EIZO’s complete spectrum of RadiForce medical monitor solutions delivers exceptionally accurate and stable image display at leading hospitals around the world.

Our commitment to technological innovation includes making products that are as ergonomically, environmentally, and economically-friendly as possible.

With the shift to completely filmless systems for improved efficiencies in patient care, EIZO will continue to provide products of unsurpassed quality, consistency, and value that are truly future focused.
Selecting the Optimum Surgical Monitor

For the Interventional Radiology Room

High-Quality Images Enhance Surgical Efficiency

During Interventional Radiology (IR), a wide range of medical information and images are required simultaneously, thus cutting-edge display quality makes a difference by bringing out the details the interventional radiologist needs at the time she needs them.

Focal Point on a Single Monitor

With its size and resolution, EIZO’s large-scale monitors for operating rooms can display images from multiple modalities simultaneously. This improves work efficiency while solving common issues encountered in multi-monitor environments like differences in panel color.

For the Control Room

Different Models for Reliable Integration

In the control room there is a need for high quality diagnostic monitors with larger screens and intelligent picture management to watch and control all applications and images used in the operating room from one centralized working place.

For the Operating Room

DICOM Compliant Large Monitors

Seamless extension of PACS (Picture Archiving and Communication System) enables the digital distribution of modality image information into the operating room as an alternative to traditional film. Having a large monitor that is compliant with DICOM Part 14 and capable of handling a large volume of information reduces the overall equipment footprint in the operating room while increasing flexibility and efficiency.

Monitors to Match Up with Endoscopic Systems

The advances in endoscopic video cameras used in procedures have increased demands placed on monitors deployed with these systems. EIZO monitors offer smooth rendering of the movements and variable color adjustments for easier tissue recognition.

Fulfilling Clean Environment Requirements

All devices used in an operating room must fulfill strict hygiene requirements. EIZO monitors come with a waterproof panel protector for safe and clean integration in the operating room. With their clean lines and smooth surfaces, all monitors allow easy cleaning and disinfection and were designed for appropriate resistance to medical cleaning agents.

Surgical Monitor Solutions

Everything for a Clear Decision at a Single Glance

With all relevant images available at a single glance, offering information on a large screen is ideal for supporting efficient and smooth surgical operations.

Complete Manager Behind the Scenes

To take full advantage of the large screen monitor, data must be gathered from the various sources and directed in accordance with the variable viewing configurations. These tasks are handled quickly and comfortably by the Large Monitor Manager.

Focal Point on a Single Monitor

Interventional Radiology Room

Control Room

Operating Room

Endovascular Radiology

For the Interventional Radiology Room

For the Control Room

For the Operating Room

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RadiForce® L&E-Series Surgical Monitors

As the variety of different picture sources increases, state-of-the-art operating rooms are increasingly shifting from traditional X-ray film to displaying images on monitors. These images originate from boom and endoscopy cameras to C-arms and Picture Archiving and Communication Systems (PACS). With EIZO’s RadiForce surgical monitors, all images can be conveniently provided for clear decision-making and the highest diagnostic precision.

**Common Features**

**Quick Brightness Stabilization for Instant Viewing**
EIZO’s fully automated stability function makes use of an internal backlight sensor to quickly stabilize the brightness level at startup and to compensate for fluctuations caused by variations in ambient temperature and the passage of time.

![Quick Brightness Stabilization Diagram](image)

**Wide Viewing Angles for Multiple People Use**
Thanks to the wide viewing angles, images can be viewed simultaneously by several people with the highest quality reproduction and minimal color shift.

![Wide Viewing Angles Diagram](image)

**Diagnostic Precision with Factory Adjustment**
To ensure the most accurate and consistent shadings possible, EIZO carefully measures and sets every grayscale tone on the production line to offer monitors fully compliant with DICOM Part 14.

![Diagnostic Precision Diagram](image)

**Consistency with DICOM Part 14 Calibration**
RadiForce monitors are calibrated to comply with DICOM Part 14 to offer rendering consistency over time.

![Consistency with DICOM Diagram](image)

**LCD Panel Protector for Easy Cleaning**
Panel protector is pre-attached to the monitor during production or offered as an option to protect against dust and scratches. Clean lines and smooth surfaces also allow easy cleaning and disinfecting.

