ColorEdge **PROMINENCE CG1**

→ **Product Website** → **Video Playlist**

30.5" HDR reference monitor

The ColorEdge PROMINENCE CG1 is EIZO's professional reference monitor for color grading and mastering professional HDR and SDR film content. The unique combination of extreme contrast range, huge color space coverage, razor-sharp image display and outstanding precision make it a reliable precision tool for film post-production in the film and television industry. With connections such as SDI, ST2110, HDMI (incl. FRL) and DisplayPort, the PROMINENCE CG1 can be seamlessly integrated into any production environment. The integrated calibration sensor simplifies recalibration enormously and enables automated quality management.

- 30.5-inch Wide Gamut LCD with 4096 x 2160 pixels (DCI-4K)
- HDR brightness and dynamic range calibrated to 1000 nits and reference class 1 level
- Deep black with up to 1000000:1 contrast - without ABL or local dimming
- HDR-HLG and HDR-PQ-EOTF precisely calibrated to reference class 1 level
- Calibrated presets for: BT.2020, BT.709, DCI-P3, PQ_BT.2100, PQ_DCI-P3, PQ_Theater, HLG_BT2100
- SDI connections: Single-Link 12G/6G/3G/HD-SD, Dual- and Quad-Link 3G (2 sample interleave)
- SFT28 connections (25GbE, ST 2110) for IP-based production environments
- HDMI with FRL - supports 12 bit 4:4:4 in DCI 4K resolution
- DisplayPort - up to 10 bit 4:4:4
- 5-year guarantee for maximum investment security

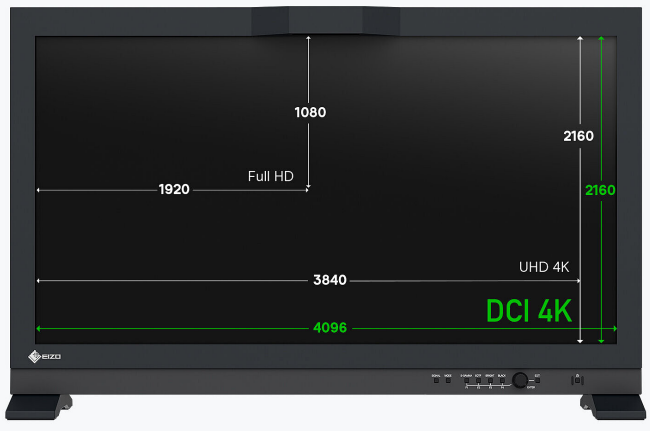
Maximum precision
Maximum reliability

Real HDR

The ColorEdge PROMINENCE CG1 is a true HDR (High Dynamic Range) reference monitor that achieves a high brightness of 1000 cd/m^2 (typical) and a contrast ratio of 1000000:1 (typical) is achieved. With the precise display of bright and dark content across the entire screen, it dispenses with disruptive functions such as local dimming or a brightness limiter (ABL).

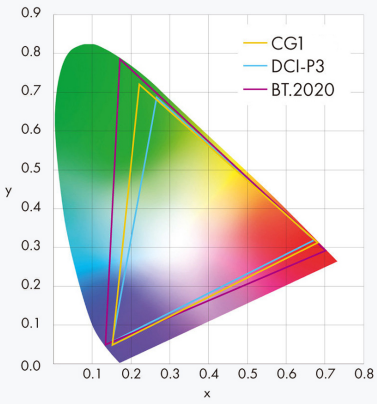
DCI 4K resolution

The PROMINENCE CG1 displays a DCI-4K resolution (4096 x 2160 (4K DCI) pixels) that is more than four times that of Full HD (1920 x 1080 pixels). This makes it an optimal solution for the creation, editing and color grading of professional films, 2D and 3D CGI, VFX or compositing.



Color space coverage

The wide gamut reproduces 98 % of the DCI P3 standard that is typically used in post-production, which displays colours true to the original source data.

