

# VPL-FHZ85

7,300 lm (8,000 lm centre) WUXGA laser light source projector



#### Overview

Powerful, compact and beautifully styled, the VPL-FHZ85 WUXGA 3LCD laser projector is bursting with Sony innovation for consistently rich, colourful images with an impressive 7,300 lm (8,000 lm centre) brightness.

Even powerful projectors can suffer from washed-out colours in strongly-lit conference rooms and classrooms. The VPL-FHZ85 features new Bright View processing technology to ensure bright, high-impact images that don't sacrifice colour.

Impressive WUXGA picture quality is boosted by newly improved Reality Creation technology. Images are analysed and compared against Sony's unique pattern database, using re-pixel mapping to ensure that video, diagrams and text always look crisp and sharp.

Intelligent Setting fine-tunes brightness, colour, cooling and other projector parameters for consistently clear, bright pictures in real-world operating conditions. There's even an ambient light sensor that adjusts image brightness to suit the environment.

The VPL-FHZ85 is ideal for integration in corporate, education and public environments. Its class-leading lens

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shift adjustment range and wide choice of interchangeable lenses broaden installing possibilities in any space, including rooms and halls with high ceilings. Installation is further simplified with Sony's Intelligent Setting that optimises brightness, cooling, colour and other projector settings for great pictures in every environment.

Maintenance requirements are reduced by the sealed laser light source and automated filter cleaning system that prevent dust build-up, ensuring cool, efficient operation with uncompromised image brightness.

#### FeaturesReality Creation for clearer images and text

The use of 4K photos and videos is increasingly common in presentations. While the VPL-FHZ85 is a WUXGA projector, it offers a 4K60P input to display images with quality that's close-to-true 4K resolution. Sony's powerful Reality Creation processing technology uses powerful algorithms that boost image resolution even closer to 4K clarity. Reality Text improves visibility of characters – ideal for presenting in conference rooms and classrooms.

#### Consistently bright, beautiful colours

Bright View is Sony's unique processing technology that brightens images while maintaining rich colours when you're presenting in brightly-lit business and educational environments.

#### Stylish blend-in design

The slim, stylish body features a flat top surface that blends discreetly into any space when the projector is ceiling mounted.

Generous lens shift range

The VPL-FHZ85 provides more installation freedom thanks to its class-leading vertical +70% lens shift adjustment range. Enjoy greater flexibility to position the projector in restricted spaces, ensuring that audience and presenter aren't distracted by the light source.

#### Versatile lens options

In addition to the supplied standard lens there's a range of lens options to suit virtually any size of room and throw requirements. The projector's quick-release bayonet mount simplifies lens exchange.

#### 4K 60P input capable

The projector's 4K 60P input capability makes life simpler when you're using it in multi-screen set ups with other devices like flat panel sub-screens. Just split the same 4K signal to drive all your displays, with no conversion needed.

#### Intelligent Settings for easy installation

Intelligent Settings simplifies installation and maximises performance based on projector usage, image detail, colour richness and fidelity, light output, cooling level and output noise. The Meeting/Classroom function controls laser output to keep brightness as high as possible for a period of actual usage time. Intelligent Settings with Ambiance uses a built-in light sensor to measure room brightness, automatically adjusting Bright View mode, colour gain and Reality Creation to suit your presentation environment.

#### Automatic filter cleaning

The VPL-FHZ85 helps minimise time spent on routine maintenance. The projector's automated filter cleaning system removes dust every 100 hours, ensuring unrestricted clean air intake for optimised cooling.

#### Avoid dust build-up

The sealed laser light source ensures that dust can't accumulate, helping to maintaining image brightness and clarity over the projector's lifetime. The dedicated cooling duct for the projector's 3LCD panels is covered with an air filter to prevent dust from entering.

#### Data cloning

The new Data Cloning feature makes it easy to copy settings from one projector to another via USB flash memory drive. You'll appreciate the time saving when installing and setting up multiple projectors.

#### Auto input select

Don't get distracted by fiddling with input settings while you're preparing for your presentation. The VPL-FHZ85 automatically switches to the right input when a new source is connected to the projector.

#### Auto power on

Connect the VPL-FHZ85 to a switched-on computer and the projector turns on automatically from standby mode, with no need to operate the power button.