![LCD Panel Protector Diagram](image)

**Arm Mountable VESA Compliance**
VEGA compliance to be attached to existing mounting accessories.

![Arm Mountable VESA Diagram](image)

**Customer Assurance with Medical Standards**
EIZO monitors meet the strictest medical, safety, and EMI emission standards.

![Customer Assurance Diagram](image)
Monitors for Interventional Radiology Rooms

With a selection ranging from space-saving compact screen monitors up to a 60-inch large screen for flexible image layouts, EIZO offers an ideal spectrum of monitors for image distribution in the intervention radiology room.

- **LX600W**: 153 cm (60.1”) Color LCD Monitor
- **LS560W**: 143 cm (56.2”) Color LCD Monitor
- **SMD 19102**: 48 cm (19”) Monochrome LCD Monitor
- **SCD 19102**: 48 cm (19”) Color LCD Monitor

**Brighter Uniformity for Steadier Image Across the Screen**

The Digital Uniformity Equalizer (DUE) function provides optimum backlight luminance uniformity which is considered difficult to attain due to the characteristics of LCD monitors, especially with larger screen sizes.

**Work Safely with Minimal Picture Delay**

With its redundant components architecture (2 power supplies, 2 backlights, 2 transmission links), EIZO ensures a high degree of operational reliability for fail-safe environments. A monitoring function can be configured to notify the X-ray system if e.g. operating conditions become critical or a component fails.

**Longer Service Life with LED Backlight**

Unlike conventional CCFL backlights, LED backlights deteriorate more slowly and thus the monitor offers a longer service life. This ensures stable and reliable performance that is needed for diagnostic monitors. Since the LED backlight is mercury free, it will reduce any potential impact on the environment when it is disposed of.

**Space-Efficient Installation Alternative**

With their compact size and VESA mount compatibility, the 19-inch monochrome and color monitors serve as efficient alternatives for use in environments with limited space.

**Everything in a Single Glance**

Wide screen monitors with a 3840 x 2160 native resolution roughly equal in size to six 1.3 megapixel (1280 x 1024) monitors. Compared with multi-monitor scenarios, these large screen monitors have no regional color differences or obtrusive bezels, thus reducing eye fatigue and the potential for distraction.

**Saving time by Optimizing Workflow**

Flexible viewing of large volumes of information on a single monitor improves workflow efficiency and saves time. Individual image placement and window size preferences can be easily arranged and recalled using a Large Monitor Manager.

With images displayed on the screen in real time, time critical aspects of image distribution are addressed to ensure e.g. safe catheter localization during insertion into an artery.

**Operational Reliability Through Redundant Components**

For its redundant components architecture (2 power supplies, 2 backlights, 2 transmission links), EIZO ensures a high degree of operational reliability for fail-safe environments. A monitoring function can be configured to notify the X-ray system if e.g. operating conditions become critical or a component fails.

With images displayed on the screen in real time, time critical aspects of image distribution are addressed to ensure e.g. safe catheter localization during insertion into an artery.
Monitors for Control Rooms

29.8-inch or 27-inch wide screen is the ideal monitor size to watch and control all applications and images used in the operating room from the control room desk. High-end and standard models are available to fit your usage requirements.

Everything on One Screen

Their high resolution is suitable for displaying and viewing large volumes of information on just one screen. This improves workflow efficiency and saves time.

In addition to its versatility for control room use, the RX430 can be used for viewing images in operating rooms. To meet the needs of different OR environments, this monitor is available in two configurations: standard with stand and without panel protector, and free mount (no stand) but with panel protector for easy attachment to ceiling suspensions.

Just the Right Size to Ensure a Direct View into the Operating Room

29.8-inch or 27-inch wide format screen size creates more free space for work efficiency in the control room and ensures a direct view into the operating room.

One Monitor, Keyboard and Mouse

Working with the Large Monitor Manager, the operator can focus on a single monitor, keyboard and mouse instead of juggling with multiple systems. This speeds up workflow and reduces the potential for handling errors.

Flexible Operation from a Centralized Workplace

The Large Monitor Manager bundles up eight different sources and enables you control them from one location. Individual image placement and window size preferences can be easily arranged and recalled using the Large Monitor Manager.

Brightness Uniformity for a Steadier Image Across the Screen

The Digital Uniformity Equalizer (DUE) function provides optimum backlight luminance uniformity which is considered difficult to attain due to the characteristics of LCD monitors, especially with larger screen sizes.

