

# **MEDICAL MONITORS**





EIZO's RadiForce represent a comprehensive range of innovative high-end solutions for medical applications in various fields from a single source. The range of medical monitors is complemented by products from the EIZO FlexScan series, which are used in clinical consultation rooms and at reception desks, for example, as well as graphics cards recommended and validated by EIZO for the RadiForce monitors.

Under the RadiForce brand, EIZO develops and markets monitor solutions that meet the high requirements demanded by the fields of diagnostics and medical review They also meet the strictest medical safety standards.

The greyscale and colour monitors in the RadiForce series support calibration using the DICOM® standard and feature outstanding image quality, which is guaranteed thanks to EIZO's own RadiCS and RadiNET Pro software solutions. They boast exceptional reliability and powerful functionalities for precise diagnoses. Examples of these include the Work-and-Flow functionalities, which simplify the imaging workflow in diagnostics using functions EIZO has specifically developed for the field of radiology.

# The advantages of EIZO medical displays

Image quality

Ergonomics

Cost-effectiveness

Service



# The perfect image quality for every application

EIZO RadiForce monitors feature unparalleled image quality, no matter the viewing angle. Thanks to properties such as even image reproduction across the entire screen, stable brightness and precise luminance characteristic curve (DICOM® GSDF), they reproduce crystal-clear medical images that are true to the original source. EIZO's quality management software also ensures consistent quality control. RadiForce products are manufactured and developed by EIZO and EIZO alone from start to finish. This allows to us to improve quality and make technological advancements when it comes to developing medical display solutions.

# Perfect ergonomics for the best performance

EIZO uses intelligent solutions to prevent posture problems and eye fatigue. One example of this is the incredibly diverse stands of the RadiForce monitors: they can be adjusted in terms of high, tilt, rotation and, depending on the model, rotate 90° so the user can set the monitor up in whichever position they require. Intelligent accessories such as the RadiLight comfort light and outstanding technologies such as hybrid gamma PXL and Sharpness Recovery technology improve the sharpness of images. The effective anti-reflection coating on the screen surface also vhelps reduce strain on your eyes.



# A great long-term investment

EIZO offers an extra-long, five-year warranty, including on-site replacement service, for almost all of its medical monitors. This means the highest possible investment security and a low total cost of ownership. Although the purchase price is higher, the investment and service costs are lower with an EIZO monitor as the service life is substantially longer and a high degree of reliability is ensured. Unique Work-and-Flow functionalities provides greater efficiency in the diagnostics process. Integrated sensors save time, costs and energy in the measures needed for aquality control (acceptance and consistency test, calibrations).

### Service quality is front and centre

It's not just the quality of the product that's important; it's the quality of the service, too. We would be happy to help find the right solution for you and provide technical support (pre- and after-sales), as well as a guarantee service with quick reaction times. And if you're still not convinced: Why not request a trial model so you can try out your desired product directly at your workplace. EIZO's outstanding product quality and its innovative service concept not only set standards but also keep pace with today's trend of longer amortisation periods. Security that convinces and you can count on.



# Application areas for medical monitors



Mammography Precise, even monitor images ensure the highest diagnostic accuracy



Projectional radiography High-performance monitors for the most subtle structural delineations



CT/MRI Diagnostic monitors with a large format to display the tiniest details



Dental Excellent image quality and brightness stability for dental diagnostics



Pathology Large-format monitors with unparalleled resolution and colour differentiation



Orthopaedics
Outstanding monitors with a diagnostic quality display



Nuclear medicine and radiotherapy Precise display of anatomical structures down to the pixel thanks to hybrid gamma



Ophthalmology Image reproduction devices to help differentiate the most subtle greyscales



Hospital administration Greater comfort thanks to ergonomic and energy-saving monitors



NDT Perfect image reproduction for industrial quality control



# **Examining the breast**

The switch from analogue to digital mammography in combination with breast ultrasound and, to some degree, MRI, has vastly improved the quality of breast cancer diagnostics.

Diagnostics systems must meet high quality standards in order to fully exploit the potential of the procedures and assist in the early detection of tumours. This applies even more so to their use in breast cancer screening programmes, for which the image reproduction device needs to deliver a fast response time for mammography data sets with high performance, meeting special requirements.

# The right monitor for every situation in mammography diagnostics

In addition to the conventional monochrome display on two monitors, EIZO addresses other user requirements: widescreen monitors for displaying before and after images in parallel without any distracting bezels between images and a multi-modality option for displaying mammography, ultrasound, and MRI images.

