# Epson Z Series Projectors



Epson EB-Z8150NL | Epson EB-Z8350WNL | Epson EB-Z8355WNL | Epson EB-Z8450WUNL | Epson EB-Z8455WUNL | Epson EB-Z10000NL | Epson EB-Z10005NL





#### Powerful Performance Beyond Hi-Def.

Powerful performers that are easy to install, manage and maintain, the Epson Z Series projectors offer astounding brightness for captivating presentations in almost any setting, even those with ambient light. Featuring innovative 3LCD technology and a remarkable contrast ratio, these products deliver brilliant images in lecture halls, conference centres and entertainment venues. Setup and installation are easy with 360-degree projection, edge blending and more. Offering diverse connectivity and a full suite of monitor and control features, these high-definition, high brightness projectors ensure easy integration with complex devices, plus a low overall cost of ownership.



#### The Best-selling Projectors in the World.

Epson offers a wide range of high-quality projectors to meet almost any need. Built with image quality and reliability in mind, Epson projectors enhance communication and inspire collaboration, while offering a low total cost of ownership. From ultra short-throw projectors designed for educational settings to boardroom-ready, installable business projectors, Epson has the model made for you.

#### Performance You Can Count On.

The Epson Z Series offers the ideal solution for your projection needs with:

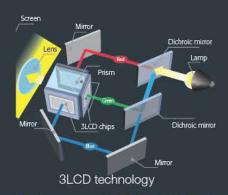
- Brilliant Image Quality
- Advanced Features
- Low Cost of Ownership
- Easy Installation Tools

2 Epson Z Series Projectors

## **Brilliant Image Quality**

# 3LCD Technology — for Quality and Colour That's Beyond Amazing

- 3 chips for full-time, vibrant colour
- 25% less electricity required per lumen of brightness when compared to 1-chip DLP projectors¹
- Over 20 years of road-tested reliability built into every projector



#### **Amazing Colour and White Light Output**

The EB-Z10000NL and EB-Z10005NL deliver 10,000 lumens of colour light output and 10,000 lumens of white light output<sup>2</sup>; the EB-Z8350WNL and EB-Z8355WNL deliver 8,500 lumens of colour light output and 8,500 lumens of white light output; the EB-Z8450WUNL and EB-Z8455WUNL deliver 7,000 lumens of colour light output and 7,000 lumens of white light output; and the EB-Z8150NL delivers 8,000 lumens of colour light output and 8,000 lumens of white light output for true-to-life, vibrant, colourful images, even in ambient light. For today's colour-rich, multimedia content, users want projectors that deliver both optimum white and colour imagery. That's why the industry has developed a new metric called Colour Light Output.



CERTIFIED

CHIP







#### **Colour Light Output**

Always look for Colour Light Output when choosing a projector.

- For optimum image quality and performance, the projector you choose should offer equal levels of colour and white light output
- When the two measurements are not identical, images do not look balanced. Whites may be brighter, making the coloured areas look dull and flat
- The combination of colour richness (Colour Light Output) and brightness (White Light Output) is as critical as the combination of bass and treble would be when purchasing audio equipment



When colour and white light output are equal or balanced, colours are authentic and vibrant.

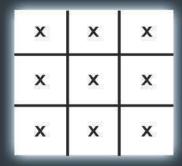


When white light output is greater than colour light output, images may appear duller.

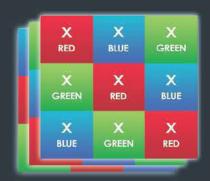
Brilliant Image Quality

#### How is CLO Measured?

The Colour Light Output spec measures Red, Green and Blue, each on a 9-point grid, applying the same method used in the ISO 21118 standard for measuring White Light Output.



Brightness (or White Light Output) measures the total amount of white light projected in lumens on a 9-point grid. It does not measure colour.



Colour Light Output uses three 9-point grids to measure the primary colours — red, green and blue, applying the same approach used to measure White Light Output, in lumens.

#### C<sup>2</sup>Fine Technology Delivers a Higher Contrast Ratio

C<sup>2</sup>Fine offers smooth, uniform images with exceptional contrast for better image quality. Based on this new phase-compensation technology, light leakage is eliminated. And, when combined with auto iris, C<sup>2</sup>Fine allows for contrast ratios up to 5000:1 using the Z Series projectors.