Presence Sensor for Power Savings

The presence sensor feature unites convenience with savings by ensuring that the monitor conserves power when it is not in use. The presence sensor prompts the monitor to switch to power save mode when it detects the user is away from the monitor, and then resume normal operation when the user returns.

Available in Two Configurations

In addition to its versatility for control room use, the RX430 can be used for viewing images in operating rooms. To meet the needs of different OR environments, this monitor is available in two configurations: standard with stand and without panel protector, and free mount (no stand) but with panel protector for easy attachment to ceiling suspensions.
Monitors for Operating Rooms

The 47-inch large screen monitor is ideally suited for viewing medical images from a PACS system or serving as a repeater monitor in the operating room. EIZO also offers four monitors in a range of sizes for use with endoscopic systems in the OR. These monitors are also suitable for direct connection to computer systems in the hospital.

- **EX240W**
  - Input / Output Terminals
  - Complies with ISO 22196 standards in regards to antimicrobial activity of antibacterial-treated monitor enclosures, to prevent biodeterioration and odor on the monitor.

- **Fanless Silent Design**
  - Engineered to dissipate heat without a fan, thus keeping distracting noises and circulation of dust and germs out of the operating room while ensuring the controlled laminar airflow remains undisturbed within the room.

- **Dual Picture Viewing Modes**
  - With Picture-in-Picture (PiP), Picture-and-Picture (PaP), and Picture-over-Picture (PoP) functions, archived images or patient data can be reviewed simultaneously during an operation.

- **Mirror Image for an Alternative Viewpoint**
  - The mirror viewing function displays the inverse image of the original video signal to support the viewing direction of the surgical assistant. The Freeze, Zoom/Pan and Overscan functions are also available for ease of use during an operation.

- **Noise Reduced and Image Sharpened**
  - Identifies and reduces high pitched noise and recognizes and sharpens blurred areas to produce crisp, clear, and smooth images while maintaining fine image details.

- **Wide Range of Input and Output Support**
  - EIZO offers multiple input signals to allow connections with both legacy and state-of-the-art endoscopic systems without the need of other optional devices or costs. With loop-through output support, the monitors are also ideally suited for multi-monitor integration or archiving in the operating room.

- **Colors to Fit the Physician’s Preference**
  - The color, hue, saturation, brightness, contrast, temperature and tones of the display can be adjusted to best in the physician’s color preference.

- **Safe Use with Antibacterial Monitor**
  - Complies with ISO 22196 standards in regards to antimicrobial activity of antibacterial-treated monitor enclosures, to prevent biodeterioration and odor on the monitor.

- **Fanless Silent Design**
  - Engineered to dissipate heat without a fan, thus keeping distracting noises and circulation of dust and germs out of the operating room while ensuring the controlled laminar airflow remains undisturbed within the room.
Signal Routing Solutions

With increasing system connectivity, multiple systems and monitors are often used concurrently in surgical rooms, thus increasing the overall complexity of and maintenance effort for the signal network. To ensure safe and reliable integration within the surgical room, EIZO offers flexible and easy to install signal routing solutions for use with its monitor systems.

- **Large Monitor Monitor**
  - LMM56800
  - LMM0802
  - LMM0801
  
  The Large Monitor Monitor for the 8 megapixel monitors gathers various video inputs, combines and arranges them in accordance with user preferences, and displays the resulting output on the screen. Pattern arrangements can be saved and applied to simplify the surgeon's individual workflow.

  - Large Monitor Monitor for the 8 megapixel monitors includes KioskView LMM56800 and LMM0800.
  - It gathers various video inputs and displays them on the large screen. Different layouts can be arranged according to user preferences and workflow scenarios. This allows the surgeon's individual workflow.

- **Flexible management of large wide screen monitors by combining and arranging all picture information on the monitor. Preferred layouts can be selected in accordance with the operation. All procedures in the operation room can be watched on one monitor and controlled by only one mouse and one keyboard.

- **The CID1000P offers a highly reliable signal routing solution.**

  - Two independent dual link DVI inputs are repeated and doubled. Signals coming from LMM56800 or LMM0802 are repeated and doubled to connect two 8 mega-pixel monitors. The HD output generates a downscaled representation of the content displayed on the large screen.