The reliable detection of breast cancer requires a precise, even, high-resolution monitor image. EIZO's image reproduction devices ensure maximum diagnostic accuracy in digital mammography by delivering a clear reproduction of the smallest details, a reliable differentiation of the finest nuances and optimal brightness at all times.



#### EIZO benefits at a glance

- Precise, even monitor image
- High contrast ratio
- Deep black levels to help distinguish between similar dark grey levels
- 2 10-bit display supports razor sharp reproduction and reliable differentiation between even the slightest tissue inconsistencies
- Calibration according to DICOM® standard, including availability of DICOM® presets and ongoing quality testing, for long-term precision

# EIZO recommends the following as diagnostic monitors for digital mammography











# High-performance monitors for the most subtle structural delineations

In projectional radiography, the optimisation of brightness and greyscales ensure unprecedented contrasts that allow even the most subtle structural delineations. A high-performance monitor that is equipped to handle the needs of users and medical investigations emphasises this effect. EIZO monitors use the DICOM® GSDF luminance characteristic curve to display consistent brightness. Various sensors ensure that the monitors deliver a uniform image quality over time, sustainably meet the DICOM® standard and effortlessly pass the legally prescribed consistency testing.

When diagnosing digital X-ray images, more and more users are demanding large widescreen monitors on which images of different modalities can be opened in parallel. EIZO widescreen monitors have a continuous panel that is designed for exactly this purpose. They allow different images to be displayed in a flexible layout (hanging protocol) without distracting bezels.

The range of EIZO RadiForce displays includes various special monitors that support the workflow of digital X-ray diagnostics. Users can choose not only between colour and greyscale monitors, but can also select a screen resolution according to their specific requirements. Another advantage offered by these monitors is the Digital Uniformity Equalizer (DUE) function, which compensates for imbalances in brightness and chrominance in different areas of the screen.



#### EIZO benefits at a glance

- Monitor models adapted to specific needs (size, screen resolution, colour or greyscale)
- Automatic calibration according to DICOM® standard
- Guaranteed brightness stability
- Presence sensor intelligently dims the monitors to save energy
- Greater flexibility in creating and displaying the hanging protocol based on screen size and resolution
- Features such as anti-reflective displays ensure optimal ergonomics
- Power-saving, mercury-free LED backlighting for high energy efficiency

# EIZO recommends the following monitors for projectional radiography diagnostics



#### **RX250 RadiForce**

- . 54 cm (21.3 Inches)
- 1x DisplayPort, 1x DVI-D

#### **RX660 RadiForce**

- 76 cm (30 Inches)
- IPS2x DisplayPort, 1x DVI-D

DICOM® preset



#### **RX370 RadiForce**

- 54,1 cm (21,3 Inches)
- 3 Megapixels (colour)

DICOM® preset



#### RX1270 RadiForce

- 78,4 cm (30,9 Inches)



# The right view for all cases

CT and MRI images are used to examine medical issues in nearly all clinical areas. Since larger series of images enable a faster diagnosis, large format monitors are an advantage when viewing diagnostic images.

EIZO's large format, high-resolution diagnostic monitors were specifically developed to display cross-sectional images, ultrasound images and conventional X-ray images in parallel. They can be adjusted to the type of diagnostics using various modes with optimised reproduction curves.

The EIZO RadiForce series features special screens for every application as a colour or greyscale monitor. Advanced features such as hybrid gamma enhance the image output for modern scanning procedures (PET CT, PET MRI). The hybrid gamma function ensures precise reproduction down to the pixel with the required reproduction curves for monochrome and coloured parts of the image.

The Digital Uniformity Equalizer function compensates for imbalances in brightness and chrominance in different areas of the screen. The integrated front sensor (IFS) in the bezel measures the brightness and greyscales and calibrates the monitor according to DICOM® standard. This guarantees a consistent image quality.



RadiForce monitor for diagnosing cross-sectional CT/MRI images

#### EIZO benefits at a glance

- ☑ Reliable image reproduction using the DICOM® GSDF luminance characteristic curve
- A selection of different monitors to meet various requirements, resulting in high cost efficiency
- Durability
- Adaptable setup for individual workstations
- Increased efficiency

# EIZO recommends the following monitors for diagnosing cross-sectional CT/MRI images











# Accurate display in dental diagnostics

Modern modalities for lens barrel, panoramic, or DVT exposures produce razor-sharp images. The rendering quality, however, of x-ray images in the field of dental radiology is also fundamentally dependent on choosing the correct screens. When the DIN6868-157 standard entered into force, new minimum requirements were also introduced for the use of radiological image rendering systems for dental diagnostics.

