finest details. A high resolution 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.

#### **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<sup>®</sup> 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

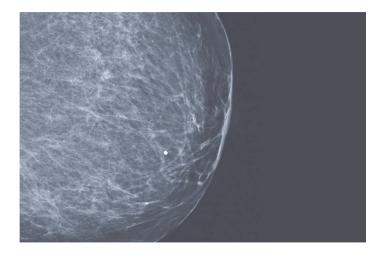


With 14 bit LUT

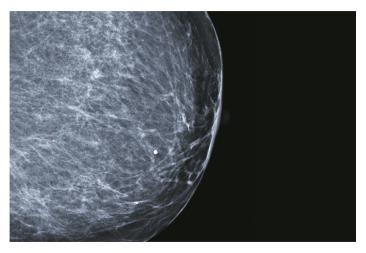


#### High-contrast to the slightest detail

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.



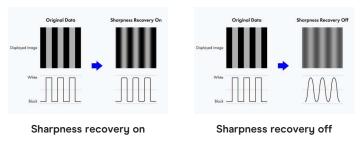
Low-contrast image



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.



# 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 essential for precise image reproduction.





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<sup>®</sup> 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 monitor holds the FDA-510(k)- clearance for breast tomosynthesis, mammography and general radiography.

### **Reliable brightness**

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



#### 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

## 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 GX560-MD 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.



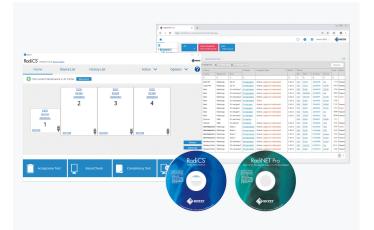
## Switch-and-Go: just one keyboard and mouse for two systems

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 - without acceptance and constancy testing - is already included with the 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)



## Improved comfort Efficiency in diagnostics

## A new level of observation, without disruptive factors

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

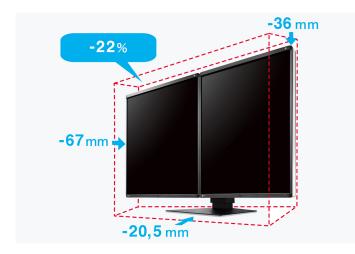
With a bezel only 7.5 mm in width the distance between the display areas of the two monitors is merely 15 mm. Moreover, the panel frame is only 2.5 mm above the screen, which means it sits nearly flush with the screen. This means viewers' vision goes undisrupted when looking back and forth between the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





#### 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.





#### **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.



## SAVE ELECTRICITY WHEN YOU ARE NOT IN FRONT OF THE MONITOR **Presence sensor**

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.



#### DAISY CHAIN METHOD

#### **Efficient multi-display 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.



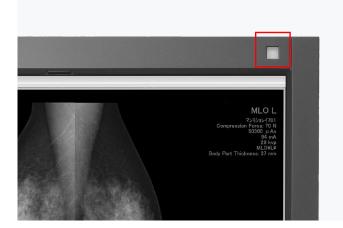


Daisy chain method

Conventional solution

## 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.



### Sustainability Environmentally and socially conscious production

#### Sustainable and durable

The GX560-MD 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 GX560-MD, we took a minimalistic approach to our resources by using high-quality components and materials, as well as a careful production process.

#### Socially responsible production

The GX560-MD 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 GX560-MD is manufactured in our own factory, which implements an environmental and energy management system in accordance with ISO 14001 und ISO 50001. This includes measures to reduce waste, wastewater and emissions, resource and energy consumption, as well as to encourage environmentally conscious behavior among employees. We publicly report on these measures on an annual basis.





## 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

### **EIZO Graphics card MED-XN83**

The EIZO 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.