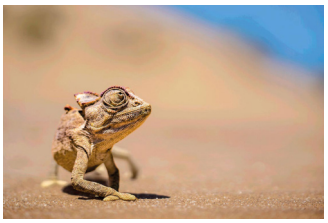


10-bit display

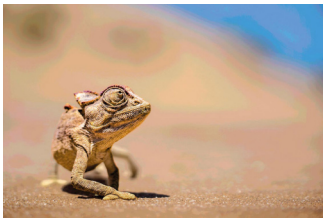
The ColorEdge PROMINENCE CG1 offers 10-bit display* based on a 24-bit look-up-table (LUT), which can display more than one billion colours. This results in finer gradations and a lower colour distance (delta E) between adjacent hues.

* This requires a graphics board and software that support 10-bit display.

10 bit (LUT: 24 bit)



8 bit (LUT: 24 bit)



8 bit (no LUT)

PERFECT RENDERING ACROSS THE ENTIRE SCREEN

Digital Uniformity Equalizer

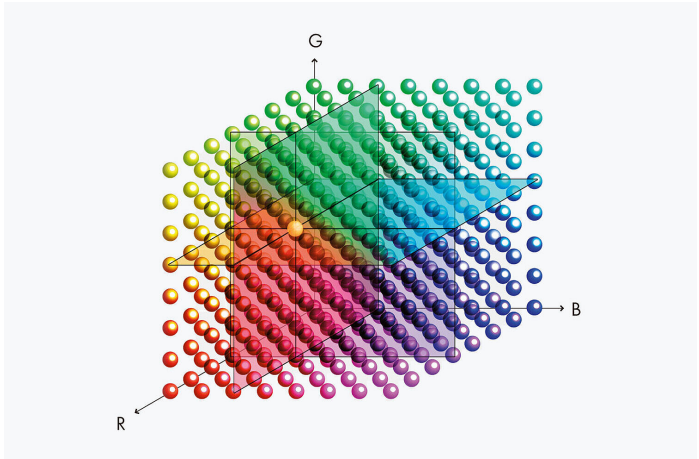
Each individual monitor panel is precisely measured over the entire surface at the EIZO factory. Any inhomogeneities in brightness and unnecessary colour are detected and removed. This process (Digital Uniformity Equalizer) guarantees that identical colours always look the same across the entire surface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

With DUE

Without DUE

3D LUT and emulation

Hues are precisely addressed in a cubic RGB table thanks to the built-in 3D LUT. The 3D LUT also improves the monitor's additive colour mixing (mixing of RGB) – a key factor for ensuring correct display of neutral grey tones. In addition, emulation data can be created from a 3D LUT file using the ColorNavigator to display a desired film look or content filmed with a flat log profile with preliminary grading.



Viewing angle

The monitor's wide viewing angle ensures a clear image with minimal change in color tone and contrast when viewed from the side. This ensures a uniform image for everyone, even if more than one person is viewing the monitor content.

Stable display thanks to industry-leading AI

To ensure gradations, colour, brightness and other characteristics are always accurately displayed even when the ambient temperature changes, the ColorEdge PROMINENCE CG1 is equipped with a temperature sensor. It accurately measures the monitor's internal temperature, while an AI (artificial intelligence)-assisted correction algorithm* distinguishes between different temperature change patterns and calculates a precise adjustment in real time.

* Patent pending

Maximum variety of ports
For every production environment

SDI ports

The ColorEdge PROMINENCE CG1 is equipped with a single-link 12G/6G/3G/HD SD and dual- or quad-link 3G /HD SDI ports that enable you to use 4K video signals. The SDI ports support the 2SI process (2 Sample Interleave), which ensures that the image consistently remains stable during transmission. VPID data (Video Payload ID) for SDI ports are also supported. Users can set any camera protocol with ColorNavigator 7 to display filmed material with the corresponding camera protocol.

SMPTE ST 2110 standard for IP environments

The PROMINENCE CG1 supports the SMPTE ST2110 standard and can therefore be seamlessly integrated into an IP-based production environment. The integrated interfaces also allow uncompressed video signals of the highest quality to be processed efficiently in the post-production video workflow.

HDMI and DisplayPort

HDMI® and DisplayPort connections are conveniently located on the side of the monitor, allowing flexible connection to a wide range of video devices. Three USB downstream ports and two USB upstream ports are also provided. The PROMINENCE CG1's HDMI port supports up to DCI-4K at 60 Hz 4:4:4 12 bit.

