



[→ Product Website](#)

Thanks to a resolution of 4096 x 2160 pixels, the CG319X is the ideal monitor for processing DCI 4K content and displaying it natively. Featuring a built-in calibration sensor and HDR presets for HLG and PQ gamma, this new monitor is the perfect choice for professional use in video postproduction, photography and other graphics applications. The CG319X boasts 98% DCI P3 colour range coverage and impressively deep black levels, making it the ideal choice for precise colour grading of 4K content. DCI 4K material can be viewed at 60 Hz via two DisplayPorts as well as two HDMI ports. As a result, the CG319X can be integrated into PC-based workflows as well as used with HDMI feeds.

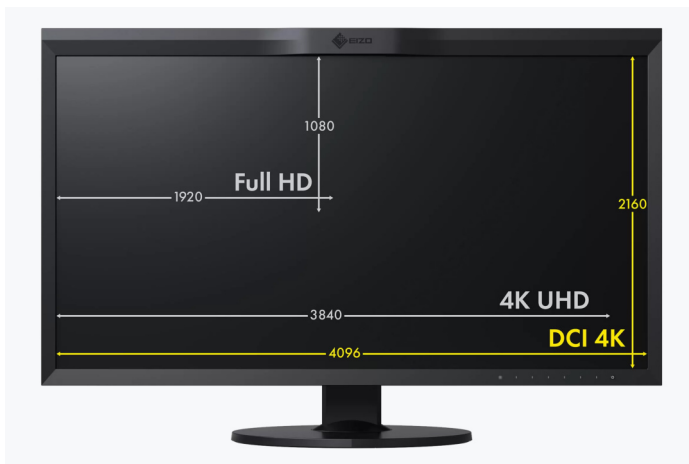
- ✓ DCI 4K with 4096 x 2160 pixels (149 ppi), four-times Full HD resolution
- ✓ Wide gamut LCD, versatile gamut covering 98% of the DCI P3 and 99% of the AdobeRGB colour gamut
- ✓ Integrated sensor and fully automatic self-calibration
- ✓ 3D look-up-table (LUT) for precise hardware calibration of brightness, white balance and gamma
- ✓ 10-bit display (over a billion colours simultaneously) based on a 24-bit look-up-table for precise colours
- ✓ Digital Uniformity Equalizer for perfect luminance distribution and colour purity
- ✓ Temperature-controlled adjustment of colour drift and brightness
- ✓ Two 1.2 DisplayPorts and two HDMI ports (4K DCI with 60 Hz)
- ✓ ColorNavigator calibration software and light protection shields included in delivery
- ✓ 5-year warranty for highest investment security

Precision and color accuracy

High-contrast, bright and crisp screen

DCI 4K resolution

The CG319X features DCI 4K 4096 x 2160 (4K DCI), which corresponds to four times the pixel count of Full HD (1920 x 1080). This monitor is therefore the ideal tool for 2D and 3D CGI or visual effects, from compositing to color grading.



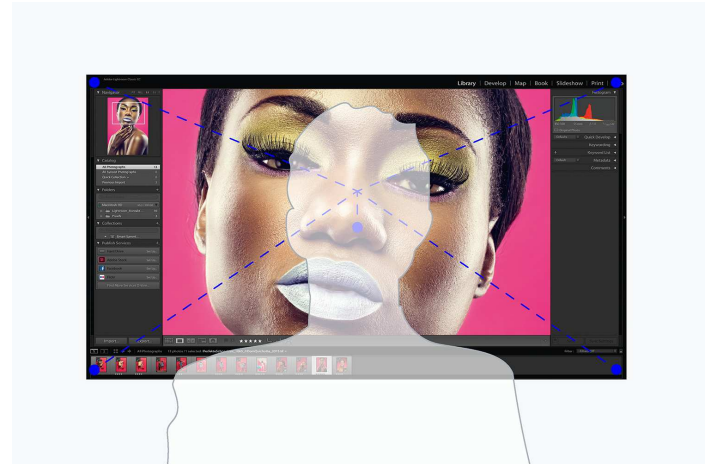
Suitable for softproofing

The EIZO CG319X fulfills strict softproof requirements based on the ISO 12646 standard. Fogra Forschungsgesellschaft Druck e.V. came to that conclusion in the course of testing the monitor. The CG319X was therefore awarded the Fogra "FograCert Softproof Monitor" seal of quality. You will therefore be working on a tested, color-proof monitor.