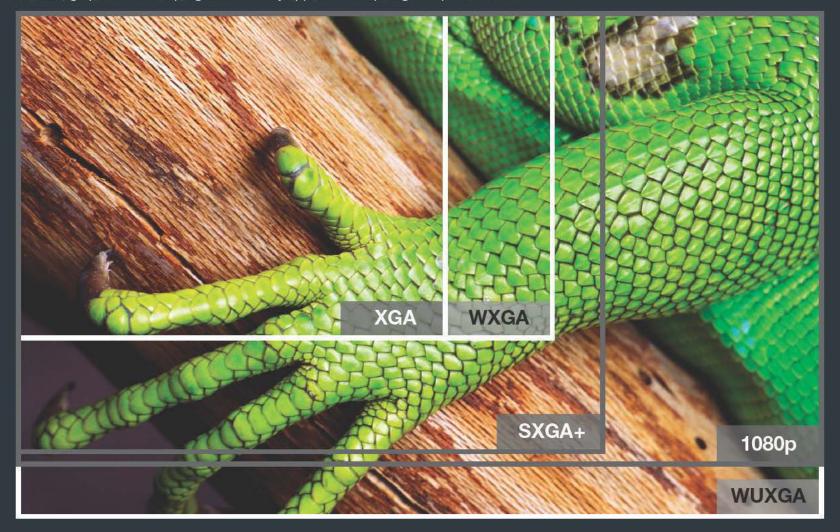
Without C<sup>2</sup>Fine

4° Brilliant Image Quality

## **Amazing Clarity and Detail**

#### **Beyond Hi-Def**

Deliver high-quality images and crisp, sharp text without any distortion or scaling — up to Full HD content at its native resolution with quality that surpasses even that of 1080p devices. WUXGA resolution is ideal for applications requiring Full Hi-Def, including Blu-ray® content, graphic intensive programs and any application requiring exceptional detail.

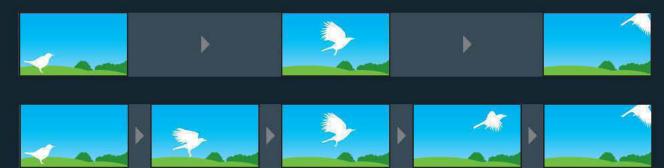


Brilliant Image Quality

## **State-of-the-art FineFrame Interpolation Processing Technology** (Z8450WUNL and Z8455WUNL only)

A movie is a series of still frames, shown in quick succession. Traditional movies are shot at 24 frames per second (fps). However, in some cases, fast-moving objects may have moved too fast to be captured on film, so they appear to jump from one part of the screen to another. This effect is called motion judder. In order to reduce motion judder, Epson has created FineFrame Interpolation Technology, which looks at the frames before and after an action, and creates an interpolated frame, halfway between two existing frames. As a result, a smoother motion is perceived by the viewer.

FineFrame Interpolation is most beneficial when viewing content such as action movies and sports videos, which are typically shown in high-definition at 30 fps. In this case, multiple frames are interpolated and inserted each second, in order to create a more realistic viewing experience.



#### Enhanced Super-resolution Technology For Sharp, Dramatically Rich Images

- Makes DVDs and standard and high-definition content come alive via its mixed colour separation techniques and imaging simulation
- Delivers crisp, clear images with super high-quality resolution
- Sharpens blurry images that have been enlarged by a general upscaling process



Super-resolution on

6 Brilliant Image Quality

## Award-winning Faroudja DCDi Cinema for Advanced Video Quality

Faroudja DCDi Cinema is a video enhancement technology, used primarily for film viewing, that produces exceptional image quality without introducing artifacts. Faroudja developed DCDi (Directional Correlational Deinterlacing) to eliminate jaggy images by using a unique algorithm. This algorithm, in combination with the technology's decoding, deinterlacing and enhancement

features, won an Emmy Award from the National Academy of Television Arts and Sciences in 2001.