The PROMINENCE CG1 supports HDMI Fixed Rate Link (FRL). The FRL signal format is required to receive 12-bit signals, process uncompressed high-resolution data such as 4K and utilize high-speed bandwidths for compressed video transport over an HDMI connection. The monitor is supplied with an FRL-capable ultra high-speed HDMI cable for a reliable 4K connection.

The DisplayPort supports up to DCI-4K at 60Hz 4:4:4 10-bit.

Sync Signal – Automatic color settings

In Sync Signal mode, the PROMINENCE CG1 switches the color settings of brightness, gamma (EOTF) and color gamut - automatically according to the VPID (Video Payload ID) of the SDI signal and the metadata of the HDMI signal.

HDR
High Dynamic Range

Gamma curves

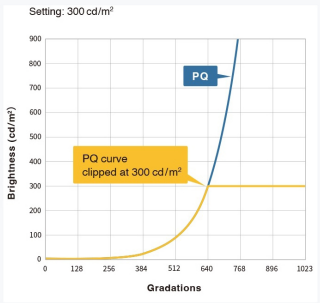
The ColorEdge PROMINENCE CG1 supports both of the gamma curves for HDR video: the HLG curve (Hybrid Log Gamma) and the PQ curve (Perceptual Quantization). Both are precisely calibrated to reference class 1 level.

Brightness simulation for PQ content

The PROMINENCE CG1 offers three PQ simulations for a task-oriented optimal display. The input signal can be clipped (PQ clipping) or compressed (PQ emulation) to adapt it to the maximum luminance of the monitor. The Auto setting in the PQ Option menu automatically adjusts the PQ curve to the current brightness of the monitor.

PQ clipping

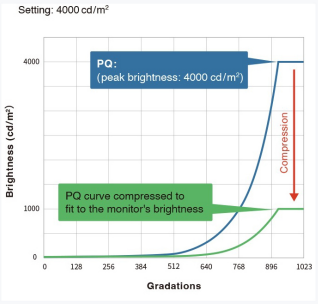
The brightness curve follows the PQ gamma curve up to a certain brightness value and is clipped
for all gradations above this point. Tone values up to this brightness value are displayed exactly according to the PQ gamma, which is useful for checking the coloration in areas with low color tones.




Low-gradation areas are accurately displayed

PQ emulation

Material with higher peak brightnesses is compressed for display over the entire PQ gamma so that the peak brightness matches the luminance of the monitor. This means that any tonal values from 0 to 1023 can be displayed within the dynamic range of the monitor to check the overall balance of the material.




Overall tone balance is accurately displayed

Luminance warning

The brightness warning can be used to mark areas that exceed a certain brightness (300, 500, 1000 or 4000 cd /m^2) when using the PQ mode. These areas are marked optionally in yellow or magenta.


Brightness warning


Without brightness warning

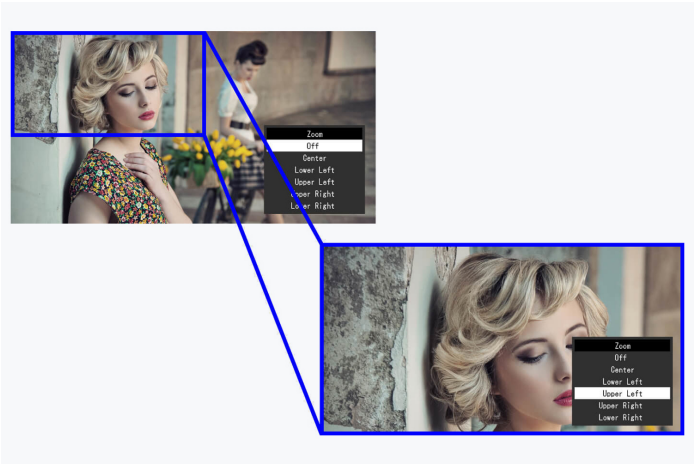
Film post-production
Film and TV industry

Multiple preset color modes

The OSD menu of the ColorEdge PROMINENCE CG1 offers quick access to the reference modes, which correspond to different playback standards. The available modes are BT.2020, BT.709, DCI-P3, PQ_BT.2100, PQ_DCI-P3, PQ_THEATER, HLG_BT.2100, Calibration and Sync Signal.