Outstandingly sharp image quality

The monitor has an impressive top resolution (4096 x 2160 (4K DCI)), a very good contrast ratio of 1500:1 and a brightness of 350 cd/m². For example, you can edit graphics and images down to the pixel. As an added benefit, text contours are clear and precise. The LCD panel with

the IPS (Wide Gamut) panel allows for a viewing angle of 178 degrees. Ensuring that hue and contrast remain stable for the viewer.

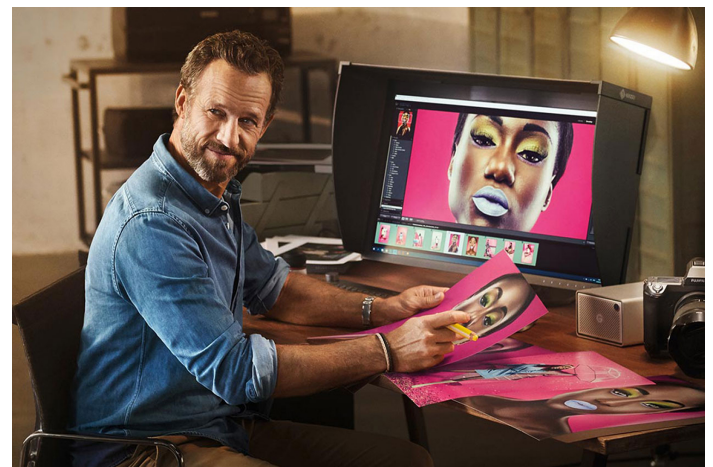


VIVID COLOURS IN LINE WITH INDUSTRY STANDARDS

Wide Gamut

The wide-gamut monitor reliably reproduces 98% of the DCI P3 standard used in digital cinema and also supports the Rec. 2020 standard.

The CG319X also covers 99% of the Adobe RGB gamut. When images recorded in RAW format are converted to AdobeRGB, the monitor reproduces these with absolute colour fidelity. The EIZO monitor also offers great advantages for printing: It covers almost the entire CMYK gamut (ISO coated and U.S. Web Coated, for example). You see the later print result on screen and save yourself the proof stage.



HDR gamma support

In terms of the HLG and PQ tone curves, the CG319X meets the relevant standards for the display and processing of content in HDR (High Dynamic Range). The optimized gamma curves enable the content to closely resemble natural, human color perception. Production and post-production professionals can count on a reliable representation with HDR tone curves for editing and color grading.

COLOR DEPTH FOR PLASTIC IMAGES

True Black

With its high contrast ratio, the CG319X displays deep blacks, which often look pale or washed out on a typical LCD monitor due to the backlight. This is especially true when viewing the monitor from the side in dimly lit rooms. The CG series is equipped with a retardation film for this purpose, which allows for this depth of blacks even at wide viewing angles.



Integrated sensor for self-calibration

An integrated calibration sensor ensures you achieve maximum colour accuracy. The sensor is perfectly aligned to the monitor, takes environmental influences such as light into account, and correlates the centre of the image with the edge of the image. This ensures an even result over the whole monitor.

The sensor is located in the bezel and is only extended when performing measurements. This means that no external calibration device is necessary, and the colour fidelity of the monitor is optimal at all times.

The CG319X is equipped with the latest sensor technology, allowing it to be recalibrated on the fly. So you can continue working with applications that are not colour-critical while the monitor calibrates. The sensor only takes up a small amount of space on the screen during calibration and therefore does not interfere. Calibration can also take place completely automatically at definable times, even if the computer is switched off or not connected to the monitor at all.



Exemplary image

EIZO software for fast calibration and printing

Good image processing is only possible on well-calibrated monitors. The usual software calibration takes a long time and requires the user to have a certain level of technical expertise. The CG319X is supplied with ColorNavigator hardware calibration software. With ColorNavigator, you can perform calibration quickly, easily, and with excellent colour precision: During calibration, the software directly accesses and saves to the look-up-table in the monitor hardware. You determine the relevant components such as white balance, gamma, brightness, and tone value curve according to your requirements. Calibration then runs automatically based on the default set during production and is therefore unique in terms of precision and speed. This also means that calibration can be performed by users in just a few steps, with no need for in-depth technical knowledge. Because the calibration takes place via the monitor hardware, it is performed without loss and independently of the computer and graphics board. The CG319X can also be smoothly integrated into an existing system.

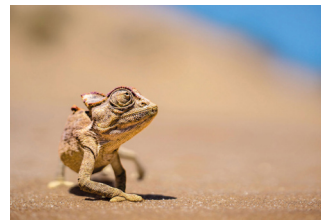
[More information on the EIZO ColorNavigator](#)

The free Quick Color Match software helps users, even without in-depth expertise in colour management, to see on the monitor how their images will look when printed on their Canon or Epson inkjet printer at home. In this way, the images can be optimised for the special properties of the selected photo paper even before printing, which helps users avoid expensive misprints.

