

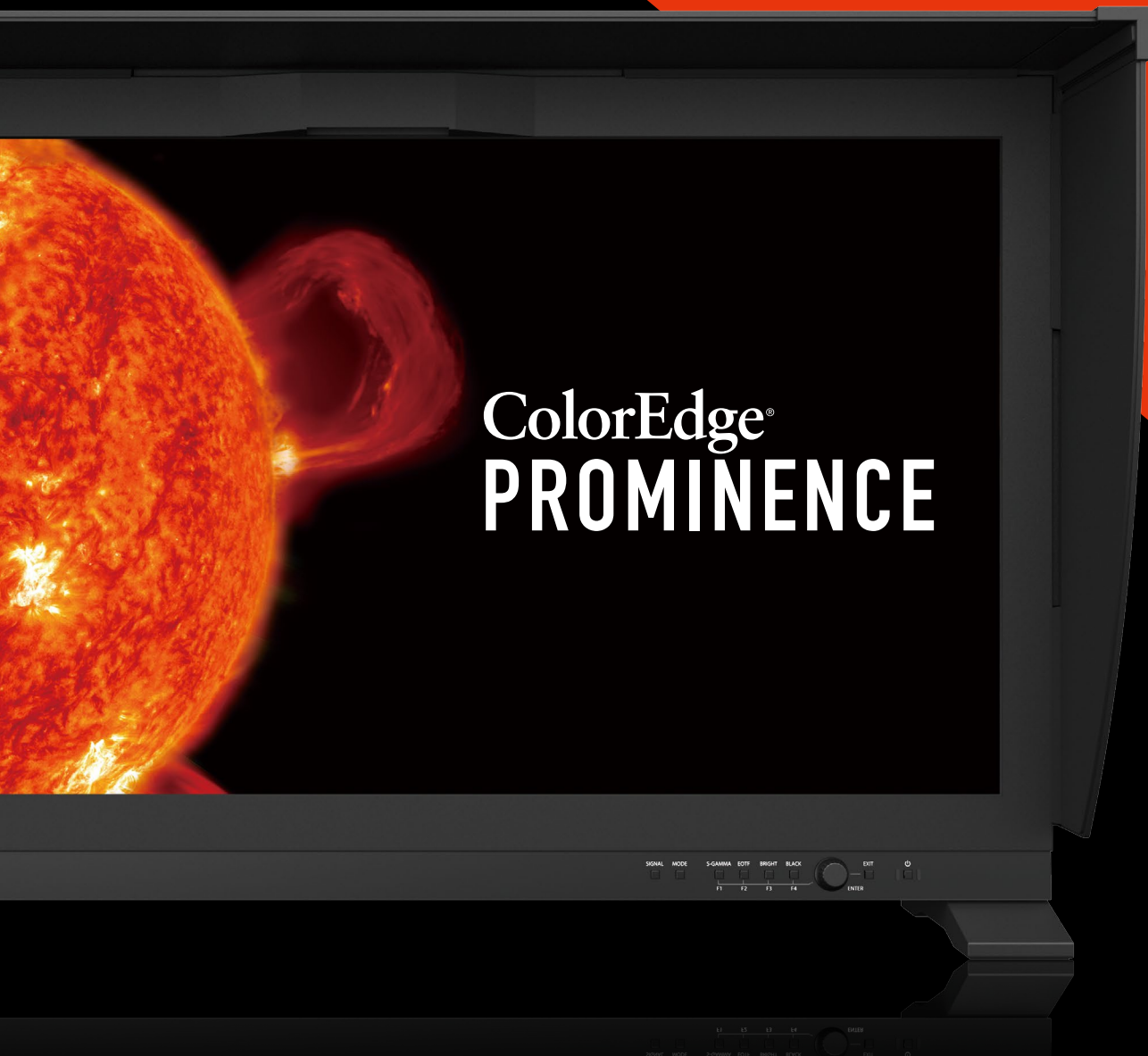


31.1" HDR Reference Monitor

ColorEdge®  
**PROMINENCE CG3146**

# HDR

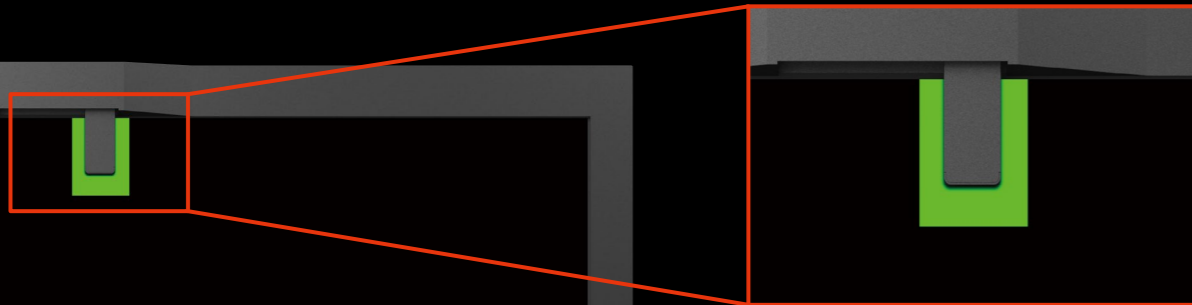
High Dynamic Range



# World's First True HDR Reference Monitor with a Built-In Calibration Sensor

# HDR

High Dynamic Range

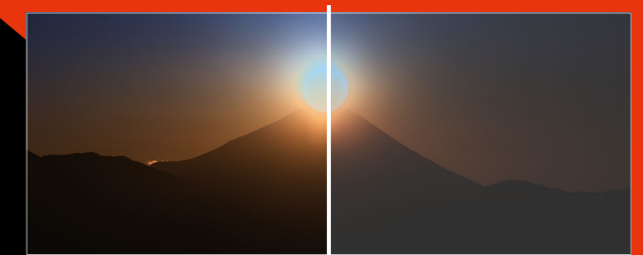


## Hardware Calibration

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 color accurate. This eliminates the need for a third-party calibration device and streamlines color 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.

## True HDR

This HDR (High Dynamic Range) monitor approximates the human perception of color and light, accurately displaying both very bright and very dark areas without sacrificing the integrity of either. It achieves 1000 cd/m<sup>2</sup> high brightness (typical) and 1,000,000:1 contrast ratio for accurately displaying light and dark scenes.



ColorEdge PROMINENCE

Conventional SDR Monitor

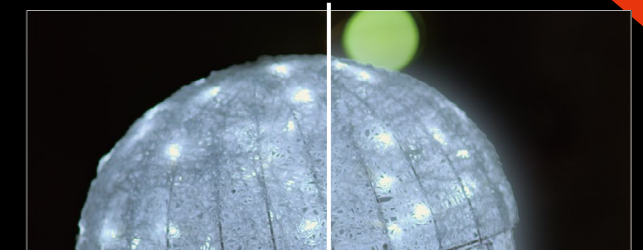
## EIZO HDR Technology

ColorEdge PROMINENCE monitors are the first LCD monitors to overcome the severe drawbacks of other HDR technologies, so they can be used reliably for post production work.