  - Analog-DVI Converter
  - DVI Splitter / Scaler
  - DVI Transmission Link

**Model Variations**

- **TDL3600-DL:**
  - DVI-D (dual link) x 1
  - DVI-D (single link) x 1
  - HDMI (DVI signals only, Single Link) x 1

- **TDL2300-SL:**
  - 1920 x 1200 (SXGA), 60 Hz
  - 1920 x 1080 (Full HD), 60 Hz

**Input Terminals**

- DVI-D (single link), 1920 x 1280 maximum, 40 Hz to 120 Hz (44 MHz maximum, horizontal size 2048 maximum, vertical size 1080 maximum, 85 Hz to 60 Hz (44 MHz maximum, horizontal size 1920 maximum, vertical size 1080 maximum), 395 Hz to 50 Hz (565 MHz maximum, horizontal size 1920 maximum, vertical size 1080 maximum), 30 Hz to 50 Hz (30 MHz maximum, horizontal size 1920 maximum, vertical size 1080 maximum), 2 x 5 V DDC2B (4.5 V output), 5 V DDC2B (4.5 V output)

**Output Terminals**

- DVI-D (Dual link x 2, maximum) 1920 x 1200 (HD)
  - 1920 x 1080 (HD)

**Output Performance**

- 1920 x 1200 (HD)
  - 1920 x 1080 (HD)

**Connector**

- Ethernet (RJ45)
  - Ethernet (RJ45)

**USB Ports**

- USB upstream (for control of video applications on PC) x 2
  - USB upstream (for control of video applications on PC) x 2

**Power Requirements**

- AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz
  - AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz

**Power Consumption**

- 150 W
  - 150 W

**Degree of Protection**

- IP54
  - IP54

**Mechanical Adaption**

- 16” rack design, 4” high
  - 16” rack design, 4” high

**OSD Languages**

- English, German
  - English, German

**Supplied Accessories**

- AC power cord x 2
  - AC power cord x 2

**Dimensions (Unit:mm)**

- 58.5 x 286 x 220
  - 58.5 x 286 x 220

*Please contact the EIZO subsidiary or distributor in your country for the latest information.*
**Accessories**

**Ceiling and Wall Mounts, and Stands**

With a selection of ceiling and wall mount, and stand options, EIZO's monitors can be optimally fit to the local site, providing improved ergonomics and use of space.

- **Ceiling Suspension / CEMOR-MMP90**
  Two arm with motor, compatible with LUM800, LS200W, and LW200W.
- **Ceiling Suspension / CEMOR-MMP91**
  One arm spring, compatible with LUM800, LS200W, and LW200W.

- **Wall Mount / FWM9300**
  Compatibl with LUM800, LW200W, LW200A, and LW200W.
- **Stand / FST7901**
  Compatibl with LUM800.
- **Stand / FST5600**
  Compatibl with LUM800.
- **Holder / HD1000**
  Compatibl with CSD900WP.

**Panel Protector**

An additional panel protector protects the monitor surface against liquids and scratches and alleviates monitor front desinfection.

- **Frontframe with Protection Screen**
  Compatibl with LUM800.
- **Panel Protector / FP-2702W**
  Compatibl with MDS900.

**Cleaner**

Keep the screen free from dust and fingerprints with this screen cleaner kit. Includes pump spray and cloth.

- **Monitor Cleaning Kit / ScreenCleaner**
  Compatibl with all monitors.

**Signal Cables and Adapters**

Various cables and adapters permit trouble-free integration of our monitors even into highly complex systems.

- **DVD-D - DVD/ Digital Signal Cable**
  2 m. compatible with LUM800, LW200A, LW200W, and LW200W.
- **DVD-D - DVI Single Link Signal Cable**
  2 m. compatible with LUM800, SMD19102, and SMD19102.
- **DVD-D - HDMI Signal Cable**
  3 m. compatible with LW190W, SMD19102, and SMD19102.
- **DVI to HDMI Conversion Adapter**
  Compatibl with all models, LUM800W is compatibl with LUM800.
- **BNC to VGA Conversion Adapter**
  Compatibl with LUM800, SMD19102, and PDS900.

