



ColorEdge
PROMINENCE
CG3146

HDR
High Dynamic Range



EIZO's ColorEdge PROMINENCE CG3146 is the worlds first true HDR reference monitor with a built-in calibration sensor.

The ColorEdge PROMINENCE CG3146 is the first HDR reference monitor in the world to be equipped with a built-in sensor which calibrates the monitor to stay colour accurate. This eliminates the need for a third-party calibration device and streamlines colour management so you can stay more focused on the creative process. Calibration information is saved directly to the monitor, so you do not need to recalibrate if connecting to more than one PC.

The PROMINENCE CG3146 is also equipped with a Single-Link 12G/6G/3G/HD-SDI and Dual- or Quad-Link 3G*/HD-SDI connections for seamless transmission of 4K video data. It also has an HDMI and DisplayPort input for flexible connection to a range of video devices.

* 2 sample interleave supported

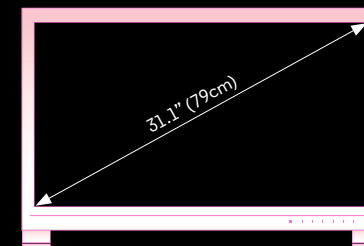
Size: 31.1" (79cm)

Resolution: 4096 x 2160 (17:9 aspect ratio)

Pixel Density: 149ppi

Colour: SDI, DisplayPort, HDMI : 107 billion (24-bit Palette)

Warranty: Five Year On-site



PROMINENCE CG3146 Features & Specifications

True HDR

ColorEdge PROMINENCE CG3146 achieves the 1000 cd/m² high brightness level needed for HDR content display. It also offers a contrast ratio in excess of 1,000,000:1 for displaying true blacks. The monitor supports the HLG and PQ gamma curves for HDR without ABL so images are displayed with the correct colour and brightness for a true HDR visual experience.

DCI 4K Resolution

ColorEdge PROMINENCE CG3146 displays the DCI-4K standard (4096 x 2160) which is more than four times that of full HD (1920 x 1080). It's ideal for creating, editing, and referencing with 2D and 3D CGI, VFX, compositing, and colour grading.

Centralised Colour Management

ColorEdge PROMINENCE CG3146 supports various video formats including HDMI 2.0 compatible with 10-bit 4:2:2 at 50/60p. DisplayPort supports up to 10-bit 4:4:4 at 50/60p. ColorEdge PROMINENCE supports EIZO's unique ColorNavigator NX quality control software. It offers quality control and asset management of client ColorEdge monitors. To suit the needs of a specific project, you can change the brightness, gamma, and white point settings of the monitor's preset colour modes and calibrate to the new values. The calibration information is saved directly to the monitor.

Video Compatibilities

ColorEdge PROMINENCE CG3146 supports various video formats including HDMI 2.0 compatible with 10-bit 4:2:2 at 50/60p. DisplayPort supports up to 10-bit 4:4:4 at 50/60p.

SDI Connectivity

The monitor is equipped with a Single-Link 12G/6G/3G/HD-SDI and Dual- or Quad-Link 3G*/HD-SDI connections for seamless transmission of 4K video data.

*2 sample interleave supported

** A graphics board and software which support 10-bit output are also necessary for 10-bit display.

***Patent Pending

Wide Colour Gamut

The wide gamut faithfully reproduces 99% of DCI-P3 and 80% of Rec. 2020 standards used in post production. This ensures the colours are reproduced according to industry standards.

10-Bit Simultaneous Display

With a 10-bit simultaneous display** from a 24-bit 3D look-up-table (3D LUT), ColorEdge PROMINENCE CG3146 can show more than one billion colours simultaneously. This results in smooth colour gradations and reduced Delta-E between two adjacent colours.

Multiple Inputs

With a single cable, the DCI-4K resolution at 60 Hz is supported by DisplayPort, HDMI and DSI Inputs.

Light-Shielding Hood

The monitor comes bundled with a shading hood that effectively prevents glare on the screen caused by ambient lighting. The hood attaches magnetically for quick and easy setup.

Electro-Optical Transfer Functions

There are two EOTF curves used for HDR video – hybrid log-gamma (HLG) and perceptual quantizer (PQ) curve. HLG is compatible with SDR displays and is suitable for live television broadcasting. The PQ Curve approximates the human visual system in terms of colour and light perception, making it ideal for films, streaming, and other video content. Both gamma curves were standardised by the International Telecommunication Union (ITU) as ITU-R BT.2100. In addition, the PQ curve was standardised by the Society of Motion Picture and Television Engineers (SMPTE) as ST-2084. ColorEdge PROMINENCE CG3146 supports both HLG and PQ curves.