ColorEdge PROMINENCE

HDR Monitor with ABL

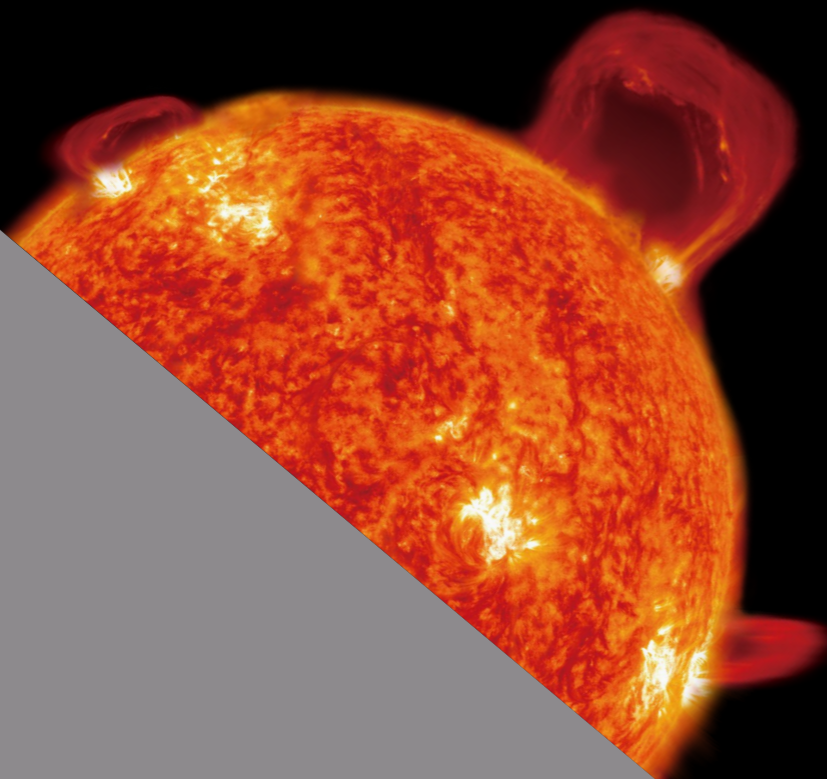
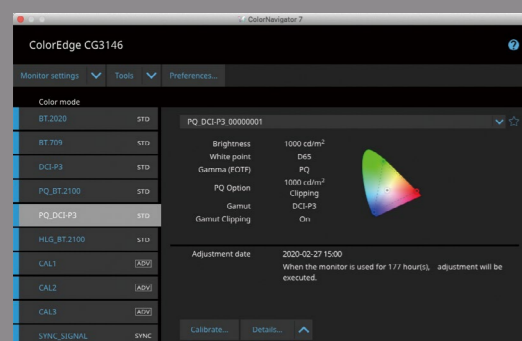


ColorEdge PROMINENCE

HDR Monitor with Local Dimming

## Color Management

EIZO's proprietary ColorNavigator 7 calibration and quality control software is also supported to make calibration simple, with predictable results.



Auto Brightness Limiter (ABL) equipped in other HDR OLED monitors limits the monitor's ability to display lighter scenes with tones over a specific range. This causes those light areas to appear dimmer and the color duller as a result.

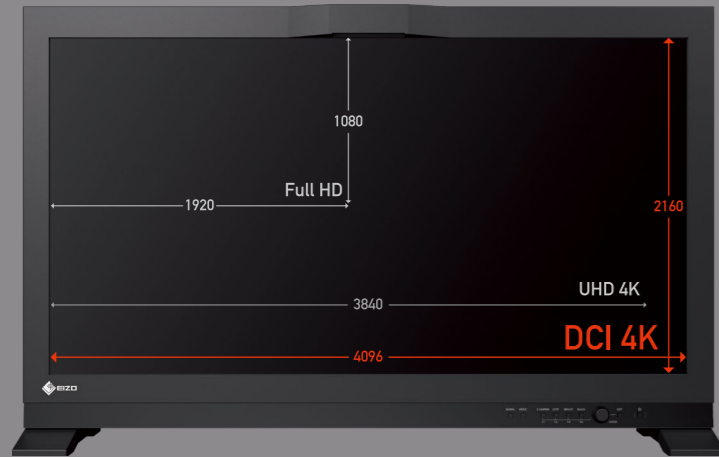
ColorEdge PROMINENCE CG3146 achieves a true HDR visual experience without ABL or Local Dimming to ensure consistently accurate color and brightness in every pixel.

Local dimming in other HDR monitors uses an area control backlight system which adjusts the brightness in sections of the screen. However, when an object on the screen falls outside of the area that is adjusted, a "halo" effect appears, making it impossible to achieve full color accuracy in smaller details.

## Gamma Curves

The ColorEdge PROMINENCE CG3146 supports hybrid log-gamma (HLG) and the perceptual quantization (PQ) curve for HDR video.