Depending on the room class, the DIN standard also calls for a minimum brightness. Room classes 5 (diagnostic rooms) and 6 (dental treatment rooms) are relevant for dental diagnostics. EIZO offers the perfect solution for this with its RadiForce products. Thanks to their optimum display quality, RadiForce monitors provide reliable images for accurate diagnostics and observations. In comparison to conventional monitors, EIZO RadiForce monitors permanently display the required minimum brightness.

#### EIZO benefits at a glance

- Screen features tailored to the needs of dentists, such as the size, resolution, colour, or greyscale
- Excellent image quality and brightness stability
- DICOM standard characteristic curve
- Energy efficiency through the motion sensor, which intelligently saves energy
- Optimum ergonomics, such as the anti-reflection coating on the surface

# EIZO recommends the following monitors for dental diagnostic rooms





# EIZO recommends the following monitors for dental treatment rooms





# Razor sharp cell and tissue images

The digitalisation of pathology has made it easier to assess the smallest cell and tissue structures, which are now transferred to screens via high-quality opto-electronic microscopes, where they can be viewed in the greatest detail. The monitors must provide an excellent image quality so that even the slightest changes or anomalies can be detected.

# Ideal for individual requirements in pathology

EIZO monitors are optimally equipped for this challenge. Not only do they have an excellent screen resolution, but they also display colours with outstanding accuracy. A high (spatial) resolution, a wide gamut, a deep black level, homogeneous illumination, a reproduction curve that can be calibrated according to individual requirements and consistent image reproduction quality guarantee reliable diagnostics, even for the smallest tissue structures.

#### Advantages of EIZO RadiForce monitors at a glance

- Large-format monitors
- An individual reproduction curve can be calibrated
- Excellent colour differentiation
- Large look-up table for correct colour reproduction
- Deep black levels
- Brightness stability sensor for long-term monitor quality
- Long product life cycle

# EIZO recommends the following monitors for pathology









# The highest standard of image reproduction

The reproduction of radiological images in orthopaedics requires monitors that meet the highest standards. Apart from excellent image quality, a high degree of reliability and product durability are also priorities in this field of medicine.

To address these needs, EIZO provides monitors with a diagnostic quality display, including correct image reproduction with the DICOM® GSDF luminance characteristic curve and a consistently high image quality during monitor use.



#### EIZO benefits at a glance

- Reliable image reproduction with DICOM® GSDF luminance characteristic curve
- A selection of different monitors to meet a various requirements, resulting in high cost efficiency
- Legally secure diagnosis
- For use with CR/DR systems

# EIZO recommends the following as diagnostic monitors in orthopaedics



#### **RX250 RadiForce**

- 54 cm (21,3 Inches) 2 Megapixels (colour).
- 1x DisplayPort, 1x DVI-D



#### MX216-HB RadiForce

- 54 cm (21 Inches)



# Precise display of anatomical structures down to the pixel

Assisted by the EIZO hybrid gamma pixel function, fused images are precisely displayed down to the pixel with an adequate image reproduction curve for colour or greyscale.

At the crossroads of therapeutic and diagnostic applications, EIZO RadiForce monitors help to better visualise the dynamic processes within the human body from acquired image data. Assisted by the EIZO hybrid gamma pixel function, fused images are precisely displayed down to the pixel with an adequate image reproduction curve for colour or greyscale.

While anatomical structures in X-rays are displayed with an optimal DICOM® curve for monochrome images, RadiForce monitors with the hybrid gamma pixel function independently detect the coloured parts of the image from nuclear medicine sources and display them with a gamma reproduction curve of 2.2, for example, which is optimal for colour images. The diagnosing physician is still free to individually calibrate the monitor to the preferred brightness curve.

#### EIZO benefits at a glance

- Hybrid gamma for reliable image reproduction
- A selection of different monitors to meet various requirements, resulting in high cost efficiency
- Adaptable setup for individual workstations
- Increased efficiency

# EIZO recommends the following monitors for image reproduction in nuclear medicine



#### **MX315W RadiForce**

- 79 cm (31.1 Inches)
- IPS 2x DisplayPort, DVI-D

DICOM® preset



#### MX216-SB RadiForce

- 54 cm (21 Inches)
- 2 Megapixels (colour),
- 1x DisplayPort, 1x DVI-D

DICOM® preset



#### **RX370 RadiForce**

- . 54,1 cm (21,3 Inches) • 3 Megapixels (colour),
- 2x DisplayPort, 1x DVI-D (DL)



# Helps differentiate the most subtle greyscales

In terms of qualitative standards, binding guidelines for image reproduction devices in ophthalmology have not yet been established. Nevertheless, with the progressive development of modern imaging procedures, particularly in optical coherence tomography (OCT), considerations of minimum requirements for diagnostic monitors are a growing concern.