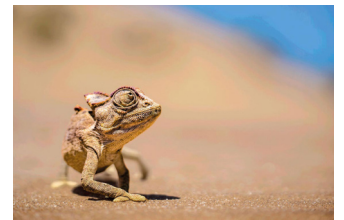
[More information on Quick Color Match](#)

Smooth and fluid transitions and gradients thanks to 24-bit LUT and 10-bit mode

Thanks to the 10 bit colour display based on a 24 bit LUT, you can utilize a huge colour spectrum. This is made possible by the rapid DisplayPort and HDMI connections in combination with the frame rate control. A billion colours at your fingertips simultaneously. That is 64 times more colours than with an 8 bit display. The colour gradations are finer and the colour differences between adjacent colours are smaller. The enhanced grayscale range is equally important for post-production. With the 10 bit grayscale range activated, between 6% and 14% more grayscales are visible.



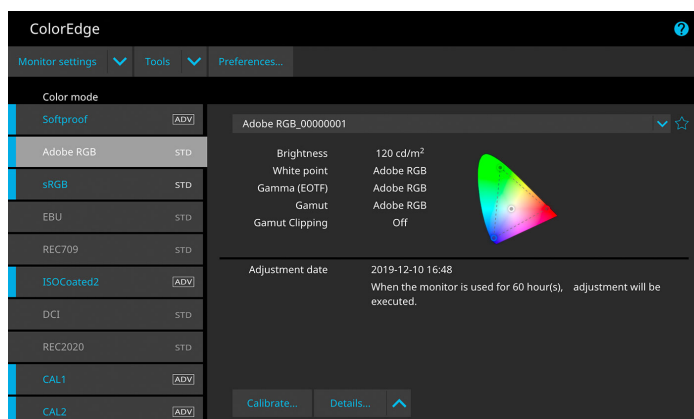
10 bit (LUT: 24 bit)



8 bit (LUT: 24 bit)



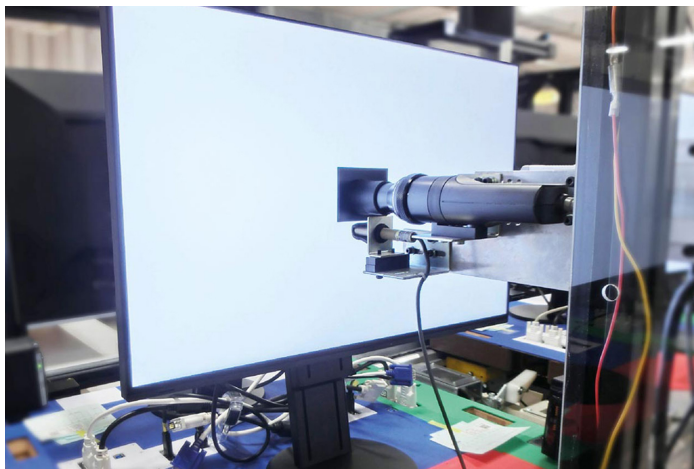
8 bit (no LUT)



READY TO USE RIGHT OUT OF THE BOX

Perfect settings right from the factory

Every ColorEdge CG319X is individually measured and optimally configured in the factory, enabling it to be used immediately after it has been unboxed. To this end, the gamma curves for the red, green and blue channels are closely checked and corrected, if necessary. This unique EIZO factory calibration enables the user to start using the monitor with the preset gamut range right out of the box. This painstaking calibration at the factory ensures that the user can quickly recalibrate the monitor if needed using ColorNavigator.



Calibration report

Each ColorEdge CG319X comes with an individual calibration report that shows the measurement results of the factory calibration of the monitor. The report proves the homogeneity, gamma curve, colour space coverage and white point of the monitor.

[More information on the calibration report](#)

PERFECT RENDERING ACROSS THE ENTIRE SCREEN

Digital Uniformity Equalizer

Each individual monitor panel is precisely measured over the entire surface at the EIZO factory. Any inhomogeneities in brightness and unnecessary colour are detected and removed. This process (Digital Uniformity Equalizer) guarantees that identical colours always look the same across the entire surface of the monitor, no matter where they are displayed. Only in this way is precise image processing and retouching possible.



