





# VPL-FHZ60 and VPL-FHZ65 3LCD laser projectors

Up to 20,000 hours maintenance-free

# enduring quality the world's brightest 3LCD laser projector

Our 3LCD four-projector-strong laser line-up features the VPL-FHZ60 and VPL-FHZ65 in our marketing-leading range. Perfect for education, business and public sector settings, they combine powerful, laser light source with Sony's advanced 3LCD BrightEra<sup>™</sup> technology to deliver outstanding performance and durability.

# 5,000 and 6,000 lumens of white and colour brightness

Achieving a high 5,000 and 6,000 lumens of white and colour brightness, the VPL-FHZ60 and VPL-FHZ65 project crisp, clear, high contrast WUXGA images at more than Full HD resolution (1920 x 1200). Colours are rich and natural and picture stability is exceptional.

## Up to 20,000 hours durability

Along with outstanding performance comes stamina and reliability. The VPL-FHZ60 and VPL-FHZ65 offer up to 20,000 hours\* of maintenancefree operation, representing a substantially lower total cost of ownership than any conventional lamp projector.

\*Actual hours may vary depending on usage and environment



### Key features

5,000 and 6,000 lumens of white and colour brightness and up to 20,000 hours\* continuous operation

**Reduced downtime and low TCO** efficient, long-life LCD panels for increased durability

**HDBaseT** Simplified installations with a single cable

New bayonet lenses 3000 series, and upgrade compatible adaptor for 2000 and 1000 lens series

Advanced energy-saving features Auto Dimming mode and many more

Almost instant on/off with no warming up or cooling down time

**360° Flexible installation** position anywhere with angle-free tilt adjustment

**Edge Blending** create supersized content with multiple projectors

\*Actual hours may vary depending on usage and environment

# Laser light source and Sony 3LCD BrightEra™ technology

This unique and highly efficient combination delivers exceptionally bright pictures with excellent colour accuracy and stability.

# 5,000 and 6,000 lumens of white and colour brightness

High impact 5,000 and 6,000 lumens of white and colour brightness for a clear, detailpacked WUXGA resolution image (1920 x 1200), higher than Full HD.

#### Up to 20,000\*\* hours operation

Virtually zero maintenance and no filter cleaning for 20,000 hours. The advanced filter keeps the projectors in peak condition, significantly reducing running costs compared to traditional lamp projectors.

### Up to 10,000:1 contrast ratio

A high contrast ratio of 10,000:1 ensures deep, black lowlights and bright, sparkling highlights for sharp definition that will take your presentations to the next level.

#### Hg (Mercury) Free

With no lamp, there's no Mercury, so the laser light source is a more environmentally friendly solution.

# Edge Blending for super-sized displays

This built in feature allows images from multiple projectors to be joined seamlessly, creating one, stunning supersized projection.

#### **Projection features**

# 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 adjusted easily with the supplied remote and on-screen menu.

# Reality Creation and Contrast Enhancer

Image quality is upscaled for a crisper, sharper picture, while dark and light areas are automatically adjusted without diminishing colour.

#### Side panel and panel cover

The input / output panel has been redesigned for these models to be located on the side of the projector. Cables are now neatly hidden within the panel cover to keep cables tidy.



Contrast Enhancer OFF



Contrast Enhancer ON

#### Installation features

### 360% angle-free tilt

Position the projectors freely, at any angle, on their side or even upside down. Install wherever you need them, close to ceilings, near a screen or even horizontally offset them.

# Wide Lens Shift, Zoom and Throw Ratio

Generous shift, zoom and throw lens adjustments give more flexibility for positioning the projectors where you need them. (Actual horizontal and vertical shift depends on lens used - optional lenses available)

# **Energy-saving features**

#### **Auto Dimming Mode**

After 10 seconds of static signal feed, the light source dims by approximately 15% (barely noticeable). If powered on while not in use, the light source dims to as low as 5% of original brightness.

#### Auto Light Source Control

Brightness is automatically adjusted depending on the projected image to minimise power consumption. When showing darker images, the light source output decreases.

#### Almost instant on/off,

Laser light source means there is no need to warm up or cool down any UHP lamps. The projectors turn on and off virtually instantaneously with a push of the remote commander.

### HDBaseT<sup>™</sup> single cable system

HDBase™ multi-signal installation system via a single cable. This cuts cabling costs as well as the need for extra signal extenders and receiver boxes. One Cat5e/6 cable runs up to 100m.

# Low power consumption with No Input

Automatically detects no signal and dims the light source to as low as 0% of original brightness.

# Constant brightness mode for stable projection\*\*\*\*

Maintain constant brightness for the expected 20,000 hours operational life for a consistent visual experience.

#### PrimeSupport

This projector comes supplied with a 5 year / 12000 hours operation support pack when sold in the EU, Norway and Switzerland, which offers unique extra services and benefits:

- 5 year cover\*\*\*
- Free telephone helpdesk support in English, German, French, Italian and Spanish
- Collection and delivery anywhere in the EU, Norway and Switzerland
- Optional PrimeSupport Plus available to extend to 5 years / 20,000 hours operation.