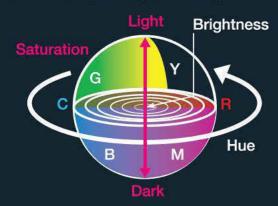
#### Improved Video with 3:2, 2:2 and 4:4 Pull-down

Most movies are shot at 24 frames per second and displayed on a 60 Hz (60 frames per second) device, such as a projector, TV or monitor. This creates a problem, since each frame must be repeated 2.5 times to fill the full length of an entire second ( $24 \times 2.5 = 60$ ). Showing half a frame creates blurry images, so the display industry has come up with the following solutions:

- 3:2 pull-down: Frames are repeated in a 3, 2, 3, 2 pattern to create a smoother movie experience.
- 2:2 pull-down: Frames are repeated in a 2, 2, 2 pattern, which is ideal for a true movie experience.
- 4:4 pull-down (Z8450WUNL and Z8455WUNL only): When the projector runs at 120 Hz, frames are repeated in a 4, 4, 4, 4 pattern, which ensures the best movie experience.

#### 6-axis Colour Adjustment

For special projection material such as high-quality photographs or artwork, users can adjust the hue, saturation and brightness for six colours, RGB-CMY (Red, Green, Blue, Cyan, Magenta, Yellow).



## **Advanced Applications**

#### **Edge Blending**

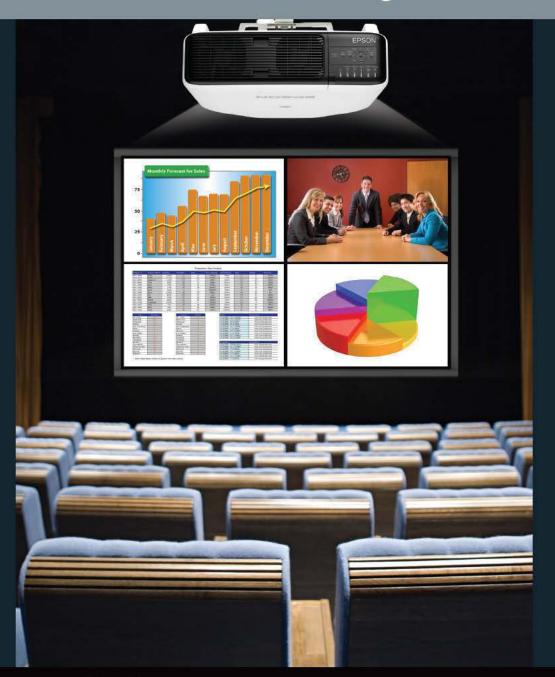
Edge blending makes it easy to use multiple projectors to achieve a seamless panoramic image in which colour and brightness match up, even in image areas that overlap. Edge blending can be a useful tool for many types of industries and organizations, including:

- Corporate
- Rental and staging
- Higher education
- House of worship
- Hospitality





## **Powerful Content Management**



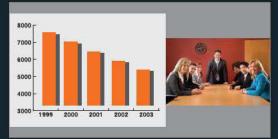
#### **Split Screen**

Split Screen<sup>3</sup> allows you to display content from two inputs simultaneously, side by side, on a single screen, with the following features:

- Three layout options, as shown below
- Video and presentation materials displayed simultaneously
- The ability to run video on both screens



Layout Option 1: 50-50% split screen



Layout Option 2: Main image on the left



Layout Option 3: Main image on the right

#### **Multi-PC Projection**

Epson Multi-PC Collaboration utility allows you to display four individual PC screens simultaneously over the network (wired or wireless), with another 12 users connected to the same projector on Standby mode. You can drag and drop participants into or out of one of the four quadrants. This feature is a great tool for meetings or classroom projects where multiple users want to present and compare their screens. You can also connect up to four remote projectors at the same time and show the same multi-screen image — another great tool for remote meeting setups.





## **Designed for Rental and Staging**



# Sleek, Black Case Design (EB-Z8355WNL, EB-Z8455WUNL and EB-Z10005NL only)

Featuring a sleek, black case design, these models are ideal for staging and entertainment applications.

#### 360-degree Projection

The Epson Z Series projectors can be rotated 360 degrees in any direction for off-axis positioning flexibility.

As a result, they can be used for a wide range of applications, such as projecting on the ceiling or floor, or as part of a rear-projection system.

