# SONY

### VPL-FHZ85/FHZ80

**3LCD Laser projectors** 







**WUXGA** 

FHZ85: 8,000lm (Center) 7,300lm FHZ80: 6,500lm (Center) 6,000lm

3LCD







The industry's smallest, lightest, 8,000 lm\* projectors\*\* with robust features.





pro.sony/projectors

### Bright, rich color even in high ambient lighting

### Improved Reality Creation and new, Reality Text

Reality Creation is Sony's unique real-time signal processing technology that improves image clarity to close-to-true 4K quality. In addition, Reality Text improves display of text-based presentation materials which are commonly used for conference rooms and classrooms.

#### For images





For presentation materials

бер	Oct	Nov	Dec	Fluctuation	ALL
8.881	222.632	262.564	263.128	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4455.510
4.089	18.866	33.999	58.457	1	829.831
0.958	52.599	14.619	7.920	MAN.	538.070
3.422	66.561	50.126	49.577	~\\\\\~~	677.680
7.684	45.217	26.525	24.551	$\wedge \sim$	493.314
6.169	21.306	46.792	65.019	$\mathcal{M}_{\mathcal{M}}$	511.122
9.830	12.148	49.696	8.679	$\sim\sim$	657.284
6.729	5.935	40.806	48.924	~~~	748.210
9.840	31.805	37.509	37.590	~~~~	636.501

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**Reality Creation OFF** 

Reality Creation ON
Clearer image with more depth
Simulated image

**Reality Text OFF** 

Reality Text ON

Clearer letters and lines with enhance legibility

Simulated images

### **Bright View**

Bright View is Sony's unique signal processing technology that brightens images without sacrificing color in high ambient light environments typically found in business and higher education environments.





**Bright View OFF** 

Bright View ON

Simulated images

#### **Intelligent Settings with Ambiance**

Intelligent Settings offer four location selections, optimizing brightness, cooling system and other projector settings to suit usage environments. In addition, with Ambiance, our new built-in ambient light sensor, the projector measures a room's brightness and automatically adjusts color gain, Bright View mode, and Reality Creation settings to match the environment and enhance the viewing experience.

### Ambiance includes an ambient light sensor



### Location selection in Intelligent Setting

Meeting/Classroom



Museum



Multi-screen

Clarity first

Color Accuracy first

Vivid color first

Easy-to-match in color first

### **High Picture Quality**

The projectors support up to 4K 60P input signals, a standard format for 4K videos. Sony's super-resolution Reality Creation 4K upscaler analyzes every pixel in any direction, then employs a digital signal processing algorithm to map pixels against an ever-evolving picture patterning database to enhance color, contrast, and textures, for beautiful near-4K image quality from a WUXGA Projector.







VPL-FHZ85/FHZ80

Simulated images

### Sophistical spatial design and installation flexibility

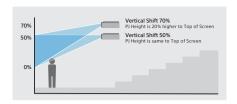
## Smallest\*, lightest\* in its class with attractive blend-in design

Slim, stylish case design features a flat top surface that blends in discreetly when the projector is ceiling mounted.

\*As of August 2021 (according to Sony research), in 3LCD laser projectors

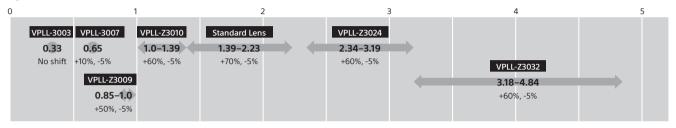
### **Wide Lens Shift**

Very wide lens shift capability of vertical + 70%



The projector has variety of lens options and wide lens shift capability for flexible installation, virtually anywhere.

Optional Lenses - throw ratio and vertical lens shift chart

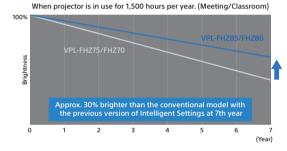


### **Extended brightness**

### **Intelligent Settings**

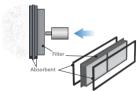
The Intelligent Settings function simplifies installation and maximizes performance based on usage, image detail, color richness, color fidelity, light output, cooling level and output noise.

In addition, the Meeting/Classroom setting controls the laser output to maximize brightness levels based on actual usage times and operation frequency.



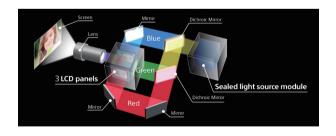
### **Hassle-free Automatic Filter Cleaning**

The projector has an automated filter cleaning system that removes dust every 100 hours to prevent dust from being accumulated. The feature enables sufficient intake of clean air to allow for proper cooling.



#### **Countermeasures to dust**

The laser light source is sealed to prevent it from attracting dust that can interfere with brightness. The 3LCD panels are also enclosed in a dedicated cooling duct structure with an air filter to prevent dust from entering.



### **Other Features**

### **Data Cloning**

Any settings made for one projector can be copied to the second and subsequent projectors using a USB memory drive. This greatly simplifies installation and set up of multiple projectors.

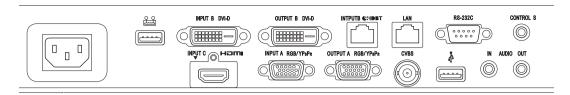
#### **Auto Input Select**

The Auto Input Select feature automatically selects a wide input signal, so there's no need to change the input each time a device is connected to the projector.