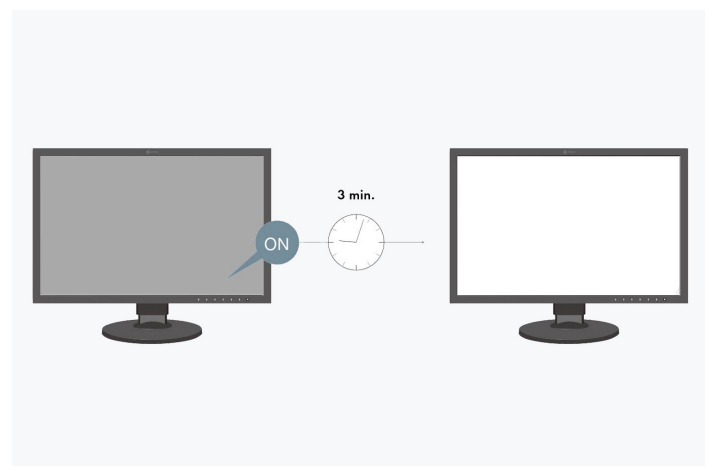
With DUE



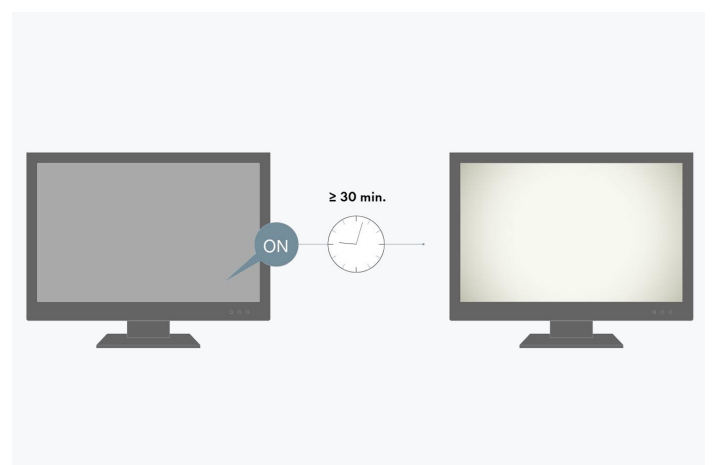
Without DUE

Stable color reproduction in just three minutes

It takes a traditional monitor a minimum of 30 minutes for the brightness, chromaticity and tone values to stabilise, whereas the ColorEdge CG319X only needs three minutes. It means that users know they can reliably trust the colours of the monitor within a short time after switching in on.



ColorEdge



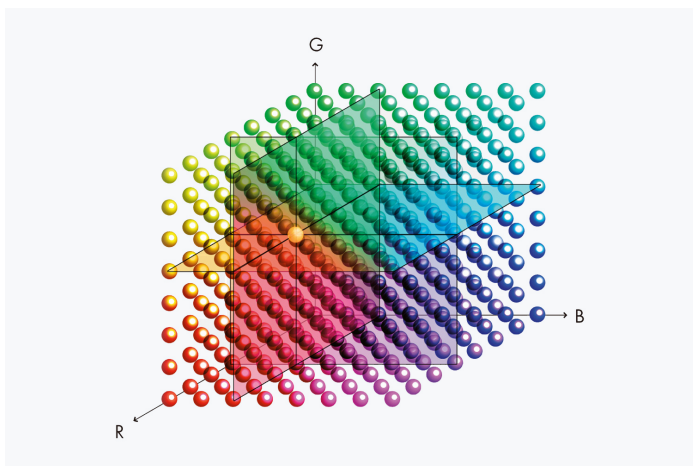
Typical monitor

Video and film production Features for post-production

Precise color reproduction thanks to high-resolution 3D LUT

The 3D LUT ensures the most precise tonal value allocation and extremely accurate colour tone reproduction, which can be seen, among other things, in the grey wedge. In LCDs, the brightness levels vary from module to module in relation to the image signal and the colour mixing (addition) of red, green and blue. This can only be accurately recorded and controlled with the help of particularly precise measuring devices.

Ex works, EIZO therefore adjusts every monitor in the CG series and its colour and tone curve. This ensures a consistent colour temperature across the entire grey scale. The result: colour reproduction is the same, precise and reliable for every single CG319X.



3D LUT profiles for film production

Film emulation with 3D LUT ColorNavigator can use 3D LUT files from the color grading of films to generate data for emulation on the monitor. This film emulation is available for up to five color modes of the monitor and is suited to simulating the coloring of films.

