

SONY

VPL-FHZ85/FHZ80

3LCD Laser projectors



WUXGA

FHZ85 : 8,000lm (Center) 7,300lm

FHZ80 : 6,500lm (Center) 6,000lm



BrightEra™
Long Lasting Optics

Z-Phosphor
LASER LIGHT SOURCE



pro.sony/projectors

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



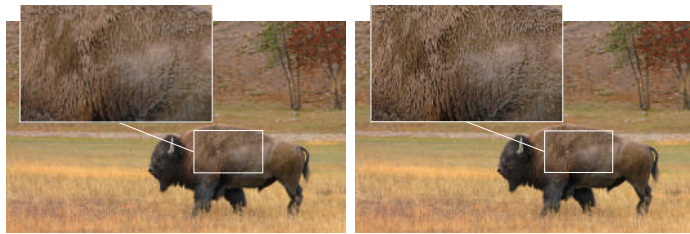
* VPL-FHZ85 ** As of August 2021 (according to Sony research), in 3LCD laser projectors of 8,000 lm center brightness

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



Reality Creation OFF

Reality Creation ON

Clearer image with more depth
Simulated images

For presentation materials

| sep | Oct | Nov | Dec | Fluctuation | ALL |
|-------|---------|---------|---------|-------------|----------|
| 8.881 | 222.632 | 262.564 | 263.128 | | 4455.510 |
| 4.089 | 18.866 | 33.999 | 58.457 | | 829.831 |
| 0.958 | 52.599 | 14.619 | 7.920 | | 538.070 |
| 3.422 | 66.561 | 50.126 | 49.577 | | 677.680 |
| 7.684 | 45.217 | 26.525 | 24.551 | | 493.314 |
| 5.169 | 21.306 | 46.792 | 65.019 | | 511.122 |
| 9.830 | 12.148 | 49.696 | 8.679 | | 657.284 |
| 8.729 | 5.935 | 40.806 | 48.924 | | 748.210 |
| 9.840 | 31.805 | 37.509 | 37.590 | | 636.501 |

Reality Text OFF

| sep | Oct | Nov | Dec | Fluctuation | ALL |
|-------|---------|---------|---------|-------------|----------|
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| 9.840 | 31.805 | 37.509 | 37.590 | | 636.501 |

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 | Entertainment | 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.



Market-available Projector



VPL-FHZ85/FHZ80

Simulated images

Sophistical spatial design and installation flexibility

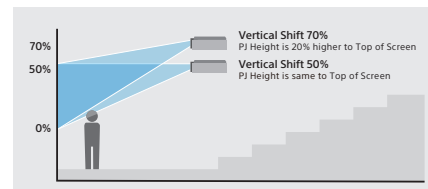
Smallest*, lightest* in its class with attractive blend-in design

