Bright Office Projection

DH351

Bright 1080p projection for office presentations

- Bright 3,600 lumens with 22,000:1 contrast ratio
- Full HD 1080p resolution
- HDMI-Link support simplifies control of connected HDMI devices and video sources
- Outstanding lamp life up to 15,000 hours (Dynamic) reduces overall cost of ownership.

Enhance presentations with a huge projection with the affordable 3,600 lumens Optoma DH351 1080p business and education projector. The excellent color reproduction and high-quality 22,000:1 contrast ratio ensures incredible images up to 301-inches so every presentation is stunning and visible by everyone in the room.

Vertical keystone support simplifies placement for easy installation while an integrated 5-watt speaker enhances presentations and videos without additional equipment. Up to 15,000-hour lamp life delivers many years of use with minimal maintenance.
### OPTICAL/TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Technology</td>
<td>Texas Instruments 0.47” DMD</td>
</tr>
<tr>
<td>Color Wheel</td>
<td>RYG/CWB</td>
</tr>
<tr>
<td>Native Resolution</td>
<td>1080p (1920 x 1080)</td>
</tr>
<tr>
<td>Maximum Resolution</td>
<td>WUXGA (1920 x 1200)</td>
</tr>
<tr>
<td>Brightness</td>
<td>3,600 ANSI lumens</td>
</tr>
<tr>
<td>Contrast Ratio</td>
<td>22,000:1</td>
</tr>
<tr>
<td>Displayable Colors</td>
<td>RYG</td>
</tr>
<tr>
<td>Lamp Life and Type*</td>
<td>15,000/10,000/4,000 (Dynamic/ECO/Bright) - 240W</td>
</tr>
<tr>
<td>Projection Method</td>
<td>Front, rear, ceiling mount, table top</td>
</tr>
<tr>
<td>Keystone Correction</td>
<td>±40° vertical</td>
</tr>
<tr>
<td>Uniformity</td>
<td>80%</td>
</tr>
<tr>
<td>Offset</td>
<td>116%±5%</td>
</tr>
<tr>
<td>Aspect Ratio</td>
<td>16:9 (native), 4:3, 16:10 and LBX compatible</td>
</tr>
<tr>
<td>Throw Ratio</td>
<td>1.47 - 1.62:1</td>
</tr>
<tr>
<td>Projection Distance</td>
<td>3.2” - 35.37” (no zoom)</td>
</tr>
<tr>
<td>Image Size</td>
<td>28” - 301”</td>
</tr>
<tr>
<td>Projection Lens</td>
<td>F=2.1 – 2.31, f=15.59 – 17.14mm</td>
</tr>
<tr>
<td>Optical Zoom</td>
<td>1.1x</td>
</tr>
<tr>
<td>Digital Zoom</td>
<td>0.8 - 2.0</td>
</tr>
<tr>
<td>Audio</td>
<td>5W</td>
</tr>
<tr>
<td>Noise Level</td>
<td>26dB</td>
</tr>
<tr>
<td>Remote Control</td>
<td>Full size remote</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>41–104°F (5–40°C), 85% max humidity</td>
</tr>
<tr>
<td>Power Supply</td>
<td>AC input 100 - 240V, 50 - 60 Hz, auto-switching</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>205W typical, 295W max</td>
</tr>
<tr>
<td>High Altitude</td>
<td>Operating temp @ sea level up to 10000 feet = 23F (max); must manually switch to high altitude mode @ 5000 feet &amp; above (using OSD)</td>
</tr>
</tbody>
</table>