Specifications	Display system	
	Display system	3 LCD system
	Display device	
	Size of effective display area	New LCD panel 0.76" (19 mm) x 3 BrightEra LCD Panel, Aspect ratio: 16:10
		6,912,000 (1920 x 1200 x 3)
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#### Number of pixels 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
Lens shift - Powered/Manual	Powered
Lens shift - Range Vertical	-5%, +70%
Lens shift - Range Horizontal	+/- 32%
Light source	

Туре	

Laser diode

# Screen size40" to 600" (1.02 m to 15.24<br/>m) (measured diagonally)Light output \*27300lm \*3 / 8000lm<br/>(Center)\*4

Mode: Middle	5840lm	
Mode: Low	-	

Colour light output *2		
Mode: Standard	7300lm	
Mode: Middle	5840lm	
Mode: Low	-	

#### Time until light output declines to 50 %\*5

Mode: Standard	20000 hours
Mode: Middle	30000 hours

#### Contrast ratio (full white / full black) \*2

Contrast ratio (full white / full black)  $\infty:1$ 

#### Displayable scanning frequency

Horizontal

15 kHz to 93 kHz

Vertical 23 Hz to 63 Hz

#### Accepted signal resolution

Computer signal input

Maximum signal resolution: 1920 x 1200 \*6



NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p,3840/60p, 3840/30p, 3840/25p, 3840/24p,4096/60p, 4096/30p, 4096/25p, 4096/24p

#### Keystone correction (Max.)

Horizontal

+/- 30 degrees

Vertical

+/- 30 degrees

#### INPUT OUTPUT (Computer / Video / Audio / Control)

INPUT A	RGB / Y PB PR input connector:Mini D-sub 15 pin (female) Audio input connector: Stereo mini jack
INPUT B	DVI input connector: DVI-D 24-pin (single link), HDCP support Audio input connector: Shared with INPUT A
INPUT C	HDMI input connector: HDMI 19-pin, HDCP support Audio input connector: HDMI audio support
	UDDocot interface compostory

HDBaseT interface connector:

INPUT D	RJ45, 4 play (Video, Audio, LAN, Control)
VIDEO IN	Video input connector: BNC 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 not supported Audio output, Monitor out connector: Stereo mini jack
REMOTE	D-sub 9-pin (male) / RS232C
LAN	RJ45, 10BASE-T/100BASE-TX
IR (Control S)	Stereo mini jack, Plug in power DC5V
USB	TYPE-A (for F/W update) , TYPE-A (for Power supply)

#### Acoustic Noise \*2

Acoustic Noise (Mode: Standard / 38 dB / 36 dB Middle)

#### Operating temperature / Operating

#### humidity

Operating0°C to 45°C (32°F to 109°F) /<br/>20% to 80% (noOperating humiditycondensation)

#### Storage temperature / Storage humidity

Storage temperature / Storage humidity

-10°C to +60°C (14°F to +140°F) / 20% to 80% (no condensation)

#### Power requirements

Power	AC 100 V to 240 V, 5.1 A to
requirements	2.2 A, 50 Hz / 60 Hz

#### Power consumption

AC 100 V to 120 V	Mode: Standard: 506 W
AC 220 V to 240 V	Mode: Standard: 474 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")

# Power consumption (Networked Standby Mode)



AC 100 V to 120 V	9.8 W (LAN) 10.6 W (HDBaseT) 10.6 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")
AC 220 V to 240 V	10.9 W (LAN) 11.6 W (HDBaseT) 11.6 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")

# Standby Mode / Networked Standby Mode Activated

Standby Mode / Networked Standby Approx. 10 Minutes Mode Activated

#### Heat dissipation

AC 100 V to 120 V 1617 BTU/h

AC 220 V to 240 V 1727 BTU/h

#### Dimensions ( $W \times H \times D$ )

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

460 x 169 x 494 mm 18 1/8 x 6 3/4 x 19 1/2 inches

#### Mass

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#### Mass

#### **Optional accessories**

Projection Lens	VPLL-3003 / 3007 / Z3009 /
	Z3010 / Z3024 / Z3032

Notes	
*1	With supplied standard lens
*2	The figures are approximate. They vary depending on the environment or how the projector is used.
*3	The value is in accordance with ISO 21118, and may differ depending on the actual unit. Brightness and contrast vary depending on use conditions and environments.
*4	The value is light output measured at centre area of screen in Standard mode, and average of all products shipped.
*5	Estimated time until light output declines to 50 % varies depending on environment.
*6	Available for VESA Reduced Blanking signal.

### Gallery