Safe in sight thanks to the Safe Area Marker

Ideal for subtitles and critical images: Thanks to the Safe Area Marker, you know which area of the scene is dis-

played in a different aspect ratio. You can therefore see immediately whether subtitles, texts or important picture elements are in the visible area. You can adjust the marker color, size and aspect ratio so that the marker is clearly visible in every image.

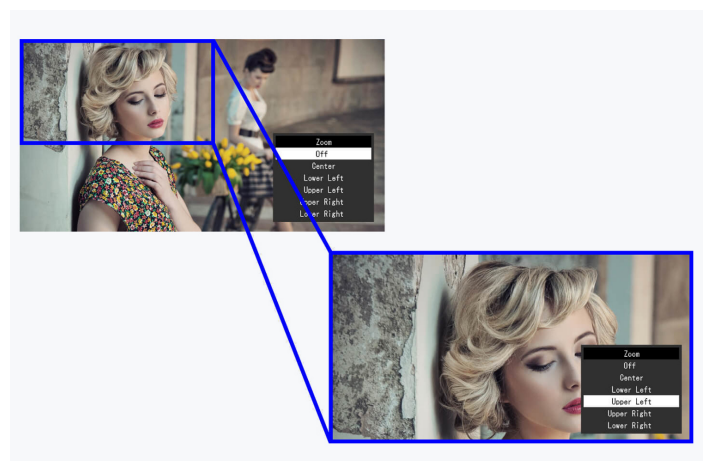


Aspect Marker

The Aspect Marker enables the display of DCI 4k image areas (4096 x 2160 pixels) or 2K video material (2048 x 1080 pixels) that are displayed in varying ways when reproduced on different devices with differing aspect ratios.

4K zoom

Users can quickly and easily make selections directly in the monitor menu to zoom in on various areas of the monitor image so as to assess details and sharpness.



Luminance warning

The brightness warning can be used to mark areas that exceed a certain brightness (300, 500, 1000 or 4000 cd/m²) when using the PQ mode. These areas are marked optionally in yellow or magenta.



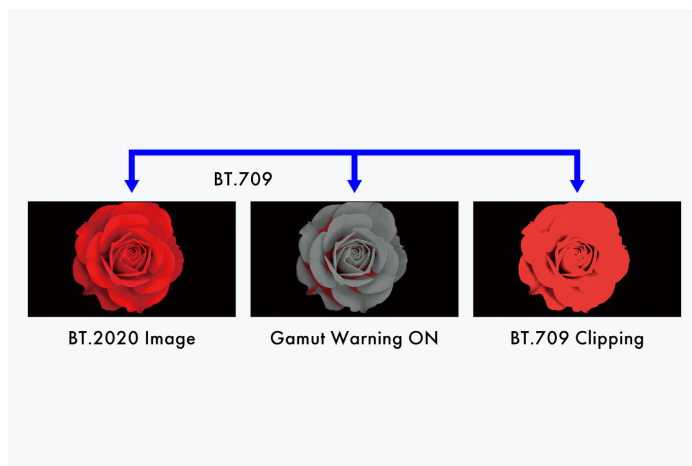
Brightness warning



Without brightness warning

Gamut warning

The Gamut warning operates in two modes: Rec. 2020 image content that can't be displayed in the Rec. 709 gamut is displayed in grayscale. Alternatively, clipping mode is simulated in Rec. 709 to show how Rec. 2020 material would look on HDTV devices.



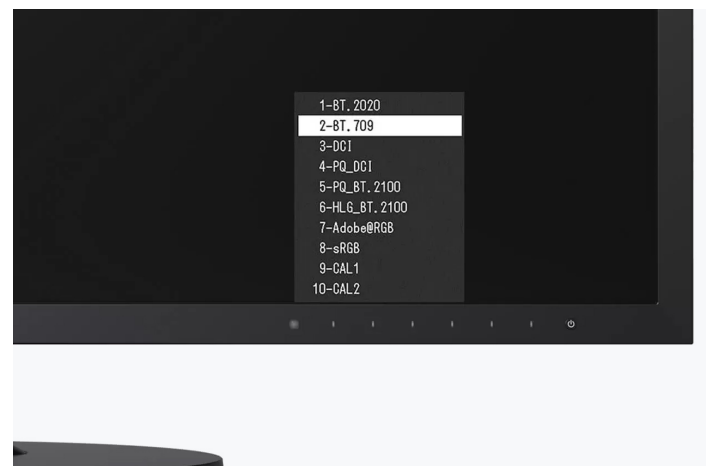
Ideal for video and film production: HDMI

Films are normally recorded at 24 fps. They therefore appear unnatural with the conventional monitor rendering of 60 Hz. The monitor supports an image frequency of 24 and 60 Hz. This means that you can view and edit your film material as it was taken.