Epson technology keeps the projector running without compromising performance or causing overheating.



#### **Diverse Connectivity**

The EB-Z8455WUNL offers HDMI, HD-SDI, BNC and LAN connectivity for easy integration with virtually any system.





## Management and Control



#### Epson's EasyMP® Monitor Tool

If you are searching for a solution that gives you control over your time, Epson network projectors with EasyMP Monitor capabilities can help. Epson network projectors contain built-in remote access, with no licensing fees added, to Epson monitor software. These features also give you added control, and the ability to troubleshoot and monitor all Epson network projectors from any computer over a wired or wireless Ethernet network.

Additional features to assist administrators/help desk

- Remote access and control through the network
- Remote monitoring of up to 1024 Epson networked projectors
- View status, including input sources, power on/off, lamp life hours and more
- Preventative maintenance features including temperature levels and error alerts
- Schedule filter and lamp timer settings
- E-mail notification (SMTP) to send alerts to your handheld device
- Enterprise SNMP plug-in available

#### **Wireless Connectivity**

Wirelessly connect — you can either connect to a wireless network (infrastructure) or to an ad hoc (peer-to-peer) wireless computer. You can either use your projector's built-in wireless function or add an optional wireless module.



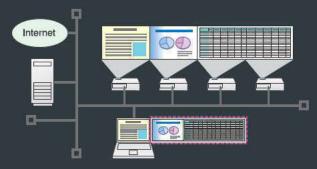
#### **Network Projection — Content Over IP**

You can use EasyMP Network Projection to display your computer screen through the projector, via a network, for effective meetings, presentations and digital signage applications. You can use either wired or high-security wireless LAN connections and project the same or up to four different images on up to four projectors, or display a panoramic image.



#### **Full Networkability**

Epson network projectors can also be accessed from your browser via an internal web page. Whether you assign a static IP address or enable DHCP, the projector becomes accessible once it's integrated in your network. The internal web page lets you control items such as network configuration, projector settings and e-mail alerts.



#### Message Broadcasting<sup>5</sup>

This innovative feature enables you to broadcast customized images/alerts over the network for announcements or instructions. Messages can be sent to up to 1024 projectors simultaneously and will overwrite the current screen content if the projector is being used, unless this function is disabled by the presenter. If the projector is off, message broadcasting will turn the projector on and then display the message.



## **High Durability and Reliability**



#### Don't Interrupt Your Presentation Due to a Lamp Failure

The Epson Z Series projectors boast a dual lamp system (two 340 W lamps) that eliminates the risk of interruption. If one lamp were to fail, operation would continue, using the other lamp.

Each lamp has a long lamp life — up to 3500 hours in ECO Mode, up to 2500 hours in Normal Mode.<sup>6</sup>

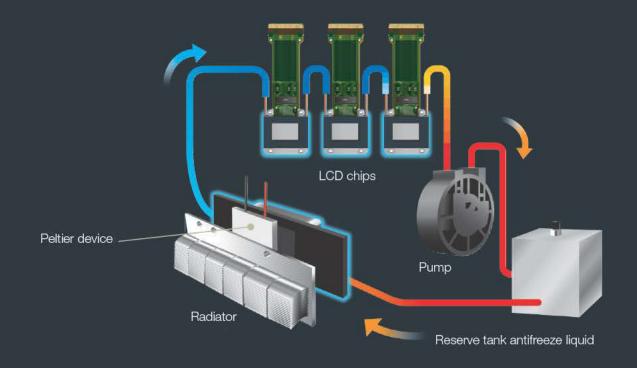
Replacements are made easy with tool-free and unobstructed access to the rear control panel.



## **Liquid Cooling**

#### **Quiet, Reliable Liquid Cooling System**

Epson's innovative system uses liquid to cool the LCD chips directly. The liquid absorbs the heat and is then cooled by a peltier device, which is then cooled by a fan, thereby keeping the overall optical engine cool. This system design promotes greater reliability and enables stable operation in temperatures up to 50 °C. In addition, it offers quiet, unobtrusive operation and allows for off-axis installation orientations.