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

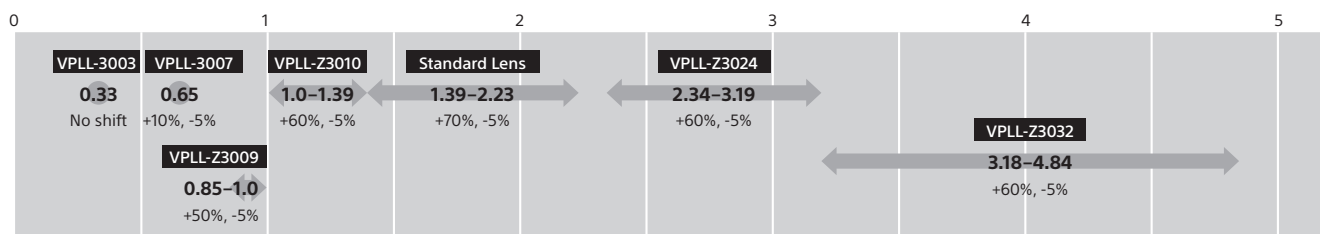
Wide Lens Shift

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

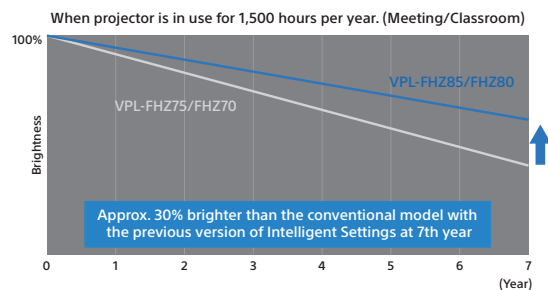


Extended brightness

Intelligent Settings

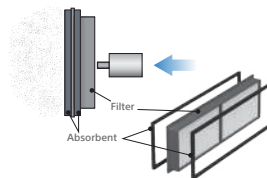
The Intelligent Settings function simplifies installation and maximizes performance based on usage, image detail, color richness, color fidelity, light output, cooling level and output noise.

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



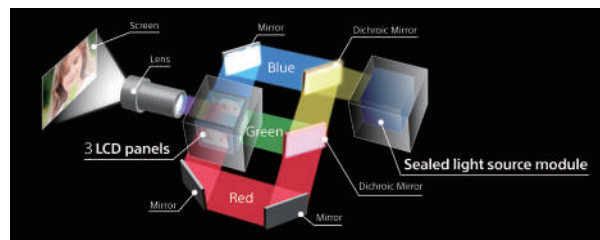
Hassle-free Automatic Filter Cleaning

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.

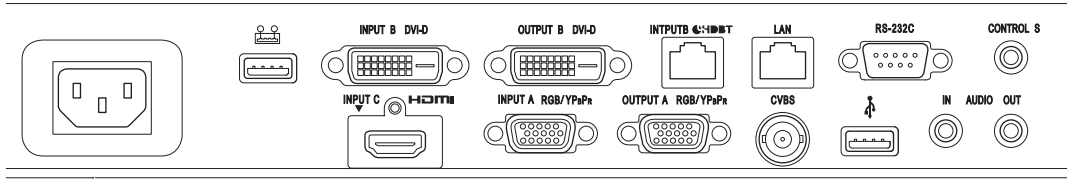
Auto Input Select

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 | Powered (Approx. x 1.6) | |
| | Focus | Powered | |
| | Lens shift | Powered, Vertical: -5%, +70%, Horizontal: +/- 32% | |
| | Throw ratio | 1.39:1 to 2.23:1 | |
| Light source | Laser diode | | |
| Screen size | 40" to 600" (1.02 m to 15.24 m) (measured diagonally) | | |
| Light output (Mode: Standard / Middle) | | 7,300 lm*2, 8,000 lm (Center)*3 / 5,840 lm | 6,000 lm*2, 6,500 lm (Center)*3 / 4,800 lm |
| Color light output (Mode: Standard / Middle) | | 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) | | ∞:1 | |
| Displayable scanning frequency | Horizontal | 15kHz to 93kHz | |
| | Vertical | 23Hz to 63Hz | |
| Display resolution | Computer signal input | Maximum display resolution: 1920 x 1200 dots*6 | |
| | 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: +/- 30 degrees Horizontal: +/- 30 degrees | |
| Input / Output (Computer / Video / Audio / Control) | INPUT A | RGB / Y P _B P _R 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 DC 5 V | |
| | USB | TYPE-A (for F/W update), TYPE-A (for Power supply) | |
| Acoustic noise (Mode: Standard / Middle) | | 38 dB / 36 dB | 36 dB / 34 dB |
| Operating temperature (Operating humidity) | | 0°C to 45°C (32°F to 109°F) / 20% to 80% (no condensation) | |
| Storage temperature (Storage humidity) | | -10°C to +60°C (14°F to +140°F) / 20% to 80% (no condensation) | |
| Power requirements | | AC 100 V to 240 V, 5.1 A to 2.2 A, 50 Hz / 60 Hz | |
| Power consumption (Mode: Standard / Middle) | AC 100 V to 120 V | 506 W / 384 W | 397 W / 288 W |
| | AC 220 V to 240 V | 474 W / 363 W | 378 W / 278 W |
| Power consumption (Standby mode) | AC 100 V to 120 V | 0.5 W (when "Standby mode" is set to "Low") | |
| | AC 220 V to 240 V | 0.5 W (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") | |
| 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 | |

*1 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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