For example, indications for the macula and the optic nerve, including glaucoma, can be diagnosed using OCT technology at a resolution that previously could not be achieved. The image reproduction device, or monitor, is becoming increasingly important, with a particular emphasis on the reproduction curve in the form of a so-called DICOM® curve, which has already been used in diagnostic radiology. It helps differentiate the most subtle greyscales and JNDs (just noticeable differences).

#### EIZO benefits at a glance

- ▼ Reliable image reproduction using the DICOM® GSDF DICONDE luminance characteristic curve
- Durability
- Increased efficiency

# EIZO recommends the following monitors for image reproduction in ophthalmology





# Monitors for convenient use in hospitals

When working at a screen, excellent image quality is important not only for medical diagnostics and review. High-quality, ergonomic monitors are also useful for the administration of medical facilities.

In addition to special monitors for the medical field, EIZO offers the FlexScan series of first-class monitors to address these requirements in hospitals. FlexScan series monitors can be adapted to the needs of individual workstations and constitute a highly ergonomic and extremely energy-efficient solution for enhancing performance in everyday hospital tasks.

#### EIZO benefits at a glance

- Most FlexScan series monitors come with a DICOM® preset
- Excellent image quality
- Perfect ergonomics ensure better posture and less eye fatigue
- Extremely energy-efficient and therefore economical
- Modern, sleek and space-saving design
- Nearly all FlexScan monitors come with a five-year guarantee

# EIZO recommends the following monitors for clinic and hospital administration



#### S1934H-BK FlexScan

- 48 cm (19 Inches)
- DisplayPort (HDCP 1.3), DVI-D (HDCP 1.4), D-sub





#### S1934H-GY FlexScan

- 48 cm (19 Inches)
  1280 x 1024, 5:4 Format
- DisplayPort (HDCP 1.3), DVI-D (HDCP 1.4), D-sub





# S2133-BK FlexScan

- 54 cm (21.3 Inches)
- 1600 x 1200, 4:3 Format DisplayPort (HDCP 1.3), DVI-D (HDCP 1.4), D-sub





#### S2133-GY FlexScan

- 54 cm (21,3 Inches) 1600 x 1200, 4:3 Format DisplayPort (HDCP 1.3), DVI-D (HDCP 1.4), D-sub





#### EV2430-BK FlexScan

- •61,1 cm (24,1 Inches) •1920 x 1200, 16:10 Format •DisplayPort (HDCP 1.3), DVI-D (HDCP 1.4), D-sub





#### EV2430-GY FlexScan

- 61,1 cm (24,1 Inches) 1920 x 1200, 16:10 Format DisplayPort (HDCP 1.3), DVI-D (HDCP 1.4), D-sub





#### EV2360-BK FlexScan

- 57,2 cm (22,5 Inches)
  1920 x 1200, 16:10 Format
  DisplayPort, HDMI, D-sub





## EV2360-WT FlexScan

- 57,2 cm (22,5 Inches)
- 1920 x 1200, 16:10 Format DisplayPort, HDMI, D-sub





#### EV2451-BK FlexScan

- 60,4 cm (23,8 Inches) 1920 x 1080 (Full HD), 16:9 Format
- DisplayPort (HDCP 1.3), HDMI (HDCP 1.4), DVI-D (HDCP 1.4), D-sub
- t D



## EV2451-WT FlexScan

- 60.4 cm (23.8 Inches)
- 1920 x 1080 (Full HD), 16:9 Format
   UsplayPort (HDCP 1.3), HDMI (HDCP 1.4), DVI-D (HDCP 1.4), D-sub





- 60,5 cm (23,8 Inches) 1920 x 1080 (Full HD), 16:9 Format
- · DisplayPort, DVI-D, HDMI, D-sub
- DICOM® preset



#### EV2460-WT FlexScan

- 60,5 cm (23,8 Inches) 1920 x 1080 (Full HD), 16:9 Format
- DisplayPort, DVI-D, HDMI, D-sub





#### EV2480-BK FlexScan

- 60,5 cm (23,8 Inches)
   1920 x 1080 (Full HD), 16:9 Format
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (Deep Colour, HDCP 1.4)



DICOM® preset



#### EV2480-WT FlexScan

- 60,5 cm (23,8 Inches)
  1920 x 1080 (Full HD), 16:9 Format USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (Deep Colour, HDCP 1.4)



DICOM® preset



#### EV2490-BK FlexScan

- . 60.5 cm (23.8 Inches)
- . 1920 x 1080 (Full HD), 16:9 Format LAN/RJ-45, KVM switch