# The Ideal Monitor for HDR Video Creation



## DCI 4K Resolution

DCI-4K (4096 × 2160) is more than four times that of full HD (1920 × 1080), making this monitor ideal for creating, editing, and referencing with 2D and 3D CGI, VFX, compositing, and color grading.

## 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. It also has an HDMI and DisplayPort input for flexible connection to a range of video devices.  
\*2 sample interleave supported.



## VPID Support

With VPID (Video Payload ID) for SDI, the monitor's settings are automatically adjusted to the correct color parameters for consistency during production.

## Video Compatibilities

The monitor supports various video formats including HDMI compatible with 10-bit 4:2:2 at 50/60p. DisplayPort supports up to 10-bit 4:4:4 at 50/60p.



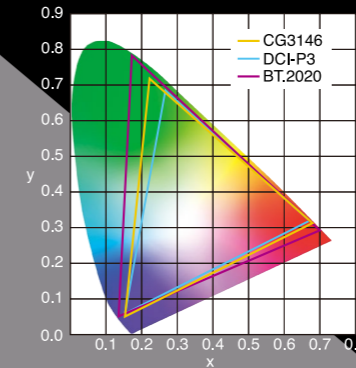
# DCI 4K

4096 × 2160

# Stable and Accurate Display

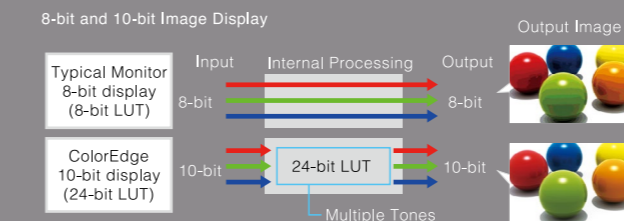
## Wide Color Gamut

The wide gamut reproduces 99% of the DCI-P3 standard for faithful reproduction of color.



## 10-Bit Simultaneous Display

10-bit simultaneous display\* from a 24-bit look-up-table (LUT) allows the monitor to display more than one billion colors simultaneously for smooth color gradations and reduced Delta-E between two adjacent colors.  
\*A graphics board and software which support 10-bit output are necessary for 10-bit display.



## 3D LUT for Accurate Color

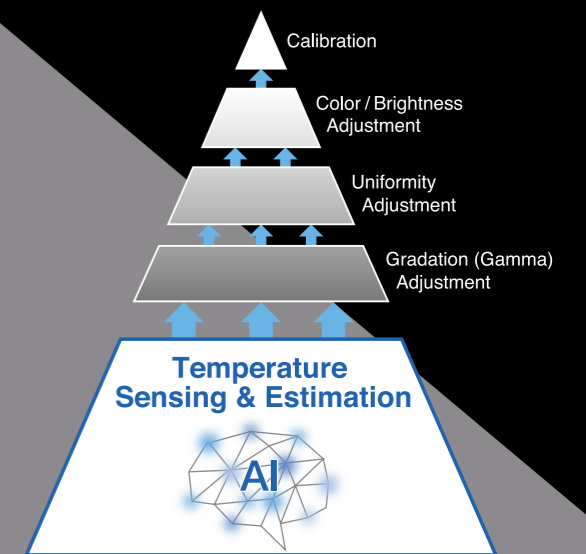
The monitor's 3D LUT adjusts colors individually on an RGB cubic table. This also improves the monitor's additive color mixture, which is key to displaying neutral gray tones.

## Commitment to Quality

- 5-Year manufacturer's warranty
  - Brightness and color warranty up to 10,000 hours
  - Zero bright pixels 6 months from purchase date
- See [www.eizoglobal.com](http://www.eizoglobal.com) for details.

## 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, color, 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.  
\*Patent pending.



## Uniformity Across the Screen

ColorEdge monitors are equipped with EIZO's patented digital uniformity equalizer (DUE) technology which corrects deviations in every tone across the screen to ensure stable display.

