VPL-FHZ70

5,500 lm (6,000 lm center) WUXGA laser light source projector

Overview

With advanced image technologies for highcontrast presentations and installation-friendly features

The compact, elegantly styled VPL-FHZ70 laser projector showcases cutting-edge Sony picture innovations and installation-friendly features — making it ideal for high-brightness projection applications in midsize corporate, education, and public environments.

The projector's long-lasting laser light source and newly developed 0.76-in 3LCD panel with incorporated optical compensator are augmented by powerful Reality Creation and color processing technologies by Sony. This ensures exceptionally high-contrast images with WUXGA resolution, true-to-life color, and very high 5,500 lumens brightness — ideal for delivering lectures and presentations with extra audience engagement.

Leveraging its long-term experience in laser projector development and analysis, Sony's Intelligent Setting function simplifies installation, offering four pre-sets that adjust brightness, cooling system, color and other projector settings for optimal performance in meeting/classrooms, museums, entertainment venues, and multi-screen setups.

With its compact "blend-in" design and widest vertical lens shift range in its class, the VPL-FHZ70 is ideal for installation even in

limited spaces, while extra flexibility's provided with accurately proportioned projection onto angled surfaces.

Features

High contrast, very high-quality 5,500 lumen images

The laser is complemented by a newly developed 0.76-in LCD panel with incorporated optical compensator. Combined with powerful signal processing technology, this ensures vivid images with crisp detail, ∞:1 contrast and natural, accurate color reproduction.

Advanced picture refinement technologies

Picture quality is boosted by Sony's unique super-resolution Reality Creation technology, which uses a powerful patternmatching database to optimize lower-resolution images, enhancing image clarity without increasing digital picture noise.

Intelligent Settings

Leveraging its long-term experience in laser projector development and analysis, Sony's Intelligent Settings offer four presets, optimizing brightness, cooling system, and other projector settings to suit all usage environments — simplifying installation for busy system integrators.

Wide Lens Shift

The industry's widest lens shift* capability of Vertical +70% gives greater flexibility for positioning the projector, and ensures that presenters or visitors aren't distracted by the projector's light source.

*In the range of 5000–6500 lm. As of February 5th, 2019, according to Sony research.

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 lens exchange.

Constant Brightness

Constant Bright maintains the same brightness throughout the 20,000 hours recommended lifespan.

Slim, attractive blend-in design

The slim, stylish body 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.

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: automated filter cleaning system removes dust every 100 hours.

Create super-size displays with Edge Blending

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

Built-in Auto Calibration

After extended periods, color can be automatically calibrated to the original factory condition. There's no need for extra calibration equipment or cameras; a built-in color sensor stores all the necessary information.



Networked control and monitoring

The projector is ideal for integration in AV environments with leading networked control, monitoring, and management systems, such as Crestron Connected™ and newly added Extron® XTP™ Systems.*

Specifications

Display system	
Display system	3 LCD system
Display device	
Size of effective display area	New LCD panel 19 mm (0.76 in) 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
Lens shift -	

^{*}Extron and XTP Systems are trademarks of RGB Systems Inc.



Powered/Manual	Powered
Lens shift - Range Vertical	-5%, +70%
Lens shift - Range Horizontal	+/- 32%
Light source	
Туре	Laser diode
Filter cleaning / re	placement cycle (Max.)*2
Filter cleaning / replacement cycle (Max.)	20000 H (service maintenance)
Screen size	
	1011

Screen size	
Screen size	40" to 600" (1.02 m to 15.24 m) (measured diagonally)
Light output *3	
Mode: Standard	5,500 lm*4 / 6,000 lm (Center)*5
Mode: Middle	4400 lm
Mode: Low	-



Color li	ight ou		
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Mode: Standard 5500 lm

Mode: Middle 4400 lm

Mode: Low -

Contrast ratio (full white / full black) *3

Contrast ratio (full white / full black)

∞:1

Displayable scanning frequency

Horizontal 15 kHz to 92 kHz

Vertical 48 Hz to 92 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
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,
Color system	PAL-M, PAL-N, PAL60

Horizontal	+/- 30 degrees
Vertical	+/- 30 degrees

INPUT OUTPUT (Co	omputer/Video/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

INPUT D	HDBaseT interface connector: 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
Acoustic Noise *3	
	36 dB



Lamp mode: Middle

Operating temperature / Operating humidity

Operating temperature /
Operating humidity

0°C to 40°C (32°F to 104°F) / 20% to 80% (no condensation)

Storage temperature / Storage humidity

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

Power requirements

Power requirements

AC 100 V to 240 V, 4.9 A to 2.0 A, 50 Hz / 60 Hz

Power consumption

AC 100 V to 120 V Mode: Standard: 483 W

AC 220 V to 240 V Mode: Standard: 468 W

Power consumption (Networked Standby Mode)

16.0 W (LAN)

20.7 W (HDBaseT)



AC 100 V to 120 V	20.7 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")
AC 220 V to 240 V	13.3 W (LAN) 18.7 W (HDBaseT) 18.7 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

Heat dissipation	
AC 100 V to 120 V	1648 BTU/h
AC 220 V to 240 V	1597 BTU/h

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

Dimensions (W x H x D) $460 \times 169 \times 515 \text{ mm}$

(without protrusions) 18 1/8 x 6 21/32 x 20 9/32 inches



Mass	
Mass	Approx. 16 kg (34 lb)
Optional accessori	es
Projection Lens	VPLL-3003 / 3007 / Z3009 / Z3010 / 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 figures are approximate. They vary depending on the environment or how the projector is used.
*4	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.



*5	The value is light output measured at center area of screen in Standard mode, and average of all products shipped.
*6	Available for VESA Reduced Blanking signal.