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.

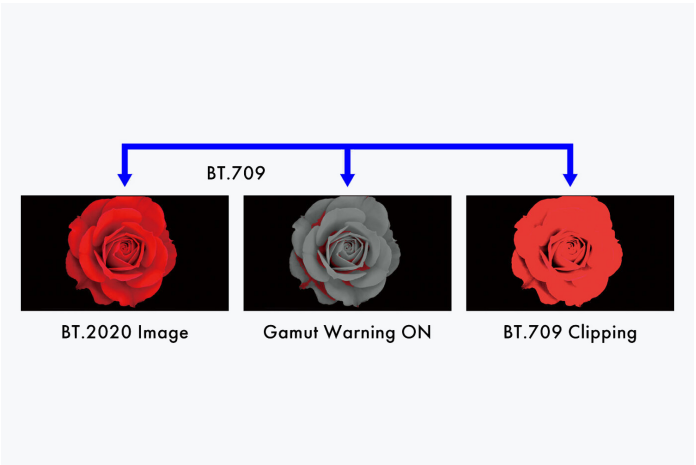


Blue-only functionality

The PROMINENCE CG1 offers a blue-only functionality that can be used to check noise in the signal. A monochrome image that uses only the blue components of the input signal will be displayed.

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.



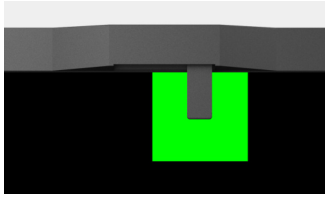
Color management and quality assurance

Integrated measurement sensor for automated workflows

A reference monitor always needs to be precisely configured in terms of white balance, colour and EOTF. The ColorEdge PROMINENCE CG1 is equipped with an integrated measuring device that automatically recalibrates the monitor to reference class level.

Each individual built-in sensor is correlated at the factory with a precision lab measurement sensor and calibrated to 'its' monitor in order to provide the exact measurement result. In addition, the sensor can be correlated to other measurement sensors that are used in existing user workflows. Thanks to the built-in measurement sensor, there is no longer a need for third-party calibration equipment. This simplifies quality control and the user can concentrate on the creative process. The calibration settings are saved directly in the monitor so that it does not have to be recalibrated when it is connected to another computer.

More information on integrated sensor technology

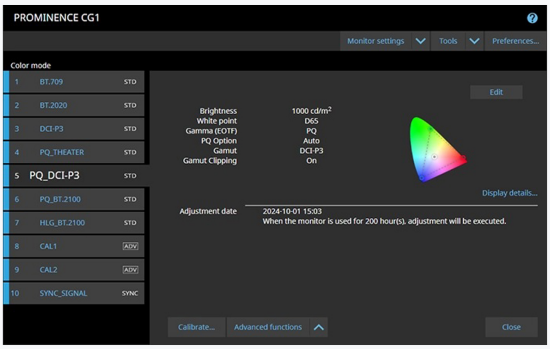


Detailed view

ColorNavigator color management software

A monitor must be calibrated at regular intervals to maintain color accuracy. EIZO's proprietary ColorNavigator software is an intuitive and highly accurate color management solution. It allows you to schedule automatic recalibration, calibrate all color modes simultaneously and correlate with external sensors to seamlessly integrate with the studio's internal color management. Calibration information is stored in the monitor and not on the connected computer, so the user does not need to recalibrate even when using a different PC.

In addition, EIZO's ColorNavigator API is available for software developers and system managers to integrate ColorNavigator functions into third-party applications such as video editing software, color correction, proofing systems, digital graphics and even remote controls. This allows developers to use the API to improve processes throughout the workflow.



Calibration report

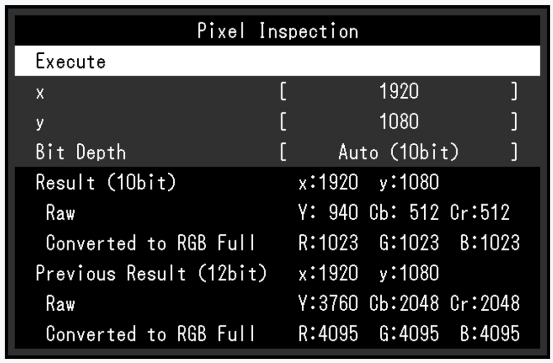
Each ColorEdge PROMINENCE CG1 comes with an individual calibration report that shows the measurement results of the factory calibration of the monitor. The report proves the homogeneity, gamma curve, colour space coverage and white point of the monitor.