## **Designed for Medical Training**

# DIAGNOSIS Patient history · Physical examination Diagnostic tests including x-ray to reveal structural pathology Flexible fiberoptic bronchoscopy to look for compression or infection

#### **DICOM Simulation Mode7**

DICOM (Digital Imaging and Communication in Medicine) is a standard for handling, storing, printing and transmitting medical imaging information. The projector's DICOM Simulation Mode enables users to reproduce images with an advanced grayscale level that simulates DICOM Part 14. This mode is ideal for viewing grayscale medical images, such as X-rays, for training and educational purposes.



Normal Mode



**DICOM Simulation Mode** 

## **Low Cost of Ownership**

#### **Easy Maintenance**

Offering convenient access to the lamps and filter, the Epson Z Series makes maintenance easier than ever, even if the projector is ceiling mounted. The lamp cover is located on the rear side panel and there are no screws, so the lid can be removed without any special tools. In addition to easy lamp and filter replacements, the Epson Z Series includes features that make it easy to monitor and control. With EasyMP Monitor, users can access advanced status functions over the LAN.

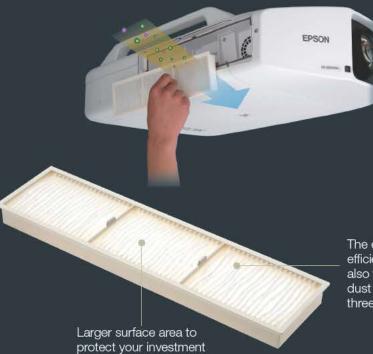
#### Long-life, Easy-to-replace Lamps

Long-life lamps that last 2500 hours (Normal Mode) or 3500 hours (ECO Mode)<sup>5</sup> can be replaced quickly with no tools and without having to uninstall the projector from the ceiling.



## Protect Your Investment — Long-life Electrostatic Air Filter

The Epson Z Series filter is designed to protect the optical engine, lamp and electronics from small dust particles that can enter any projector. It has a recommended 10,000-hour filter cleaning schedule.<sup>7</sup> The Epson electrostatic filter captures particles as small as three microns, due in part to its pleated, expanded design. With one air intake and one exhaust path, the Epson Z Series offers an efficient airflow system for optimum cooling of key components and a reduction in dust-related problems. Additionally, it has the capability to send an e-mail notification out through the Epson Monitor utility when an increase in temperature is detected, due to clogging.



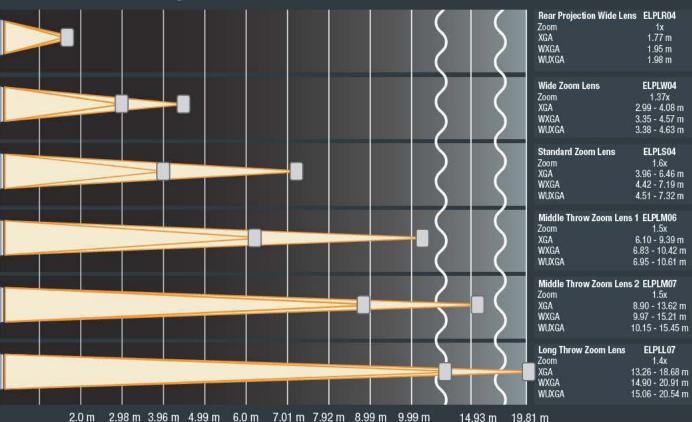
The electrostatic filter is highly efficient at minimizing dust and also very durable. It captures dust particles down to the three-micron level.

## **Optional Lenses**

#### **Six Optional Bayonet Lenses**

The Epson Z Series offers increased placement flexibility, with a 1.6x standard lens. For even greater flexibility, Epson offers a total of six lenses with varying ranges including short, wide and rear, along with mid- to long-throw lenses that allow users to choose the motorized lens most suited for their environment. A quick release lever allows for a quick, easy lens exchange. (Lens not included)

#### Throw distance for a 120" diagonal screen





#### Easy Lens Replacement

Using optional lenses, these projectors can handle projection distances near and far.