\*\*\* Subject to Hours on Optical Engine and laser light source will be applied

\*\*\* Constant Brightness feature will reduce brightness to approx 75% of original specified brightness



#### Ideal for:

- Universities (auditoriums / large classrooms)
- Corporate boardrooms
- Museums
- Digital art

Exceptional brightness for a clearer, crisper picture

#### **Specifications**

Distributed by

		VPL-FHZ60	VPL-FHZ65
Display system		3 LCD s	
New Jane 4 and	Size of effective	0.76"(19 mm) x 3 BrightEra LCD Panel,	0.76"(19.3 mm) x 3 BrightEra LCD Panel, Aspect ratio: 16:10
Display device	display area Number of pixels	Aspect ratio: 16:10 6.912.000.(1920.x	Aspect ratio: 16:10
Projection lens	Focus	6,912,000 (1920 x 1200 x 3) pixels Powered	
	Zoom –		
	Powered/Manual	Powered	
	Zoom – Ratio	Approx	
	Throw ratio	1.39:1 to 2.23:1	
	Lens shift –	Powered	
	Powered/Manual		
	Lens shift – Range Vertical	15% / +20%	-5% / + 60%
	Lens shift -		
	Range Horizontal	+/- 32%	
ight source	Туре	Laser diode	
ilter cleaning /	Filter cleaning /		
eplacement cycle Max.)*2	replacement cycle (Max.)	20000 H (cleaning)	
Screen size*1	Screen size (measured diagonally)	40" to 600" (1.02 m to 15.24 m)	
	Lamp mode: High	5000 lm 6000 lm	
ight output	Lamp mode: Standard	3500 lm	4000 lm
	Lamp mode: High	5000 lm	6000 lm
olor light output	Lamp mode: Standard	3500 lm	4000 lm
Contrast ratio (full whit		1000	
)isplayable	Horizontal	15 kHz to 92 kHz	
canning frequency	Vertical	48 Hz to 92 Hz	
	Computer signal input	Maximum display resolution: 1920 x 1200 dots *4	
Display resolution		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		NTSC3.58, PAL, SECAM, NTSC4.43, PAL-N, PAL-N, PAL60	
(eystone	Vertical	+/- 30 degrees	
correction (Max.)	Horizontal	+/- 30 de	•
		RGB / Y PB PR input connector: Mini D-sub 15-pin (female) Audio input connector: Stereo mini jack	
INPUT OUTPUT (Computer/ Video/Control)	INPUT A		
	INPUT B	DVI input connector: DVI-D 24-pin (single link), HDCP support 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	
	OUTPUT A:	Monitor output for Input A Connector: Mini D-sub 15-pin (female)	
		Audio output connector: Stereo mini jack	
	OUTPUT B	Monitor output for Input B Connector: DVI-D 24-pin (single link), HDCP support	
	REMOTE	Audio output, Monitor out connector: Stereo mini jack D-sub 9-pin (male) / R\$232C	
	LAN	D-sub 9-pin (male) / R5232C RJ-45, 10BASE-T/100BASE-TX	
	IR (Control S)		
		Stereo mini jack, Plug in power DC5V	
Acoustic noise	Lamp mode: Standard	28 dB	
Operating temperature / Operating humidity Storage temperature / Storage humidity		0°C to 40°C / 32°F to 104°F / 20% to 80%	
		(no condensation)	
		-10°C to +60°C / 14°F to +140°F / 10% to 90%	
		(no conde	
ower requirements		AC 100 V to 240 V, 4.5 A to 1.9 A, 50 Hz / 60 Hz	AC 100 V to 240 V, 5.5 A to 2.3 A, 50 Hz / 60 Hz
Power consumption (Lamp mode: High)	AC 100 V to 120 V	420 W	509 W
		400.14	400 \\\\
	AC 220 V to 240 V	408 W	492 W
Power Consumption	AC 100 V to 120 V	0.5 W	
ower Consumblion	AC 220 V to 240 V	0.5 W	
		0.0 W	
		Approx. 460 x 169 x 515 mm (18 1/8 inches x 6 3/5 inches x 20 3/8 inches)	
Lamp mode: Low)	Dimensions (W x H x D)		
Lamp mode: Low) Dimensions (W x H x D)	(without protrusions)		32 lb
Lamp mode: Low) Dimensions (W x H x D) Mass	(without protrusions)	16 kg /	
(Lamp mode: Low) Dimensions (W x H x D) Mass	(without protrusions) Remote commander		
Lamp mode: Low) Dimensions (W x H x D) Mass Supplied accessories	Remote commander Projection Lens	16 kg / RM-P	J27
Lamp mode: Low) Dimensions (W x H x D) Mass Supplied accessories	(without protrusions) Remote commander Projection Lens (throw ratios)	16 kg / RM-P VPLL-3007 (0.65:1) / Z3009 (0.85-1.0) / Z3	J27 D24 (2.34 to 3.19) / Z3032 (3.18 to 4.84)
Lamp mode: Low) Dimensions (W x H x D) Mass Supplied accessories Optional accessories	Remote commander Projection Lens	16 kg / RM-P	J27 D24 (2.34 to 3.19) / Z3032 (3.18 to 4.84)

\*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.

# For full features visit: pro.sony.eu/laser

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