More information on the calibration report

Pixel Inspection

Incorrect system configurations impair processing and can lead to a considerable need for corrections to the project and costly delays. With the pixel inspection function, which is controlled via the monitor's OSD, the color information of a pixel from the source data can be compared with the values displayed on the monitor.

This allows system administrators to check whether the technical configurations match the predefined color parameters of the current project. This is particularly helpful when users are working remotely and the system managers cannot check the settings on site.



User Interface
Ease of use

Configurable rotary control

The PROMINENCE CG1 has a dial on its front bezel that can be used to customise the monitor settings to your needs, such as by assigning it to the brightness settings, making navigation quick and easy.

Interface for remote control

The PROMINENCE CG1's RJ45 connector enables a user-owned GPI (General Purpose Interface) remote control for external access to its OSD options. Users can assign frequently used monitor functions to the remote control, such as changing color modes, switching markers on and off, zooming, pixel inspection and much more. This enables individualized optimization of monitor operation.

Sustainability
Environmentally and socially conscious production

Sustainable and durable

The PROMINENCE CG1 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 PROMINENCE CG1 we paid attention to reducing resource consumption by using high-quality components and materials and being meticulous in production.

Socially responsible production

The PROMINENCE CG1 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 PROMINENCE CG1 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.

Guaranteed brightness and color reproduction

EIZO provides a brightness and color guarantee for a maximum of 10 000 hours of monitor usage time on the ColorEdge PROMINENCE CG1 from the date of purchase. A minimum brightness of 800 cd/m^2 is guaranteed at a color temperature of 6500 K.

COLOR AND BRIGHTNESS

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.

5 YEAR WARRANTY

Technical Data

GENERAL

Item no.	CG1
Case color	Black
Areas of application	Photography, Video & Graphics
Product line	ColorEdge
Areas of application	Video Editing, Post Production and Colour Grading
Specific system requirements	None, compatible with most computers and operating systems including macOS and Windows
EAN	4995047068037

SCREEN

Screen size [in inches]	30,5
Screen size [in cm]	77,5
Format	17:9
Viewable image size (width x height) [in mm]	685,7 x 361,6
Ideal and recommended resolution	4096 x 2160 (4K DCI)
Pixel pitch [in mm]	0,167 x 0,167
Pixel density [in ppi]	152
Supported resolutions	4096 x 2160 (4K DCI), 3840 x 2160 (4K UHD), 2560 x 1440, 2560 x 1440 (@ 30 Hz), 1920 x 1200, 1920 x 1080 (Full HD), 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), 720p (@ 60 Hz), 720p (@ 50 Hz), 576p (@ 60 Hz), 576p (@ 50 Hz), 480i (@ 60 Hz)
Panel technology	Dual Layer IPS (Wide Gamut, 10 Bit)
Max. viewing angle horizontal	178
Max. viewing angle vertical	178
Number of colors or greyscale	1,07 Mrd. Farben (ST 2110 (SFP28) direct IP, 24 Bit), 1.07 billion colours (HDMI, 24-bit), 1.07 billion colours (DisplayPort, 24-bit), 1.07 billion colours (SDI, 24-bit)
Color palette/look-up table	More than 278 trillion color tones / 24 Bit 3D-LUT
Max. color space (typical)	DCI P3 (100%)
Color space presets	DCI-P3, SMTPE-C, BT.2020, BT.709, EBU, sRGB, AdobeRGB, Native
YUV transfer matrix	BT.2020, BT.709, BT.601, Auto
HDR Gamma	PQ, HLG
EOTF presets	HLG, PQ, EBU(2,35), sRGB, Gamma 1.6-2,7
Max. brightness (typical) [in cd/m²]	1000
Max. dark room contrast (typical)	1000000:1
Color temperature presets	DCI, D65, D65(CRT), D50, Native, User, 4000-10000 K
Backlight	Wide Gamut LED