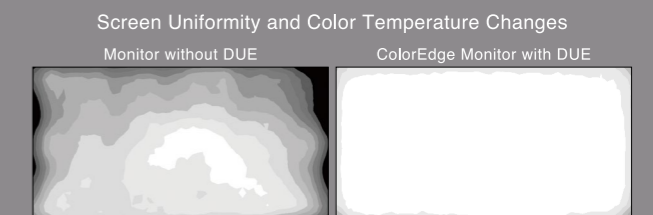
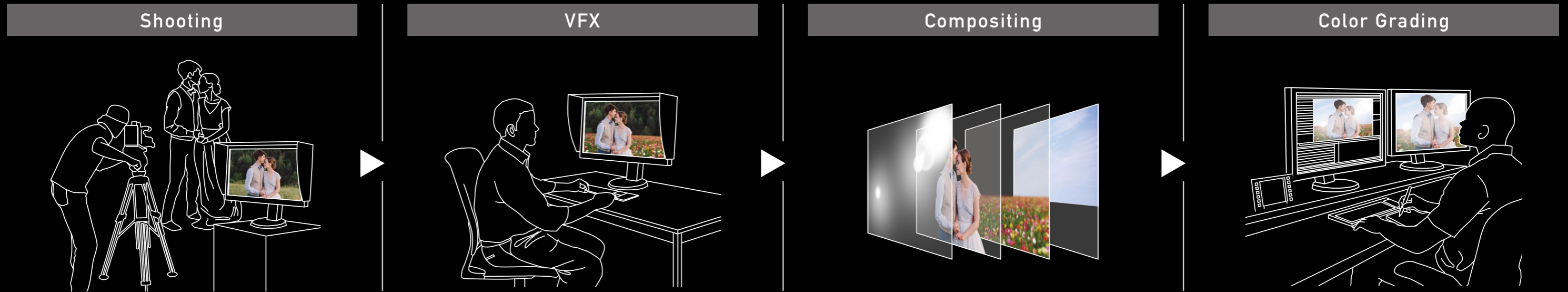


Image is for illustrative purposes only. Actual results will vary depending on model and environment.

# 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 optimized 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 color grading.



|                   |                   |                      |                      |
|-------------------|-------------------|----------------------|----------------------|
| Shooting          | Shooting          | Shooting             | Shooting             |
| VFX               | VFX               | VFX                  | VFX                  |
| Compositing       | Compositing       | Compositing          | Compositing          |
| Color Grading     | Color Grading     | Color Grading        | Color Grading        |
|                   |                   |                      |                      |
| <b>CG247X HDR</b> | <b>CG279X HDR</b> | <b>CG319X HDR 4K</b> | <b>CG3146 HDR 4K</b> |

**Color Management Monitors with HDR Gamma**

|                          | 24.1"                 | 27"                   | 31.1"                 | 31.1"                  |
|--------------------------|-----------------------|-----------------------|-----------------------|------------------------|
| Size                     | 24.1"                 | 27"                   | 31.1"                 | 31.1"                  |
| Native Resolution        | 1920 × 1200           | 2560 × 1440           | 4096 × 2160           | 4096 × 2160            |
| Brightness (typical)     | 400 cd/m <sup>2</sup> | 350 cd/m <sup>2</sup> | 350 cd/m <sup>2</sup> | 1000 cd/m <sup>2</sup> |
| Contrast Ratio (typical) | 1500:1                | 1300:1                | 1500:1                | 1,000,000:1            |
| Color Gamut (typical)    | DCI-P3: 98%           | DCI-P3: 98%           | DCI-P3: 98%           | DCI-P3: 99%            |

