# SONY

# VPL-FHZ65

# 6,000 lumens WUXGA laser light source projector



# Overview

### Bright, beautiful images with low running costs, minimal maintenance and flexible installation

The VPL-FHZ65 laser projector is ideal for a wide range of business, education and entertainment applications. The powerful Z-Phosphor laser light source is teamed with Sony's advanced BrightEra 3LCD projection engine to deliver extremely bright, detail-packed WUXGA resolution images with generous 6000 lumens brightness and rich, stable colours. Constant Bright Maintains the same brightness throughout the 20,000 hours recommended life span.

The laser light source allows up to 20,000 hours\* of virtually zero maintenance operation without the worry of sudden lamp failures. A new automated filter system cuts the hassle of regular dust cleaning. Near-zero maintenance needs are complemented by a range of energy-saving feature, significantly driving down total lifetime ownership costs.

Offering a stylish new blend-in design, tidy cable management and low fan noise, the VPL-FHZ65 fits smoothly into almost any environment – from academic institutions, corporate, medical training and public sector organisations to visitor attractions and retail spaces. Seamlessly blend images from multiple projectors to create super-sized displays, or project accurately proportioned images onto angled or curved surfaces. Mount the projector at any angle, even on its side or upside down. Set-up's easier than ever with a friendly new installation menu.

\*Actual hours may vary depending on usage environment.

VPL-FHZ65



#### **Features**

# Very high image quality with Sony's advanced BrightEra 3LCD projection engine and Z-Phosphor laser light source

The Z-Phosphor laser light source is coupled with Sony's acclaimed BrightEra 3LCD projection engine to ensure high 6000 lumen image brightness with vivid, natural colour reproduction.

# Constant Brightness

Constant Bright Maintains the same brightness throughout the 20,000 hours recommended life span.

# Advanced picture refinement technologies

Picture quality is boosted by advanced processing featured on Sony home cinema projectors. Reality Creation uses a powerful pattern-matching database to optimise every pixel. Contrast Enhancer actively analyses and refines dark and light image areas for sparkling highlights and rich, deep blacks.

# Crisp, detail-packed WUXGA resolution images

See the finest detail in PC presentations, videos or multimedia signage with WUXGA (1920 x 1200) 16:10 resolution.

# Up to 20,000 hours\* operation with virtually no maintenance

The advanced laser light source offers up to 20,000 hours\* operation without lamp exchange, reducing lifetime running costs compared with traditional projectors.

\*Actual hours may vary depending on usage environment.

# Hassle-free automatic filter cleaning

Focus on great-looking images instead of arduous maintenance tasks: new automated filter cleaning system removes dust every 100 hours.

#### Energy saving features

Reduce running costs even further with convenient energy-saving features: Picture Mute and Auto Dimming.

#### Save time with every presentation

Quick power On/Off dramatically cuts warm-up time after switch-on before you can start presenting at full brightness.

# 360° free-angle installation capability

Enjoy greater installation flexibility: position the projector freely at any angle - or its side or even upside down.

# Powered Wide Lens Shift

Generous lens shift adjustments give more flexibility for positioning the projector where you need it: close to ceilings or even horizontally offset.

#### Included powered standard zoom lens plus wide choice of lens options

Installation flexibility is increased by a wide range of compatible lens options to suit virtually any size of room and throw requirements. New quick-release bayonet mount simplifies quick lens exchange.

#### Supports HDBaseT

Simpler, more cost-effective installation and connectivity with digital transmission of HD video, audio and



networking/control over a single Ethernet cable.

# Create super-size displays with Edge Blending

Seamlessly join accurately colour-matched images from multiple projectors, simplifying creation of stunning super-size displays for corporate and education.

#### Project onto non-flat surfaces with Image Warping

Easily correct image geometry for natural-looking projections – even on convex or concave surfaces. Corner and edge correction can be easily adjusted with the supplied remote and on-screen menu.

#### Quiet operation

Low fan noise ensures discreet, unobtrusive operation in quiet environments from museums and galleries to lecture theatres.

#### Slim, attractive new blend-in design

The slim, stylish case design features a flat top surface that blends in discreetly when the projector is ceiling mounted. The clean appearance is accentuated by a new terminal cover that reduces cable clutter.

#### Picture Mode

New Picture Mode ensures great-looking pictures in any presentation conditions. Select Standard, Dynamic, Brightness Priority or Multi Screen mode for optimised image quality, with any source and in every room.

#### • Simple set-up with friendly new Installation menu

Easily adjust projector settings with remote commander, including warping and edge blending.

#### Project Side by Side

Project images from two inputs at the same time: ideal for applications such as video conferencing and medical training where two images need to be seen simultaneously.



# **Technical Specifications**

Display system			
Display system	3 LCD system		
Display device			
Size of effective display area	0.76" (19 mm) x 3 BrightEra LCD Panel, A	0.76" (19 mm) x 3 BrightEra LCD Panel, Aspect ratio: 16:10	
Number of pixels	6,912,000 (1920 x 1200 x 3) pixels		
Projection lens *1			
• Focus		Powered	
Zoom - Powered/Manual		Powered	
Zoom - Ratio		Approx. x 1.6	
Throw ratio		1.39:1 to 2.23:1	
<ul> <li>Lens shift - Powered/Manual</li> </ul>		Powered	
Lens shift - Range Vertical		-5%, +60%	
Lens shift - Range Horizontal		+/- 32%	
Light source			
<ul> <li>Type</li> </ul>	Laser diode		
Filter cleaning / replacement cycle (Max.)*2  • Filter cleaning / replacement cycle (Max.)  20000 H (service maintenance)			
Screen size  40" to 600" (1.02 m to 15.24 m) (measured diagonally)			
Light output			
Mode: High		6000 lm	
Mode: Standard		4000 lm	
Color light output			
Mode: High		6000 lm	
Mode: Standard		4000 lm	
Contrast ratio (full white / full black) *3			
Contrast ratio (full white / full black)		10000:1	
Displayable scanning frequency			
Horizontal	15 kHz to 92 kHz		
Vertical	48 Hz to 92 Hz		
Display resolution			
Computer signal input     Maximum display resolution: 1920 x 1200 dots *4			
NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i			



Video signal input
 The following items are available for digital signal (HDMI input) only; 1080/60P, 1080/50p, 1080/24p

Color system

Color system
 NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60

Keystone correction (Max.)