HDMI signals with refresh rates of 60, 50, 30, 25 and 24 Hz are supported. The monitor also features I/P conversion.

Gamut pre-sets for film and video production

Presets for the gamuts DCI P3, Rec. 709 and Rec. 2020 are precisely calibrated in the factory and ensure you work with the correct gamma values. Colour modes for PQ (DCI and Rec. 2100) and HLG (Rec. 2100) for the display of HDR content are also preset as factory defaults. Colour modes on the monitor can be easily changed at the touch of a key, and recalibrated when necessary using ColorNavigator.



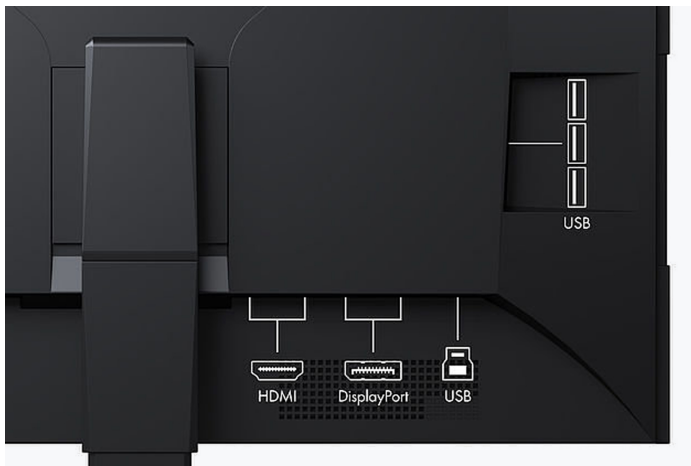
Variety of ports

Best connectivity

One monitor, many ports

It doesn't get simpler than this: Most end devices, such as PCs, laptops or cameras, can be connected directly to the monitor, thanks to its wide range of interfaces.

The CG319X supports a wide variety of video formats up to 10-bit 4:4:4 at 50/60 p via DisplayPort and 10-bit 4:2:2 at 50/60 Hz via HDMI. As a result, the CG319X can be integrated into PC-based workflows as well as used with HDMI feeds.



Ergonomics

Working in a relaxed manner

FOR THE SAKE OF THE EYES

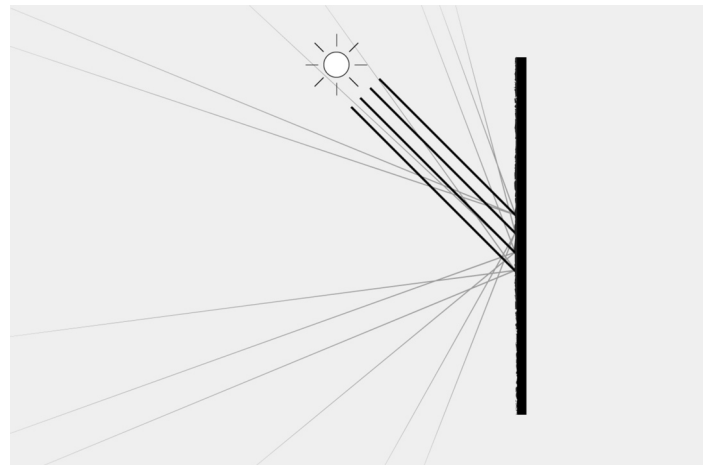
Flicker free

The monitor is flicker-free at every brightness setting. This is great for users, as their eyes will not tire as quickly, allowing them to work in front of the screen for longer periods of time without fatigue.

Anti-glare coating: more image, less reflection

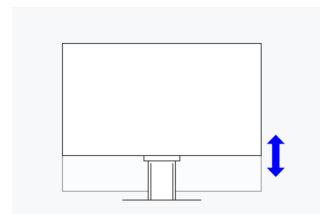
The CG319X offers a perfect, non-glare surface. By minimising glare by diffusing the reflected light, the CG319X effectively protects your eyes from straining. This keeps your eyes from getting as tired and allows you to sit

comfortably in front of the monitor, without having to sit in a forced position to prevent glare.