### COMPATIBILITY SPECIFICATIONS

<table>
<thead>
<tr>
<th>Category</th>
<th>Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Compatibility</td>
<td>FHD, HD, WXGA, UXGA, SXGA, XGA, XGA, SVGA, VGA, Mac</td>
</tr>
<tr>
<td>Video Input Compatibility</td>
<td>PAL (B, D, G, H, I, M, N, 576/p), NTSC (M, 4.43/3.58 MHz, 480/p), SECAM (B, D, G, K, K1, L) HD (1080i, 720p)</td>
</tr>
<tr>
<td>3D Compatibility†</td>
<td>Supports all HDMI 1.4a mandatory 3D formats (Frame pack, side-by-side, top-bottom) and up converts frame rate from 60Hz to 120Hz or 24Hz to 144Hz (i.e. 60 or 72 frames per eye). 3D glasses are needed and are sold separately. Refer to user manual for details.</td>
</tr>
<tr>
<td>Vertical Scan Rate</td>
<td>15.375 - 91.146kHz</td>
</tr>
<tr>
<td>Horizontal Scan Rate</td>
<td>25 - 85Hz (120Hz for 3D)</td>
</tr>
<tr>
<td>User Controls</td>
<td>Complete on-screen menu adjustment in 27 languages</td>
</tr>
<tr>
<td>I/O Connection Ports</td>
<td>HDMI (1.4a), audio out (3.5mm), USB (1.5a / firmware update)</td>
</tr>
<tr>
<td>Loop Through (Audio)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### PHYSICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>Security bar, Kensington lock, password protection</td>
</tr>
<tr>
<td>Weight</td>
<td>6.2 lbs.</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>12.4” x 4.3” x 9.5”</td>
</tr>
</tbody>
</table>

*Light source life is dependent upon many factors, including brightness mode, display mode, usage, environmental conditions and more. Light source brightness can decrease over time.

†3D content can be viewed with DLP Link active shutter 3D glasses when projector is used with a compatible 3D player. Please visit Optoma.com for more information.
Bright 1080p Projection
EH412

Exceptional brightness and lamp life

- Incredible 4,500 lumens and 50,000:1 contrast ratio
- Flexible installations with 1.3x zoom and RS232
- 4K UHD and 1080p HDR (HDMI 2.0) input compatible
- Accurate color with sRGB & REC.709 color profile
- Powerful 10 watt speaker
- Minimal maintenance with 15,000 hour lamp life

Project incredibly bright 4,500 lumens, 1080p images with the Optoma EH412. Support for 4K HDR input sources, sRGB and REC.709 color profiles with a 50,000:1 contrast ratio ensures sharp and vivid images, ideal for classrooms, meeting and training rooms.

The 1.3x zoom, keystone correction and RS232 control deliver flexible installation options. Powerful 10-watt audio fills a room with loud and crisp audio to further enhance media and presentations.

Robust inputs include HDMI 2.0 and VGA for connectivity to a wide range of devices. A 15,000-hour lamp life enables many years of use with minimal maintenance.
OPTICAL/TECHNICAL SPECIFICATIONS

Display Technology  
Texas Instruments 0.65” 1080p DMD

Color Wheel  
6 Segment; RYGCWB

Native Resolution  
1080p (1920 x 1080)

Maximum Resolution  
HDMI 2.0: 4K UHD (3840 x 2160)  
HDMI 1.4a: WUXGA (1920 x 1200)

Brightness  
4,500 ANSI lumens

Contrast Ratio  
50,000:1

HDR (High Dynamic Range)  
4K UHD and 1080p HDR10 compatible (HDMI 2.0 port only)

Displayable Colors  
1.07 billion

Lamp Life and Type  
4,000/10,000/15,000 (Bright/Eco/Dynamic)

Light Source Type  
245W lamp

Throw Ratio  
1.12~1.47:1

Projection Distance  
3.3’-32.8’ (without zoom)

Image Size  
30.8”-301.4”

Lamp Life and Type  
4,000/10,000/15,000 (Bright/Eco/Dynamic)

Light Source Type  
245W lamp

Projection Method  
front, rear, ceiling mount, table top

Keystone Correction  
±40 degree (vertical)

Geometry  
Keystone correction

Lens Shift  
N/A

Uniformity  
80%

Offset  
116% ±5%

Aspect Ratio  
16:9(native), 4:3, LBX and auto compatible

Throw Ratio  
1.12~1.47:1

Projection Distance  
3.3’-32.8’ (without zoom)