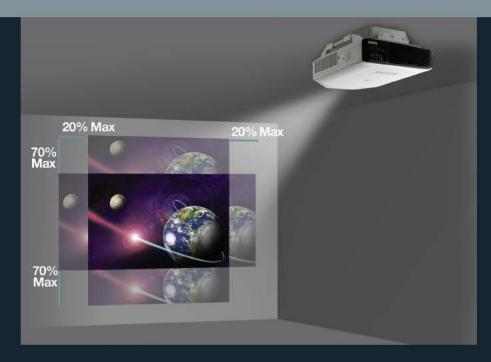
The standard lens is equipped with 1.6x zoom, allowing a broader projection distance range.

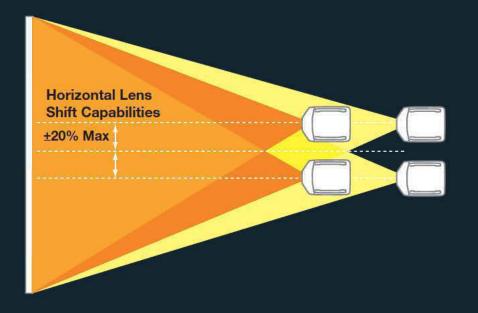


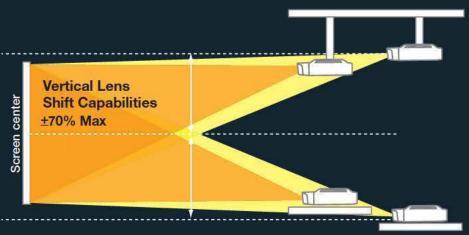
### **Lens Shift**

#### Horizontal and Vertical Lens Shift

In addition to added reliability and amazing colour performance, Epson's industry-leading 3LCD technology enables the projector to achieve a wide range of lens shift capabilities. This lens shift technology enables outstanding installation flexibility with an incredible range of up to + or - 70% on the vertical axis and up to + or - 20% on the horizontal axis. Users can operate the lens shift functions using the remote control, the projector control panel, or control commands.



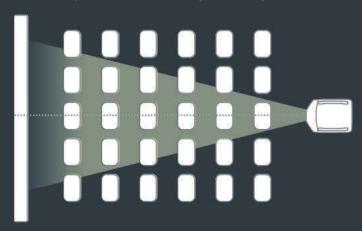




## **Designed for Easy Installation**

#### **Centered Lens Design**

Featuring a centered lens design, the Epson Z Series makes installations easy to plan. Positioning the ceiling mount, screen, and projector can be performed individually and independent of one another.





#### **Integrated Design**

A new, innovative layout and cable cover design conceals the cabling for a pleasing, aesthetic look.

Streamlined design with integrated handles simplifies installation



#### Keeps cables neat

The terminal inputs on the front have a cover that matches the case design to keep them tucked neatly out of sight.

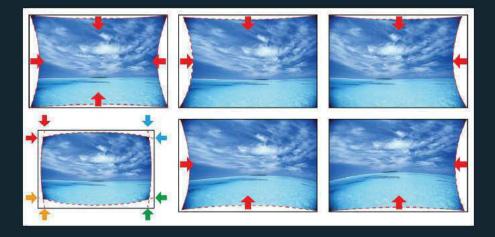


Operation panel is located on the back for ease of operation while looking at the screen.

## **Advanced Image Adjustment Tools**

#### **Arc Correction**

Using arc correction, you can adjust each side of a projected image in an arch or barrel-shaped way, making it easier than ever to get a perfectly rectangular image.



#### **Test Patterns**

The Epson Z Series projectors include six test patterns with precise setup features, including detecting distortion, checking linearity, colour reproduction and bleeding and tone production check.