HDR Workflow

In addition to the ColorEdge PROMINENCE CG3146 HDR reference monitor, EIZO offers optional HLG and PQ curves for many of its current CG Series monitors. The optimised gamma curves render images to appear more true to how the human eye perceives the real world compared to SDR. These products will support the HDR workflow from shooting to colour grading.

Stable Display Using Industry First AI

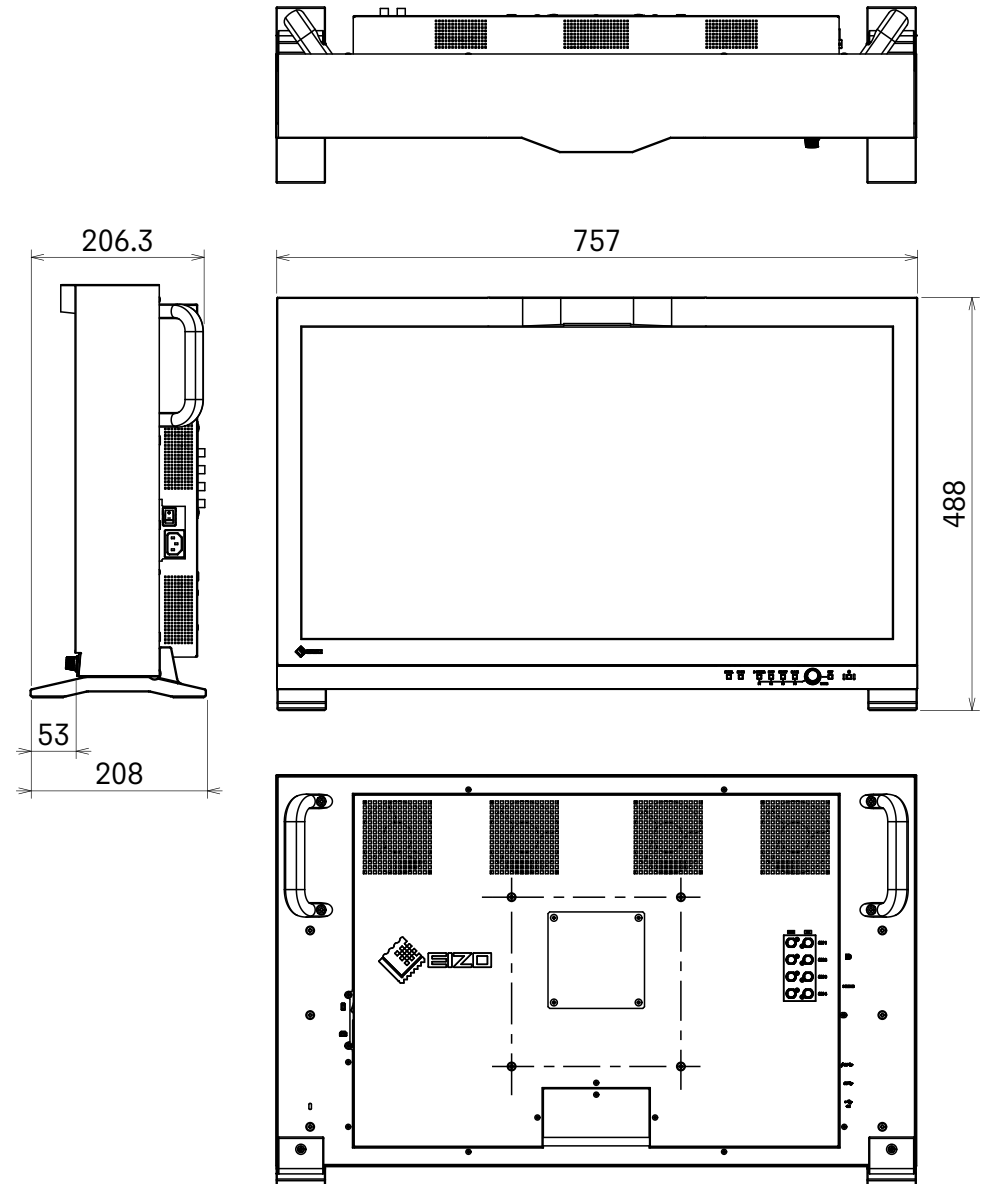
A temperature sensor accurately measures the temperature inside the monitor, as well as estimates the temperature of the surrounding environment as the monitor adjusts in real-time so gradations, colour, brightness, and other characteristics continue to be displayed accurately. Furthermore, EIZO uses AI (artificial intelligence)*** in the estimation algorithm so it can distinguish between various temperature changing patterns to calculate even more accurate correction.