**HDR Reference Monitor**

## Specifications

|  |   |  |
|--|---|--|
| Panel  | Type  | IPS  |
|  | Backlight   | Wide-Gamut LED   |
|  | Size  | 31.1" / 78.9 cm  |
|  | Native Resolution   | 4096 x 2160 (17:9 aspect ratio)  |
|  | Viewable Image Size (H x V)   | 698 x 368.1 mm   |
|  | Pixel Pitch   | 0.170 x 0.170 mm   |
|  | Pixel Density   | 149 ppi  |
|  | Grayscale Tones   | SDI, DisplayPort, HDMI: 1,024 tones (palette of 65 thousand)   |
|  | Display Colors  | SDI, DisplayPort, HDMI: 1.07 billion (24-bit palette)  |
|  | Viewing Angles (H / V, typical)   | 178°, 178°   |
|  | Brightness (typical)  | 1000 cd/m <sup>2</sup>   |
|  | Contrast Ratio (typical)  | 1,000,000:1  |
|  | HDR Gamma   | HLG, PQ Curve  |
|  | Response Time (typical)   | 10 ms (gray-to-gray)   |
|  | Color Gamut (typical)   | DCI-P3: 99%  |
| Video Signals  | 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                |
|  | Digital Scanning Frequency (H / V)  | DisplayPort: 25 - 137 kHz, 23 - 61 Hz<br>HDMI: 15 - 135 kHz, 23 - 61 Hz                                |
| USB  | Upstream  | USB 3.1 Gen 1: Type-B  |
|  | Downstream  | USB 3.1 Gen 1: Type-A x 3 (Battery Charging 10.5 W max. x 1)   |
| Power  | Power Requirements  | AC 100 - 240 V, 50 / 60 Hz   |
|  | Typical Power Consumption   | 290 W  |
|  | Maximum Power Consumption   | 485 W  |
|  | Power Save Mode   | 1.2 W or less  |
|  | Standby Mode  | 1.2 W or less  |
| Features & Functions   | Brightness Stabilization  | Yes  |
|  | Digital Uniformity Equalizer  | Yes  |
|  | Preset Modes  | BT.2020, BT.709, DCI, PQ_BT.2100, PQ_BT.709, PQ_DCI, HLG_BT.2100, Calibration, Sync Signal             |
| Built-In Calibration Sensor  | Yes   |  |
| Physical Specifications  | Dimensions (Landscape, W x H x D)   | 757 x 488 x 208 mm   |
|  | Dimensions (Landscape with Hood, W x H x D)   | 778 x 498.5 x 327 mm   |
|  | Net Weight  | 26.9 kg  |
|  | Net Weight (With Hood)  | 27.8 kg  |
|  | Hole Spacing (VESA Standard)  | 200 x 200 mm   |
| Environmental Requirements   | Operating Temperature   | 0 - 30 °C  |
|  | Operating Humidity (R.H., non condensing)   | 20 - 80%   |
| Supplied Accessories<br>(May vary by country. Please contact EIZO for the latest information.) | DisplayPort (2 m), HDMI (2 m)   |  |
| Certifications & Standards (Please contact EIZO for the latest information.)                   | CB, CE, TUV/GS, cTUVus, FCC-B, CAN ICES-3 (B), TUV/S, PSE, VCCI-B, RCM, EAC, RoHS, WEEE, TUV/Ergonomics |  |
| Warranty   | Five Years <sup>2</sup>   |  |

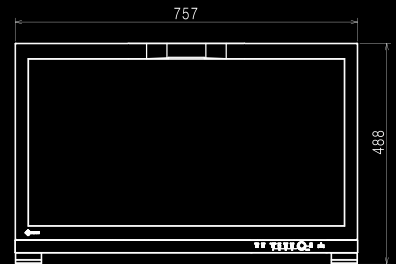
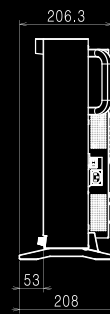
<sup>1</sup> HDCP 2.2 is not supported with DisplayPort.

<sup>2</sup> Usage time is limited to 30,000 hours (10,000 for the LCD panel).

<sup>3</sup> A brightness level of 800 cd/m<sup>2</sup> or more and a color temperature of 6500K are warranted.

<sup>4</sup> Free from bright sub-pixels for 6 months from the date of purchase.

With current LCD technology, a panel may contain a limited number of missing or flickering pixels.



# HDR

## High Dynamic Range

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[www.eizo.es](http://www.eizo.es)

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