## **Product Details**



22 Product Specifications

# **Product Specifications**

Model	Z8450WUNL	Z8455WUNL	Z10000NL	Z10005NL	Z8350WNL	Z8355WNL	Z8150NL
Part Number	V11H462953	V11H462853	V11H458953	V11H458853	V11H460953	V11H460853	V11H459953
Case Colour	White	Black	White	Black	White	Black	White
Colour and White Light Output <sup>2</sup>	7000 lumens	7000 lumens	8000 lumens	10,000 lumens	8500 lumens	8500 lumens	8000 lumens
Native Resolution	1920 x 1200 (WUXGA)	1920 x 1200 (WUXGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 800 (WXGA)	1280 x 800 (WXGA)	1024 x 768 (XGA)
Aspect Ratio	Native 16:10, supports 16:9 and 4:3	Native 16:10, supports 16:9 and 4:3	Native 4:3, supports 16:9 and 16:10	Native 4:3, supports 16:9 and 16:10	Native 16:10, supports 16:9 and 4:3	Native 16:10, supports 16:9 and 4:3	Native 4:3, supports 16:9 and 16:10
Replacement Air Filter	V13H134A23						
Genuine Epson Lamp	V13H010L72 (Single Lamp).— V13H010L73 (Dual Lamps)						
Projection System	Epson 3LCD, 3-chip technology						
Projection Method	Front/Rear/Ceiling						
Contrast Ratio	5000:1						
Edge Blending	Yes						
Split Screen <sup>3</sup>	Yes						
Multi-PC Projection	Yes						
DICOM Simulation Mode⁴	Yes						
Networking Functions	Yes						
Wireless Networking	Optional 802.11b/g/n						
Epson iProjection™ Support	Yes						
Lamp Type	340 W UHE x 2						
Lamp Hours <sup>5</sup>	2500 hours (Normal)						
Optional Lenses	6						
Image Size	60" – 500"						
Power Consumption	911 W (Normal) 738 W (ECO)						786 W (Normal)
Fan Noise	40 dB (Normal) 35 dB (ECO)						37 dB (Normal)
Lens Shift	Vertical: +-70% Horizontal: +-20%	Vertical: +-70% Horizontal: +-20%	Vertical: +-56% Horizontal: +-6%	Vertical: +-56% Horizontal: +-6%	Vertical: +-70% Horizontal: +-20%	Vertical: +-70% Horizontal: +-20%	Vertical: +-56% Horizontal: +-6%
Interfaces	HDMI x 2 SDI x 1 Computer: D-sub 15 pin x 1 Video: BNC x 5 Composite Video: BNC x 1 S-Video: Mini DIN x 1 Wired Network: RJ-45 x 1 Wireless Network: Optional Serial: RS-232c x 1 Hardwired Remote Jack x 1 Monitor-Out: D-sub 15 pin x 1 USB Type-A: For wireless only USB Type-B: For service only		HDMI x 2 Computer: D-sub 15 pin x 1 Video: BNC x 5 Composite Video: BNC x 1 S-Video: Mini DIN x 1 Wired Network: RJ-45 x 1 Wireless Network: Optional Serial: RS-232c x 1 Hardwired Remote Jack x 1 Monitor-Out: D-sub 15 pin x 1 USB Type-A: For wireless only USB Type-B: For service only				

Product Specifications 23





For more information on Epson's environmental programs, go to www.epson.com.au/company/environment

EPSON AUSTRALIA

3 Talavera Road North Ryde NSW 2113 Tel: (02) 8899 3666 www.epson.com.au

EPSON NEW ZEALAND ABN 91 002 625 783

Level 2, 7-9 Fanshawe Street 10/12

Auckland, 1010 Tel: (09) 366 6855

www.epson.co.nz

1 Data source: ProjectorCentral.com Jan, 2012. Average of 1122 shipping models for which the manufacturers provided lumens and total power data, all resolutions and brightness levels. Energy efficiency was measured as wattage per lumen. It was measured for both 3LCD and 1-chip projectors in each of five brightness segments. 3LCD projectors averaged less required electricity per lumen in each of the five segments.

- 2 Colour and white output will vary depending on mode selected. White light output measured using ISO 21118 standard.
- 3 The Split Screen feature can only use one digital input source at a time. The other source must be an analog source (PC/Component or Composite video). However, two different analog input sources can be used at the same time. Please check the product user quide for details.
- 4 Works only with Epson projectors that support presentation over the network capability.
- 5 Lamp life will vary depending upon mode selected, environmental conditions and usage. Lamp brightness decreases over time.
- 6 These projectors do not meet the DICOM standard Part 14 and should not be used as a medical diagnostic device.
- 7 Recommendation based on normal room conditions. Cleaning requirements may vary depending on use, environment and other conditions. Cleaning intervals may be adjusted to accommodate the environment in which the projector is used.

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