To the graphics card overview



## **Technical Data**

ltem no.	GX560-MD
Case color	Bicolor, black and white
Areas of application	Healthcare
Product line	RadiForce
Areas of application	Mammography, Nuclear medicine and radiotherapy, Non-destructive-testing
SCREEN	
Screen size [in inches]	21,3
Screen size [in cm]	54,1
Format	4:5
Viewable image size (width x height) [in mm]	338 x 422
Resolution in MP	5 Megapixels (greyscale)
Ideal and recommended resolution	2048 x 2560
Pixel pitch [in mm]	0.165 x 0.165
Panel technology	IPS
Max. viewing angle horizontal	178
Max. viewing angle vertical	178
Number of colors or greyscale	256 gray scales (DVI, 8 Bit), 256 gray scales (Display Port, 8 Bit), 1024 gray scales (DisplayPort, 10 Bit)
Color palette/look-up table	16,369 gray tones / 14 Bit
Max. brightness (typical) [in cd/m²]	2500
Recommended brightness [in cd/m²]	1000
Max. dark room contrast (typical)	1700:1
Backlight	LED
FEATURES & OPERATION	
Preset color/greyscale modes	2x manual memory locations, Paper, DICOM
DICOM tone curve	✓
Hardware calibration of brightness and light density characteristic curve	✓
Digital Uniformity Equalizer (homoge- neity correction)	✓
Blur reduction	✓
Sensors	Ambient Light Sensor, Integrated luminance sensor, Backlight Sensor, Presence sensor
On-screen menu languages	de, en, fr, es, it, se
Adjustment options	Pathology tonal value, Brightness, Gamma, OSD language
Integrated power unit	<b>v</b>

Certification

CE (Medical Device), ANSI/AAMI ES60601-1, CSA C222 Nr. 601-1, EN60601-1, IEC60601-1, RCM, FCC-B, CAN ICES-3 (B), VCCI-B, RoHS, WEEE, China RoHS, CCC, EAC

CONNECTIONS	
Signal inputs	2x DisplayPort (HDCP 1.2), DVI-D (HDCP 1.4)
Signal outputs	1x DisplayPort (HDCP 1.2)
Daisy-chain capable	✓
USB specification	USB 2
USB upstream ports	2 x type B
USB downstream ports	2x type A
Graphic signal	DVI Single Link (TMDS), DisplayPort
Control port	USB-Protocol
ELECTRICAL DATA	
Frequency	Digital: 31-135 kHz/23-61 Hz; Frame sync mode: 23,5- 25,5 Hz/47-51 Hz
Power consumption (typical) [in watts]	28
Maximum Power Consumption [in watts]	79 (at maximum brightness with all signal inputs and USB ports in use)
Max. Power consumption in stand-by mode [in watts]	1
Power consumption with power switch off [in watts]	0
Power supply	AC 100-240V, 50/60Hz
DIMENSIONS & WEIGHT	
Dimensions (incl. stand) (width x height x depth) [in mm]	709 x 476-566 x 225
Weight (incl. stand) [in kg]	17.1
Weight (without stand) [in kg]	8
Dimension drawing (PDF)	Dimension drawing (PDF)
Rotatability of the stand [in °]	70
Tiltability forwards/backwards [in °]	5 / 25
Pivot between portrait / landscape	clockwise
Hole spacing	100 × 100
SOFTWARE & ACCESSORIES	
Accompanying software and other accessories are available for down- load	RadiCS LE
Other box contents	1x short signal cable DisplayPort – DisplayPort, 4x Signal cable DisplayPort - DisplayPort, 2x Power cord, 2x USB cable (Type A - Type B)
Accessories	RadiCS (UX2-Kit) (The EIZO software is capable of complete quality management – from calibration through asset management to acceptance and con- stancy testing.), RadiNET Pro (EIZO software for net- work-based quality management in large facilities – with remote functionality for monitors)
Recommended graphics card	MED-XN83



WARRANTY	
Warranty periode	5 years
Included warranty	In addition, the warranty includes the normal wear and tear of the backlight if it is operated at a recommen- ded brightness of 1000 cd/sq m. EIZO guarantees this brightness for the term of five years from the date of purchase.

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