 Horizontal +/- 30 degrees

 Vertical +/- 30 degrees

INPUT OUTPUT (Computer/Video/Control) RGB / Y PB PR input connector:Mini D-sub 15 pin (female) INPLIT A Audio input connector: Stereo mini jack DVI input connector: DVI-D 24-pin (single link), HDCP support INPUT B Audio input connector: Shared with INPUT A HDMI input connector: HDMI 19-pin, HDCP support INPUT C Audio input connector: HDMI audio support INPUT D HDBaseT interface connector: RJ45, 4 play (Video, Audio, LAN, Control) Video input connector: BNC VIDEO IN Audio input connector: Shared with input A Monitor output for Input A Connector: Mini D-sub 15-pin (female) OUTPUT A Audio output connector: Stereo mini jack Monitor output for Input B Connector: DVI-D 24-pin (single link), HDCP not supported OUTPUT B Audio output, Monitor out connector: Stereo mini jack REMOTE D-sub 9-pin (male) / RS232C BJ45, 10BASE-T/100BASE-TX LAN IR (Control S) Stereo mini jack, Plug in power DC5V

Acoustic Noise

Lamp mode: Standard
 28 dB

Operating temperature / Operating humidity

Operating temperature / Operating humidity
 O°C to 40°C (32°F to 104°F) / 20% to 80% (no condensation)

Storage temperature / Storage humidity

 $\bullet \quad \text{Storage temperature / Storage humidity} \\ \quad -10\,^{\circ}\text{C to } +60\,^{\circ}\text{C (14\,^{\circ}F to } +140\,^{\circ}\text{F)} \, / \, 20\% \text{ to 80\% (no condensation)}$ 

Power requirements

Power requirements
 AC 100 V to 240 V, 5.5 A to 2.3 A, 50 Hz / 60 Hz

Power consumption

• AC 100 V to 120 V Mode: High: 509 W

AC 220 V to 240 V
 Mode: High: 492 W

Power Consumption (Standby Mode)

AC 100 V to 120 V
 0.5W (when "Standby mode" is set to "Low")

• AC 220 V to 240 V 0.5W (when "Standby mode" is set to "Low")

15.0 W (LAN)

Power Consumption (Networked Standby Mode)

• AC 100 V to 120 V 15.0 W (HDBaseT)

15.0 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")



AC 220 V to 240 V

13.3 W (LAN) 13.3 W (HDBaseT)

13.3 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")

#### Standby Mode / Networked Standby Mode Activated

Standby Mode / Networked Standby Mode Activated

Approx. 10 Minutes

#### Dimensions (W x H x D)

• Dimensions (W x H x D) (without protrusions)

460 x 169 x 515 mm

18 1/8 x 6 21/32 x 20 9/32 inches

#### Mass

Mass

16 kg (34 lb)

#### Supplied accessories

Remote commander

RM-PJ27

#### Optional accessories

Projection Lens

VPLL-3007 / Z3009 / Z3024 / Z3032

#### Notes

- \*1 With supplied standard lens
- \*2 This figure is expected maintenance time, not guaranteed time. The actual value depends on the environment and how the projector is used.
- \*3 The value is average.
- \*4 Available for VESA Reduced Blanking signal.

# **Accessories**

# **Ceiling Brackets**



#### PSS-650

Projector Ceiling Bracket for Installation



#### PSS-650P

Projector Ceiling Bracket for Installation





#### VPLL-3003

Projection Lens for the VPL-F Series



# VPLL-3007

Projection Lens for the VPL-F Series



#### VPLL-Z3009

Short focus zoom lens



# VPLL-Z3024

Projection Lens for the VPL-F Series



#### LKRA-FL1

Optical Filter for 3D projection



#### LKRA-FL2

Optical Filter for angular projection



#### PK-F60LA1

Lens Adaptor for the discontinued VPLL-1032 optional Lens to use with the VPL-FHZ57, FHZ60, FHZ65, FH60, FH65, VPL-FWZ65, FWZ60 FW65 and FW60 Installation Projectors



# PK-F60LA2

Lens Adaptor for the discontinued VPLL-1024 optional Lens to use with the VPL-FHZ57, FHZ60, FHZ65, FH60, FH65, VPL-FWZ65, FWZ60 FW65 and FW60 Installation Projectors



#### PK-F60LA3

Lens Adaptor for the discontinued VPLL-Z2009 optional Lens to use with the VPL-FHZ57, FHZ60, FHZ65, FH60, FH65, VPL-FWZ65, FWZ60 FW65 and FW60 Installation Projectors



# PK-F60LA4

Lens Adaptor for the discontinued VPLL-2007 optional Lens to use with the VPL-FHZ57, FHZ60, FHZ65, FH60, FH65, VPL-FWZ65, FWZ60, FW65 and FW60 Installation Projectors

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# VPLL-Z3032

Long focus zoom lens

Other Accessories