



**SONY**

# Corporate and Education solutions range guide

February 2019

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## The Sony Solution

When it comes to professional AV technology, Sony provides much more than just great products. We create solutions that make visual communications and knowledge sharing even smarter and more efficient.

We empower organisations of every industry, sector and size with advanced audio-visual tools that help them go further. From schools to universities, small business to big business, retail to automotive and more, we have the perfect solution.

Our comprehensive suite of TEOS solutions intelligently manage all of your connected devices, while our powerful collaboration tools enable real-time knowledge sharing. Discover new levels of detail with our class-leading BRAVIA Professional Displays, and take your presentations further with our bright, captivating range of Projectors.

Support is at the heart of everything we do. With our PrimeSupport packages, you'll always get the best service for your business. With specialist advice and a host of support features included as standard, we've got you covered.

For full product features and specifications please visit **pro.sony**



For more on PrimeSupport visit [pro.sony/EU-PrimeSupport](https://pro.sony/EU-PrimeSupport) 



## You've got our support

Your business can't afford unscheduled interruptions. Our PrimeSupport packages plus optional extras make sure you're covered with the perfect level of support.



### PrimeSupport Pro

Our initial **PrimeSupportPro** packages go beyond a standard warranty with access to expert technical assistance. Our multilingual helpdesk can answer everyday questions on setting up and using your product by phone or email. And if you do need repairs, we'll organise things quickly and efficiently, with free shipping and no hidden costs.



### PrimeSupport Elite

If you're looking for even more peace of mind, upgrading to **PrimeSupportElite** could be the option for your business. We'll keep you up and running with our fast-track repair service that includes all shipping costs. And – depending on your product – we may offer to loan a replacement unit\* while yours is being repaired. For certain models, we now offer an Advanced Replacement extension where we will ship out a replacement model within 48 hours.



### PrimeSupport On-Demand

Everybody's business is different. A selected number of our products are also eligible for **PrimeSupportBespoke**, and **PrimeSupportOn-Demand**, tailored solutions for organisations with the most demanding requirements for service and support. With options like next working day spares and on-site technical assistance, there's no better choice when dependable performance of your AV communications infrastructure is most crucial.



### PrimeSupport Bespoke



Find your local telephone number to contact our technical support team on our website [pro.sony/EU-PrimeSupport](https://pro.sony/EU-PrimeSupport), or e-mail [primesupport@sony.com](mailto:primesupport@sony.com)

Monday - Friday 09:00 – 18:00 (Central European Time), excluding local national holidays. Support is available in English, French, Italian, German & Spanish and is free for most European countries.

† Specific product cover may vary. Please visit [pro.sony/EU-PrimeSupport](https://pro.sony/EU-PrimeSupport) for full details.

# Workplace solutions for a changing world

**Transformation. It's the buzzword that's reshaping the very idea of what a workplace should be.**



No longer is an office simply a place of work. It's a space that facilitates collaboration, unlocks creativity and increases productivity.

As a result, the expectations and pressures on workplace managers have grown considerably. Employees want intuitive ways to share and present work. IT managers demand total security and connectivity. Senior management want to promote consistent and high-quality branding throughout the premises.

And facilities managers have a vested interest in workplace design and data analysis to help boost efficiency.

Our goal is to help you not only meet these expectations, but to surpass them. We've designed our corporate solutions to cover every aspect of workplace management, from room booking to data analysis, virtual receptions to digital signage – all displayed on stunning 4K professional displays.

## 1 Reception

Enable guests to check themselves in, sign terms and conditions forms and report their arrival

Entertain and inform with news or brand messaging on our stunning BRAVIA 4K Professional Displays

## 2 Common areas

Inform and ensure branding consistency with digital signage and floorplans displayed on BRAVIA screens

Analyse booking and occupancy rates with workspace analytics

## 3 Large meeting room

Control lights, projectors and any other AV equipment straight from your device

Collaborate with remote participants via Vision Exchange and communicate with Skype for Business

Check room availability and book it with a tap of a button  
Put an end to ghost rooms and unused spaces

## 4 Small meeting room

Check room availability and book it with a tap of a button

Mirror content wirelessly onto BRAVIA screens

Put an end to ghost rooms and unused spaces

Monitor the operating status of devices to catch issues before meetings are disrupted