FEATURES & OPERATION

Hardware calibration of brightness and luminance characteristics	✓
Integrated sensor for self-calibration	✓
Scheduled self calibration	✓
Preset color/greyscale modes	BT.2020, PQ BT.2100, BT.709, HLG BT.2100, PQ Theater, DCI-P3, PQ DCI-P3, additional memory spaces through calibration, Sync Signal
Temperature color drift correction	✓
Brightness drift correction	✓
Digital Uniformity Equalizer (homogeneity correction)	✓
No flickering	✓
3D LUT film emulation (10 bit log)	✓
Adjustable front dial	✓
Safe Area Marker	✓
I/P conversion	✓
HDCP Decoder	✓
Gamut warning	✓
Luminance warning	✓
Blue Only	✓
D65 (CRT) Offset	✓
Time Code (VITC, LTC)	✓
Gamut Clipping	✓
Automatic signal input recognition	✓
On-screen menu languages	de, en, fr, es, it, se
Adjustment options	Signal information, Color Mode, Brightness, Color temperature/White point, Gamma, HLG system gamma, Color saturation, 6 Colors, Scaling, Color matrix YUV/RGB, Input Range, black level, XYZ Format, Zoom, BT.709 color space warning, Markers (safe area marker, safe area size, format marker, format adjustment, bezel color), Skip signal input, Skip color mode, Custom key, Power Indicator, Monitor reset, Signal input
Button Guide	✓
Integrated power unit	✓

CONNECTIONS

Signal inputs	2x SFP28 (25GbE, ST 2110) direct IP, 2x BNC (12G/6G/3G/HD-SDI), 2x BNC (3G/HD-SDI), DisplayPort (HDCP 2.3), HDMI (Deep Color, HDCP 2.3)
Signal outputs	2 x BNC (12G/ 6G/3G/HD-SDI, through-out (active)), 2 x BNC (3G/HD-SDI, through-out (active))
USB specification	USB 5Gbps (USB 3)
USB upstream ports	2 x type B
USB downstream ports	3 x type A
Control port	RJ45

ELECTRICAL DATA

Frequency	DisplayPort: 25 - 137 kHz / 23 - 61 Hz; HDMI: 15 - 136 kHz / 23 - 61 Hz
Power consumption (typical) [in watts]	271
Maximum Power Consumption [in watts]	420 (at maximum brightness with all signal inputs and USB ports in use)
Max. Power consumption in stand-by mode [in watts]	0.5
Power supply	AC 100-240V, 50/60Hz

DIMENSIONS & WEIGHT

Dimensions (incl. stand) (width x height x depth) [in mm]	746.8 x 482.7 x 208
Weight (incl. stand) [in kg]	17.5
Dimensions (without stand) (width x height x depth) [in mm]	746.8 x 457 x 165.8
Weight (without stand) [in kg]	16.8
Dimension drawing (PDF)	Dimension drawing (PDF)

CERTIFICATION & STANDARDS

Operating temperature	0 - 30 °C / 20 - 80 % (R.H., non condensing)
Certification	CE, UKCA, CB, TÜV/GS, TÜV/Ergonomics (including ISO 9241-307), RCM, cTÜVus, FCC-A, CAN ICES-3 (A), TÜV/S, PSE, VCCI-A, RoHS, WEEE

SOFTWARE & ACCESSORIES

Accompanying software and other accessories are available for download	ColorNavigator, ColorNavigator Network
Other box contents	Signal cable HDMI - HDMI (Ultra High Speed), USB cable (Type A - Type B), Signal cable DisplayPort - DisplayPort, Power cord, Calibration report, Manual via download, Quick guide
Accessories	PM200-K (DisplayPort cable to transfer digital video and audio signals), CP200 (USB-C to DisplayPort cable), PP100-K (DisplayPort cable)

WARRANTY

Warranty periode	5 years
Included warranty	Für die Dauer von 5 Jahren oder 10.000 Betriebsstunden, je nachdem, was früher eintritt, wird eine Helligkeit von mindestens 800 cd/qm bei einer Farbtemperatur von 6500 K garantiert., Zero pixel defects guarantee; no fully illuminated sub-pixels (sub-pixels ISO 9241-307) for six months from date of purchase.

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