Image Size  
30.8”-301.4”

Optical Zoom  
1.3x

Digital Zoom  
0.8 - 2.0x

Audio  
10W

Noise Level  
26 dB

Remote Control  
Full size remote

360° and Portrait Mode Operation  
No

Operating Temperature  
41~104°F (5~40°C), 85% max humidity

Power Supply  
AC input 100 - 240V, 50 - 60 Hz, auto-switching

Power Consumption  
325W max, 295W typical (Bright mode),  
225W max, 205W typical (Eco Mode)

High Altitude  
Operating temperature at sea level up to 10,000 feet = 104° F (max); Must manually switch to high altitude mode from 5,000 feet and above (using OSD menu) to maintain optimal functionality

COMPATIBILITY SPECIFICATIONS

Computer Compatibility  
VGA, SVGA, HDTV(720P), WXGA, WXGA+, SXGA, SXGA+, UXGA, HDTV(1080p), WUXGA

Video Input Compatibility  
PAL, SECAM, 576i/p, NTSC, 480i/p, HDTV 720p/1080p/1080p

3D Compatibility†  
Supports all HDMI 1.4a mandatory 3D formats (Frame pack, side-by-side, top-bottom) and up converts frame rate from 60Hz to 120Hz or 24Hz to 144Hz (i.e. 60 or 72 frames per eye). 3D glasses are needed and are sold separately. Refer to user manual for details.

Vertical Scan Rate  
50 ~ 85 Hz (120Hz for 3D feature projector)

Horizontal Scan Rate  
15.375~91.146 KHz

Input lag  
32ms

I/O Connection Ports  
1x HDMI 2.0, 1x HDMI 1.4a, 1x VGA, 1x audio in, 1x USB-A,  
1x VGA out, 1x audio out

Control  
RS232

PHYSICAL SPECIFICATIONS

Security  
Kensington® lock port, password (OSD)

Weight  
7.7 lbs

Dimensions (W x H x D)  
12.4(W) x 9.5 (D) x 4.5(H)

What's in the Box

EH412 projector, AC power cord, remote control, batteries for remote, carrying case, quick start guide and warranty card

Optional Accessories

Ceiling mount

Accessory Part Numbers

Lamp: BL-FU245A  
Remote: BR-5080C  
Carrying case: BK-4028  
Ceiling mount: OCM815W  
Ceiling mount: OCM818W-RU  
Ceiling mount: BM-5001U

UPC  
796435 44 405 1

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Light source life is dependent on brightness mode, display mode, usage, environmental conditions and more. Light source brightness can decrease over time.

Watching 3D projection while wearing 3D glasses for an extended period of time may cause headaches or fatigue. If you experience a headache, fatigue or dizziness, stop viewing the 3D projection and rest.
Exceptional brightness and lamp life

- Short throw 0.5:1 projection lens
- Incredible 4,000 lumens and 50,000:1 contrast ratio
- 4K UHD and 1080p HDR (HDMI 2.0) input compatible
- Accurate color with sRGB & REC.709 color profile
- Powerful 10 watt speaker
- Minimal maintenance with 15,000 hour lamp life

Experience massive, 1080p images from feet away with the 4,000 lumens, short throw Optoma EH412ST. Support for 4K HDR input sources, sRGB and REC.709 color profiles with a 50,000:1 contrast ratio ensures sharp and vivid images, ideal for classrooms, meeting and training rooms.

Keystone correction and RS232 control deliver flexible installation options. Powerful 10-watt audio fills a room with loud and crisp audio to further enhance media and presentations.