### **Auto Power on**

When connected to a computer, the projector's power turns on automatically, without having to operate the power button.

### **Connector Panels**



### **Specifications**

		VPL-FHZ85	VPL-FHZ80				
Display system		3 LCD system					
Display device	Size of effective display area	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	Zoom	6,52,600 (1220 × 1200 × 2) pixel3 Powered (Approx. x 1.6)					
,	Focus	Powered (Approx. A 1.0)					
	Lens shift	Powered, Vertical: -5%, +70%, Horizontal: +/-32%					
	Throw ratio	1.39:1 to 2.23:1					
Light source	111101111110	Laser diode					
Screen size		40" to 600" (1.02 m to 15.24 m) ( measured diagonally)					
	de: Standard / Middle)	7,300 lm <sup>2</sup> , 8,000 lm (Center) <sup>23</sup> / 5,840 lm 6,000 lm <sup>2</sup> , 6,500 lm (Center) <sup>23</sup> / 4,800 lm					
Color light output							
(Mode: Standard		7,300 lm / 5,840 lm 6,000 lm / 4,800 lm					
Time until light output declines to 50 %*4		20,000 hours (Standard) / 30,000 hours (Middle)					
Contrast ratio*5 (full white / full black)		20,000 nours (standard) / 30,000 nours (middle)					
Displayable	Horizontal						
scanning	HOHZOHILAI	15kHz to 93kHz					
frequency	Vertical	23Hz to 63Hz					
Display	Computer signal input	Maximum display resolution: 1920 x 1200 dots*6					
resolution	Video signal input	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.)		Vertical: +7-30 degrees					
,	()	Horizontal: +/- 30 degrees					
Input / Output	INPUT A	RGB / Y PB PR input connector: Mini D-sub 15-pin (female), Audio input connector: Stereo mini jack					
(Computer /	INPUT B	DVI input connector: DVI-D 24-pin (single link), HDCP support, Audio input connector: Shared with INPUT A					
Video /Audio /	INPUT C	HDMI input connector: HDMI 19-pin, HDCP support, Audio input connector: HDMI audio support					
Control)	INPUT D	HDBaseT interface connector: RJ45, 4 play (Video, Audio, LAN, Control)					
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 A Connector: Mini D-sub 15-pin (Ternale), Audio output Connector: Stereo Mini Jack  Monitor output for Input B Connector: DVI-D 24-pin (single link), HDCP not supported, Audio output, Monitor out connector: Stereo mini jack					
	REMOTE	Monitor output for input is connector: DVI-D 24-pin (single link), HDCP not supported, Audio output, Monitor out connector: stereo mini Jack   D-sub 9-pin (male) / RS232C					
	LAN	D-sub 9-pin (male) / RS232C RJ45, 10BASE-T / 100BASE-TX					
	IR (Control S)						
	USB	Stereo mini jack, Plug in power DC 5 V					
Acquetic poice (M		TYPE-A (for F/W update) , TYPE-A (for Power supply)  38 dB / 36 dB  36 dB / 34 dB					
Acoustic noise (Mode: Standard / Middle) Operating temperature		0°C to 45°C (32°F to 109°F) / 20% to 80% (no condensation)	30 UB / 34 UB				
		0 C to 45 C (52 F to 109 F) / 20% to 60% (110 condensation)					
(Operating humid		1006 to 16006 (1405 to 144005) 1200( to 000) (an analysis of					
Storage temperature (Storage humidity)		-10°C to +60°C (14°F to +140°F) / 20% to 80% (no condensation)					
Power requirement		AC 100 V to 240 V, 5.1 A to 2.2 A, 50 Hz / 60 Hz					
Power	AC 100 V to 120 V	506 W / 384 W	397 W / 288 W				
consumption		300 11 7 30 1 11	337 11 7 200 11				
(Mode: Standard	AC 220 V to 240 V	474 W / 363 W	378 W / 278 W				
/ Middle)		4/4 W / 303 W	3/8 W / 2/8 W				
Power	AC 100 V to 120 V	0.5 W (when "Standby mode" is set to "Low")					
consumption	46.000.1/1.040.1/						
(Standby mode)	AC 220 V to 240 V	0.5 W (when "Standby mode" is set to "Low")					
Power	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")					
consumption (Networked Standby mode)		2.0 W (Entry / 10.0 W (Fibraser) / 10.0 W (ALL Terminias and Networks Connected, When Standard Notes 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")					
Outside dimensions		Approx. W 460 x H 169 x D 494 mm (W 18 1/8 x H 6 3/4 x D 19 1/2 in) (without protrusions)					
Mass		Approx. 13 kg (29 lb)	Approx. 13 kg (28 lb)				
Optional accessories	Projection lenses	VPLL-3003 / 3007 / Z3009 / Z3010 / Z3024 / Z3032					

<sup>\*1</sup> With supplied standard lens 
\*2 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. 
\*3 The value is light output measured at center area of screen in Standard mode, and average of all products shipped. 
\*4 Estimated time until light output declines to 50 % varies depending on environment. 
\*5 The figures are approximate. They vary depending on the environment or how the projector is used. 
\*6 Available for VESA Reduced Blanking signal.

IEC 60825-1:2014 CLASS 1 LASER PRODUCT



As with any bright light source, do not stare into the beam, RG2 IEC 62471-5:2015.

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