PROMINENCE CG3146 Specifications & Dimensions

Specifications

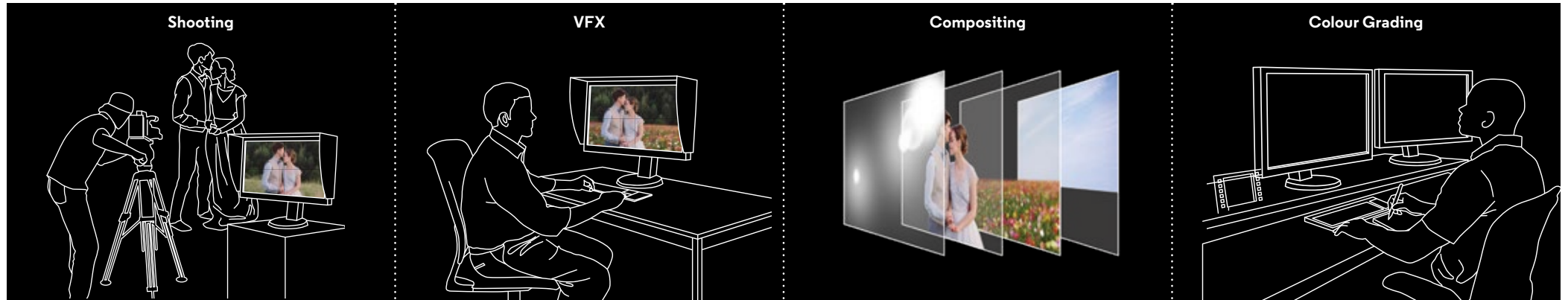
Cabinet Colour	Black
Panel Type	IPS
Panel Size	31.1" / 79 cm (789 mm diagonal)
Native Resolution	4096 x 2160 (17:9 aspect ratio)
Viewable Image Size (H°~V)	698 x 368.1 mm
Pixel Pitch	0.170 x 0.170
Pixel Density	149 ppi
Greyscale Tones	SDI, DisplayPort, HDMI: 1,024 tones (palette of 65 thousand)
Display Colours	SDI, DisplayPort, HDMI: 1.07 billion (24-bit palette)
Viewing Angles (H / V, typical)	178°, 178°
Brightness (typical)	1000 cd/m ²
Contrast Ratio (typical)	1,000,000:1
Response Time (typical)	10 ms (grey-to-grey)
Wide Gamut Coverage (typical)	Adobe RGB: 99%, DCI-P3: 99% (TBD), Rec. 2020: 80% (TBD)
Input Terminals	BNC (12G/6G/3G/HD-SDI), BNC (3G/HD-SDI) x 3, DisplayPort (HDCP 1.3), HDMI (Deep Color, HDCP 2.2 / 1.4)
Output Terminals	BNC (12G/6G/3G/HD-SDI, through-out (active)), BNC (3G/HD-SDI, through-out (active)) x 3
USB Function	USB 3.1 Gen 1: Type-A x 3
USB Standard	USB 3.1 Gen 1: Type-B
Preset Modes	BT.2020, BT.709, DCI, PQ_BT.2100, PQ_BT.709, PQ_DCI, HLG_BT.2100, Calibration, Sync Signal
Digital Uniformity Equalizer	Yes
Included Cables	DisplayPort (2 m), Mini DisplayPort - DisplayPort (2 m), HDMI (2 m) AC power cord, USB cable

Dimensions (Unit: mm)



HDR Video Workflow

In addition to the ColorEdge PROMINENCE CG3146 HDR reference monitor, EIZO offers HLG and PQ curves with many of its CG Series monitors. The optimised gamma curves render images to appear more true to how the human eye perceives the real world compared to SDR. These products will support the HDR workflow from shooting to colour grading.