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### Model Variations

<table>
<thead>
<tr>
<th>Model Variations</th>
<th>Cabinet Color</th>
<th>Panel Type</th>
<th>Panel Size</th>
<th>Display Size (H x V)</th>
<th>Recommended Brightness for Calibration</th>
<th>Response Time (typical)</th>
<th>Scanning Frequency (H, V)</th>
<th>Dot Clock</th>
<th>Power Requirements</th>
<th>Maximum Power Consumption</th>
<th>Save Mode</th>
<th>Power Management</th>
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</thead>
<tbody>
<tr>
<td>RX430</td>
<td>Black</td>
<td>IPS</td>
<td>54 cm / 21.3&quot; (540 mm diagonal)</td>
<td>432 x 324 mm</td>
<td>16ms x 6.5µs (4:3 aspect ratio)</td>
<td>31 - 89 kHz, 29.5 - 61 Hz (VGA Text: 69 - 71 Hz)</td>
<td>242 MHz</td>
<td>AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz</td>
<td>8.66 kg</td>
<td>300 W / Less than 27 W</td>
<td>Digital: DVI DMPM, Analog: VESA DPM, 300 W</td>
<td>1 upstream, 2 downstream / Rev. 2.0</td>
<td>Backlight Sensor, Integrated Front Sensor</td>
</tr>
<tr>
<td>MX270W</td>
<td>Black</td>
<td>VA</td>
<td>68 cm / 27&quot; (684 mm diagonal)</td>
<td>596.7 x 335.6 mm</td>
<td>10 ms (Midtone)</td>
<td>31 - 100 kHz, 50 - 85 Hz (VGA Text: 69 - 71 Hz)</td>
<td>242 MHz</td>
<td>AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz</td>
<td>7.1 kg</td>
<td>82 W / Less than 5 W</td>
<td>Digital: DVI DMPM, Analog: VESA DPM, 40 W</td>
<td>1 upstream, 2 downstream / Rev. 2.0</td>
<td>Backlight Sensor</td>
</tr>
<tr>
<td>LX470W</td>
<td>Black, White</td>
<td>IPS</td>
<td>54 cm / 21.3&quot; (540 mm diagonal)</td>
<td>432 x 324 mm</td>
<td>16ms x 6.5µs (4:3 aspect ratio)</td>
<td>31 - 89 kHz, 29.5 - 61 Hz (VGA Text: 69 - 71 Hz)</td>
<td>242 MHz</td>
<td>AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz</td>
<td>8.66 kg</td>
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<td>Digital: DVI DMPM, Analog: VESA DPM, 300 W</td>
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<td>Backlight Sensor, Integrated Front Sensor</td>
</tr>
<tr>
<td>EX240W</td>
<td>Light Gray</td>
<td>IPS</td>
<td>54 cm / 21.3&quot; (540 mm diagonal)</td>
<td>432 x 324 mm</td>
<td>16ms x 6.5µs (4:3 aspect ratio)</td>
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<td>Backlight Sensor, Integrated Front Sensor</td>
</tr>
<tr>
<td>EX210</td>
<td>Light Gray</td>
<td>IPS</td>
<td>54 cm / 21.3&quot; (540 mm diagonal)</td>
<td>432 x 324 mm</td>
<td>16ms x 6.5µs (4:3 aspect ratio)</td>
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<td>300 W / Less than 27 W</td>
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<tr>
<td>EX190W</td>
<td>Light Gray</td>
<td>IPS</td>
<td>54 cm / 21.3&quot; (540 mm diagonal)</td>
<td>432 x 324 mm</td>
<td>16ms x 6.5µs (4:3 aspect ratio)</td>
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<td>8.66 kg</td>
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<td>Digital: DVI DMPM, Analog: VESA DPM, 300 W</td>
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<td>Backlight Sensor, Integrated Front Sensor</td>
</tr>
<tr>
<td>ES150</td>
<td>Light Gray</td>
<td>IPS</td>
<td>54 cm / 21.3&quot; (540 mm diagonal)</td>
<td>432 x 324 mm</td>
<td>16ms x 6.5µs (4:3 aspect ratio)</td>
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</tr>
</tbody>
</table>

### Specifications

- **Monitor:** TFT Color LCD Panel (IPS)
- **Panel Size:** 432 x 324 mm
- **Display Size (H x V):** 432 x 324 mm
- **Recommended Brightness for Calibration:** 16ms x 6.5µs (4:3 aspect ratio)
- **Response Time (typical):** 31 - 89 kHz, 29.5 - 61 Hz (VGA Text: 69 - 71 Hz)
- **AC power cord, AC adapter, signal cable (DVI-D ~ DVI-D), 4 screws for mount option, user’s manual**