  USB-C (DisplayPort Alf Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (HDCP 1.4)





#### EV2490-WT FlexScan

- 60,5 cm (23,8 Inches)
   1920 x 1080 (Full HD), 16:9 Format
   LAN/RJ-45, KVM switch
   USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (HDCP 1.4)



#### EV2456-BK FlexScan

- •61,1 cm (24,1 Inches) •1920 x 1200, 16:10 Format •DisplayPort (HDCP 1.3), HDMI (HDCP 1.4), DVI-D (HDCP 1.4), D-sub



DICOM® preset



#### EV2456-WT FlexScan

- •61,1 cm (24,1 Inches) •1920 x 1200, 16:10 Format •DisplayPort (HDCP 1.3), HDMI (HDCP 1.4), DVI-D (HDCP 1.4), D-sub



DICOM® preset



#### EV2457-BK FlexScan

- -61 cm (24,1 Inches)
- 1920 x 1200, 16:10 Format DisplayPort, DVI-D, HDMI





#### EV2457-WT FlexScan

- •61 cm (24,1 Inches)
- 1920 x 1200, 16:10 Format
- DisplayPort, DVI-D, HDMI





#### EV2485-BK FlexScan

- •61,1 cm (24,1 Inches) •1920 x 1200, 16:10 Format
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (HDCP 1.4)





#### EV2485-WT FlexScan

- 61,1 cm (24,1 Inches)1920 x 1200, 16:10 Format
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (HDCP 1.4)





#### EV2495-BK FlexScan

- •61,1 cm (24,1 Inches) •1920 x 1200, 16:10 Format
- LAN/RJ-45, KVM switch
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (HDCP 1.4)





#### EV2495-WT FlexScan

- •61,1 cm (24,1 Inches) •1920 x 1200, 16:10 Format
- LAN/RJ-45, KVM switch
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (HDCP 1.4)





#### EV2760-BK FlexScan

- 68,5 cm (27 Inches)
- 2560 x 1440, 16:9 Format 2x DisplayPort (HDCP 1.3), HDMI (HDCP 1.4), DVI-D (HDCP 1.4)



DICOM® preset



#### EV2760-WT FlexScan

- •68,5 cm (27 Inches) •2560 x 1440, 16:9 Format
- 2x DisplayPort (HDCP 1.3), HDMI (HDCP 1.4), DVI-D (HDCP 1.4)







#### EV2795-BK FlexScan

- 68,5 cm (27 Inches)2560 x 1440, 16:9 FormatLAN/RJ-45, KVM switch
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (HDCP 1.4)





# EV2795-WT FlexScan

- 68.5 cm (27 Inches) 2560 x 1440, 16:9 Format LANRJ-45, KVM switch USB-C DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), HDMI (HDCP 1.4)



#### EV3895-BK FlexScan

- •95,3 cm (37,5 Inches) •3840 x 1600, 24:10 Format •LAN/RJ-45, KVM switch
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), 2x HDMI (HDCP 2.2/1.4)



# EV3895-WT FlexScan

- 95,3 cm (37,5 Inches)
   3840 x 1600, 24:10 Format
   LAN/RJ-45, KVM switch
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), 2x HDMI (HDCP 2.2/1.4)



DICOM® preset



## EV2785-BK FlexScan

- 68,5 cm (27 Inches)
- 3840 x 2160 (4K UHD), 16:9 Format USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), 2x HDMI (HDCP 2.2/1.4; 4K @ 60Hz)



DICOM® preset



## EV2785-WT FlexScan

- 68,5 cm (27 Inches)
- •3840 x 2160 (4K UHD), 16:9 Format
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), 2x HDMI (HDCP 2.2/1.4; 4K @ 60Hz)



DICOM® preset



### EV3285-BK FlexScan

- · 80 cm (31,5 Inches)
- 3840 x 2160 (4K UHD), 16:9 Format
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), 2x HDMI (HDCP 2.2/1.4; 4K @ 60Hz)



DICOM® preset



#### EV3285-WT FlexScan

- •80 cm (31,5 Inches)
- 3840 x 2160 (4K UHD), 16:9 Format
- USB-C (DisplayPort Alt Mode, HDCP 1.3), DisplayPort (HDCP 1.3), 2x HDMI (HDCP 2.2/1.4; 4K @ 60Hz)



DICOM® preset



#### **MS236WT RadiForce**

- 58 cm (23 Inches)
- 2 Megapixels (colour),
- IPS
   1x DisplayPort, 1x DVI-D, 1x D-sub