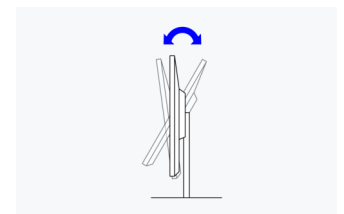


Ergonomic stand

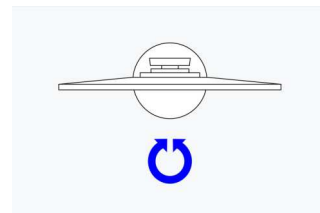
Ergonomic and stable: the adjustable stand focuses on ergonomics. You can rotate, swivel and tilt the monitor stand until you find the most comfortable setting for your back, neck and sitting posture. It features continuous height adjustment and can be lowered almost to the base plate of the stand, enabling you to position the top image line ergonomically right below your eye level.



Height
154 mm



Tilt
Between 5° forwards and 35° backwards



Swivel
344°

Customised key assignment

Depending on the model, up to two sensor buttons on the front can be assigned functions from the on-screen menu. The advantage: you have direct access to frequently used features.

PROTECTION AGAINST REFLECTIONS AND GLARE

Monitor hood

The monitor hood reduces reflection and brightness on the screen and helps protect your eyes. It is easy to attach and reduces the amount of light that hits the screen from above and from the sides.



Sustainability

Environmentally and socially conscious production

Sustainable and durable

The CG319X is designed for a long service life that takes into account the entire lifecycle and impact on the environment. It is generally well above the five-year guarantee. Spare parts are available up to five years after the end of production. The monitor's long service life and the ability to repair it save resources and the climate. When designing the CG319X we paid attention to reducing resource consumption by using high-quality components and materials and being meticulous in production.

Socially responsible production

The CG319X 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 CG319X 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

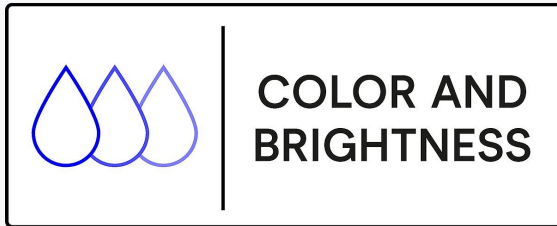
Five-year warranty

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.



Guaranteed brightness and color reproduction

The CG319X has a color and brightness guarantee for five years from the date of purchase for 10000 operating hours at a maximum brightness of 120 cd/m² and a color temperature between 5000 and 6500 K.



Technical Data

| GENERAL | | FEATURES & OPERATION | |
|---|---|--|--|
| Item no. | CG319X | Hardware calibration of brightness and luminance characteristics | ✓ |
| Case color | Black | Integrated sensor for self-calibration | ✓ |
| Areas of application | Photography, Video & Graphics | Scheduled self calibration | ✓ |
| Product line | ColorEdge | Preset color/greyscale modes | BT.2020, PQ BT.2100, BT.709, HLG BT.2100, AdobeRGB, DCI, PQ DCI, 2x manual memory locations, sRGB |
| Areas of application | Photography, image editing and retouching, Video Editing, Post Production and Colour Grading, Design, creation and illustration, Printing and Fine Art Printing, Textile and fashion industry | Temperature color drift correction | ✓ |
| Specific system requirements | None, compatible with most computers and operating systems including macOS and Windows | Brightness drift correction | ✓ |
| EAN | 4995047053088 | Digital Uniformity Equalizer (homogeneity correction) | ✓ |
| SCREEN | | Overdrive | ✓ |
| Screen size [in inches] | 31,1 | No flickering | ✓ |
| Screen size [in cm] | 78,9 | True Black | ✓ |
| Format | 17:9 | 3D LUT film emulation (10 bit log) | ✓ |
| Viewable image size (width x height) [in mm] | 698 x 368 | Safe Area Marker | ✓ |
| Ideal and recommended resolution | 4096 x 2160 (4K DCI) | I/P conversion | ✓ |
| Pixel pitch [in mm] | 0,17 x 0,17 | Noise suppression (HDMI) | ✓ |
| Pixel density [in ppi] | 149 | RGB and CMYK colour space emulation | ✓ |
| Supported resolutions | 4096 x 2160 (4K DCI), 3840 x 2160 (4K UHD), 2560 x 1600, 2560 x 1440, 2560 x 1440 (@ 30 Hz), 1920 x 1200, 1680 x 1050, 1600 x 1200, 1280 x 1024, 1024 x 768, 800 x 600, 720 x 400, 640 x 480, 1080p (@ 60 Hz), 1080i (@ 60 Hz), 1080p (@ 50 Hz), 1080i (@ 50 Hz), 1080p (@ 30/25/24 Hz), 720p (@ 60 Hz), 720p (@ 50 Hz), 576p (@ 60 Hz), 576p (@ 50 Hz), 480i (@ 60 Hz) | HDCP Decoder | ✓ |
| Panel technology | IPS (Wide Gamut) | Luminance warning | ✓ |
| Max. viewing angle horizontal | 178 | Gamut Clipping | ✓ |
| Max. viewing angle vertical | 178 | Automatic signal input recognition | ✓ |
| Number of colors or greyscale | 1.07 billion colors (HDMI, 10 Bit), 1.07 billion colors (DisplayPort, 10 Bit) | On-screen menu languages | de, en, fr, es, it, se |
| Color palette/look-up table | More than 278 trillion color tones / 24 Bit 3D-LUT | Adjustment options | Color Mode, Brightness, Contrast, Color temperature /White point, Gamma, Colour tone, Color saturation, Resolution, Scaling, Color matrix YUV/RGB, Zoom, BT.709 color space warning, Markers (safe area marker, safe area size, format marker, format adjustment, bezel color), OSD language, Signal input, DUE priority |
| Max. color space (typical) | AdobeRGB (>99%), DCI P3 (>98%), ISO Coated V2 (>99%), Rec709 (100%), EBU (100%), SMPTE-C (100%), sRGB (100%) | Button Guide | ✓ |
| Max. brightness (typical) [in cd/m ²] | 350 | Integrated power unit | ✓ |
| Recommended brightness [in cd/m ²] | 120 | CONNECTIONS | |
| Max. dark room contrast (typical) | 1500:1 | Signal inputs | 2x DisplayPort (HDCP 1.3), 2x HDMI (Deep Color, HDCP 1.4/2.2) |
| Response time grey-grey alternation (typical) [in ms] | 9 | USB specification | USB 5Gbps (USB 3) |
| Max. refresh rate [in Hz] | 60 | USB upstream ports | 1 x type B |
| Backlight | Wide Gamut LED | USB downstream ports | 3 x type A |
| | | Graphic signal | DisplayPort, HDMI (RGB, YUV) |