- Shooting
- VFX
- Compositing
- Colour Grading



CG247X HDR

- Shooting
- VFX
- Compositing
- Colour Grading



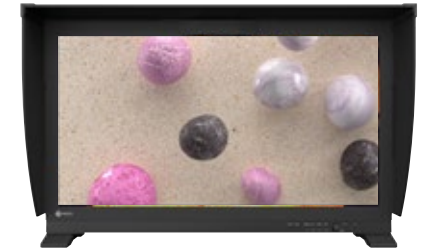
CG279X HDR

- Shooting
- VFX
- Compositing
- Colour Grading



CG319X HDR 4K

- Shooting
- VFX
- Compositing
- Colour Grading



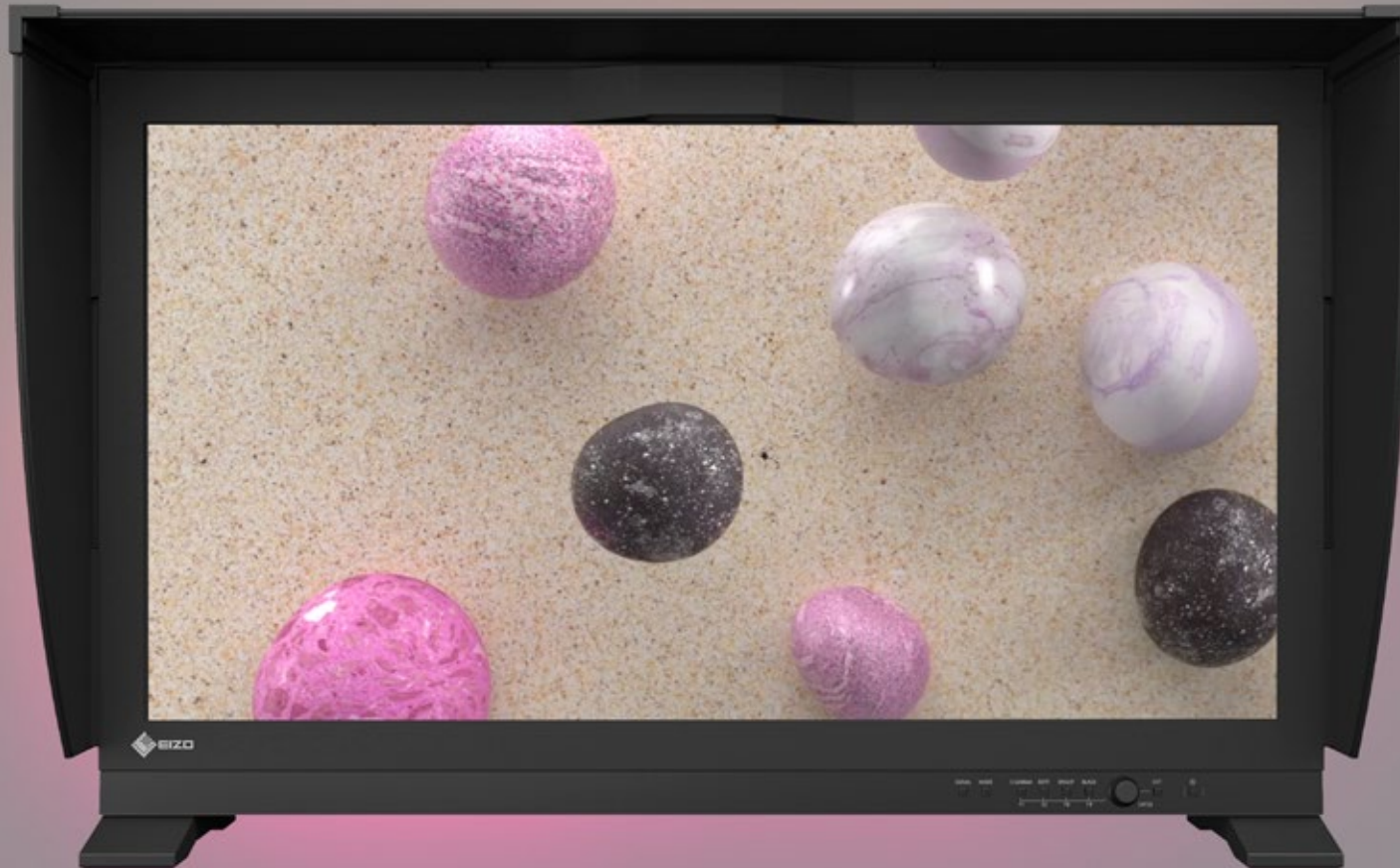
CG3146 HDR 4K

Colour Management Monitors with HDR Gamma

	Colour Management Monitors with HDR Gamma			HDR Reference Monitor
Size	24.1"	27"	31.1"	31.1"
Native Resolution	1920 × 1200	2560 × 1440	4096 × 2160	4096 × 2160
Brightness (typical)	400 cd/m ²	350 cd/m ²	350 cd/m ²	1000 cd/m ²
Contrast Ratio (typical)	1500:1	1300:1	1500:1	1,000,000:1
Colour Gamut (typical)	DCI-P3: 98%	DCI-P3: 98%	DCI-P3: 98%	DCI-P3: 99%



ColorEdge PROMINENCE CG3146



5 | Year on site Warranty
★★★★★

Warranty

Product: 5 years and 30,000 hours
LCD Panel: 5 years and 10,000 hours
Brightness warranty condition: 10,000 hours (at 6500K, and at least 800cd/m²) regardless of user's luminance and colour settings.

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