Robust inputs include HDMI 2.0 and VGA for connectivity to a wide range of devices. A 15,000-hour lamp life enables many years of use with minimal maintenance.
Bright Short Throw 1080p Projection - EH412ST

OPTICAL/TECHNICAL SPECIFICATIONS

Display Technology: Texas Instruments 0.65" 1080p DMD
Color Wheel: 6 Segment; RYGCBW
Native Resolution: 1080p (1920 x 1080)
Maximum Resolution: HDMI 2.0: 4K UHD (3840 x 2160)
HDMI 1.4a: WUXGA (1920 x 1200)
Brightness: 4,000 ANSI lumens
Contrast Ratio: 50,000:1
HDR (High Dynamic Range): 4K UHD and 1080p HDR10 compatible (HDMI 2.0 port only)
Picture Modes: Bright, Detail, Film, Standard
HDR SIM (simulate HDR effect with non-HDR content)
Displayable Colors: 1.07 billion
Lamp Life and Type: 3,000/4,000/5,000 hours (Bright/Eco/Dynamic)
Light Source Type: 245W lamp
Projection Method: front, rear, ceiling mount, table top
Keystone Correction: ±40 degree (vertical)
Geometry: Keystone correction
Lens Shift: N/A
Uniformity: 80%
Offset: 116% ±5%
Aspect Ratio: 16:9 (native), 4:3, LBX and auto compatible
Throw Ratio: 0.50:1
Projection Distance: 1.3’ - 11.3’
Image Size: 36.2”-307.8”
Projection Lens: F:2.8, f=7.42mm, fixed lens
Optical Zoom: N/A
Digital Zoom: 0.8 - 2.0x
Audio: 10W
Noise Level: 26 dB
Remote Control: Full size remote
360° and Portrait mode operation: No
Operating Temperature: 41-104°F (5-40°C), 85% max humidity
Power Supply: AC input 100 - 240V, 50 - 60 Hz, auto-switching
Power Consumption: 235W max, 229W typical (Bright mode), 225W max, 205W typical (Eco Mode)
High Altitude: Operating temperature at sea level up to 10,000 feet = 104° F (max); Must manually switch to high altitude mode from 5,000 feet and above (using OSD menu) to maintain optimal functionality

COMPATIBILITY SPECIFICATIONS

Computer Compatibility: VGA, SVGA, HDTV(720p), WXGA, WXGA+, SXGA, SXGA+, UXGA, HDTV(1080p), WUXGA
Video Input Compatibility: PAL, SECAM, 576i/p, NTSC, 480i/p, HDTV 720p/1080i/1080p
3D Compatibility: Supports all HDMI 1.4a mandatory 3D formats (Frame pack, side-by-side, top-bottom) and up converts frame rate from 60Hz to 120Hz or 24Hz to 144Hz (i.e. 60 or 72 frames per eye). 3D glasses are needed and are sold separately. Refer to user manual for details.
Vertical Scan Rate: 50 - 85 Hz (120Hz for 3D feature projector)
Horizontal Scan Rate: 15.375 - 91,146 kHz
Input Lag: 32ms
I/O Connection Ports: 1x HDMI 2.0, 1x HDMI 1.4a, 1x VGA, 1x audio in, 1x USB-A, 1x VGA out, 1x audio out
Control: RS232

PHYSICAL SPECIFICATIONS

Security: Kensington® lock port, password (OSD)
Weight: 7.7 lbs
Dimensions (W x H x D): 12.4(W) x 9.5 (D) x 4.5(H)

What's in the Box

EH412ST projector, AC power cord, remote control, batteries for remote, quick start user manual

Accessories

QuickCast Pro 4K HDMI starter kit: QCP-4K-KIT (2 TX, 1 RX, 1 Cradle)
QuickCast Pro 4K HDMI starter kit: QCP-SK-4K-HDMI (1 TX and 1 RX)
4K UHD Casting and mirroring adapter: UHDCast Pro
Mounting Plate: BM-4002p
Universal ceiling mount: BM-5001
Universal ceiling mount: OCM818W-RU
Universal ceiling mount: OCM815W
Carrying case: BK-4028
4K UHD Casting and mirroring adapter: UHDCast Pro
QuickCast Pro 4K HDMI starter kit: QCP-4K-HDMI (1 TX and 1 RX)
QuickCast Pro 4K HDMI starter kit: QCP-4K-KIT (2 TX, 1 RX, 1 Cradle)

UPC: 796435 44 411 2

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