ELECTRICAL DATA

| | |
|--|---|
| Frequency | DisplayPort: 25.0 - 137 kHz, 23 - 61 Hz; HDMI: 15 - 136 kHz, 23 - 61 Hz |
| Power consumption (typical) [in watts] | 52 |
| Maximum Power Consumption [in watts] | 140 (at maximum brightness with all signal inputs and USB ports in use) |
| Max. Power consumption in stand-by mode [in watts] | 1.2 |
| Power consumption with power switch off [in watts] | 0 |
| Energy efficiency class | G |
| Energy consumption/1000h [in kWh] | 55 |
| Power supply | AC 100-120 V / 200-240 V, 50/60 Hz |
| Power management | ✓ |

DIMENSIONS & WEIGHT

| | |
|---|---|
| Dimensions (incl. stand) (width x height x depth) [in mm] | 735 x 434 - 588 x 290 |
| Weight (incl. stand) [in kg] | 12.4 |
| Dimension drawing (PDF) | Dimension drawing (PDF) |
| Rotatability of the stand [in °] | 344 |
| Tiltability forwards/backwards [in °] | 5 / 35 |
| Height adjustment range [in mm] | 154 |
| Hole spacing | 100 x 100 |

CERTIFICATION & STANDARDS

| | |
|---------------|--|
| Certification | CE, CB, TÜV/GS, TÜV/Ergonomics (including ISO 9241-307), TÜV/Color Accuracy (Quick Stability), FograCert Softproofing System (class A), RCM, cTÜVus, FCC-B, CAN ICES-3 (B), TÜV/S, PSE, VCCI-B, RoHS, WEEE, China RoHS, CCC, EAC |
|---------------|--|

SOFTWARE & ACCESSORIES

| | |
|--|---|
| Accompanying software and other accessories are available for download | ColorNavigator, ColorNavigator Network |
| Other box contents | Calibration report, Signal cable HDMI - HDMI, USB cable (Type A - Type B), Signal cable DisplayPort - DisplayPort, Manual via download, Power cord, Quick guide |
| Accessories | CP200 (USB-C to DisplayPort cable), EX4 (Colorimeter for ColorEdge monitor calibration) |
| Light protection cover | ✓ |

WARRANTY

| | |
|-------------------|--|
| Warranty periode | 5 years for unit and LCD module up to 30,000 operating hours, whichever comes first. |
| Included warranty | A brightness of at least 120 cd/sqm at a colour temperature of 5000 K to 6500 K is guaranteed for a period of 5 years or 10,000 operating hours, whichever comes first., Zero pixel defects guarantee; no fully illuminated sub-pixels (sub-pixels ISO 9241-307) for six months from date of purchase. |