## 5 Operations room

Use a single and comprehensive solution to manage all your AV devices and signage content

Lower energy costs and improve environmental impact by scheduling device activation

Analyse data to get a better understanding of your workplace

Set custom alerts in the case of emergencies

Create engaging signage and display instantly around the office

## 6 Auditorium

Wow your audience with brilliant visuals from 3LCD laser projectors, and benefit from a far lower cost of ownership (no bulbs to be replaced)

Manage projectors from a single dashboard

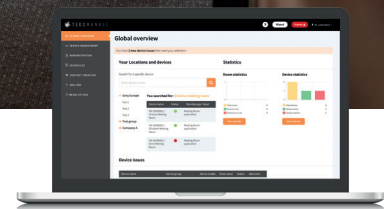
Record presentations at broadcast quality

Stream live and share presentations

# TEOS Solutions Overview

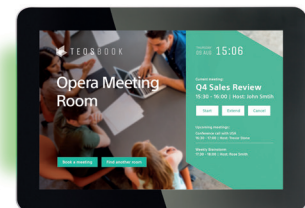
## TEOS Manage

Manage your workplace from a single, intuitive dashboard



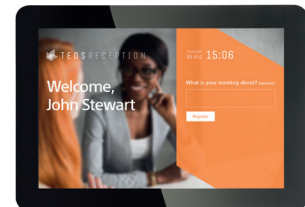
## TEOS Book

Check meeting room availability, book rooms and review activity from a stylish room booking tablet



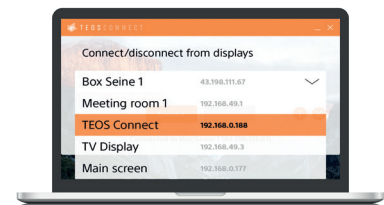
## TEOS Reception

Enable guests to check in with our virtual receptionist on a range of tablets



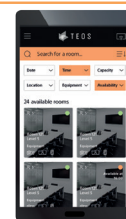
## TEOS Connect

Mirror content wirelessly from your device to large displays



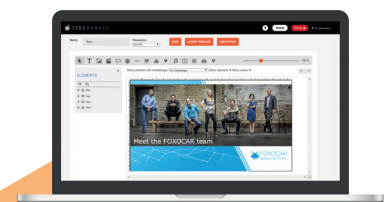
## TEOS Employee App

Take control of all the connected devices in a meeting room from your phone



## TEOS Signage

Easily create impressive signage and schedule across a wide range of displays





# TEOS Manage

## Streamline your workday, from start to finish

Make your working environment smarter and more productive with TEOS Manage – the workplace management platform from Sony. The systems give AV/IT, facilities and communications managers full control over devices, signage and content across the whole workplace ecosystem, from meeting rooms to reception areas. And, as your needs evolve, you can add further solutions with ease, including TEOS Book, TEOS Reception or TEOS Remote.

The result is simple yet systematic working, tighter team collaboration and intuitive management tools for all your facility and resource needs.

### Integrated management solutions

#### Manage all your networked devices

Enjoy a dashboard-style overview of devices; locations, activity status, green management settings and device issues.

#### Scheduled payout

Push content such as images, signage and videos to individual devices, zones or across the whole network. It's easy to manage and review payout schedules to ensure that the right content is displayed on the right screen, at the right time.

#### Group devices by location

With TEOS Manage, users can control, monitor, update and group displays by building, floor or area. Furthermore, adding more devices is easy with the network auto-discover function.

#### Receive device alerts

See the operating status of all connected display devices and receive alerts when one stops working.

#### Green management settings

Schedule on and off times for each display to save energy when devices are not in use.

### Simplicity

#### Cloud or on-site local deployment

Offering exceptional flexibility and easy access to TEOS Manage whenever and wherever a user needs. Alternatively, you can opt for local deployment and benefit from enhanced levels of security.

#### Easily create digital signage

Create colourful, eye-catching, and touch-interactive signage and distribute it across networked screens. For non-technical users, a revolutionary "e-mail to signage" feature simplifies the workflow – just email a PowerPoint slide to a chosen address.

#### Send emergency alerts

Push urgent alert notifications to all connected displays – such as directions to fire exits.

#### Wide device compatibility

TEOS Manage is compatible with most IP-enabled devices including Sony, LG, Samsung and Philips display screens, tablets and projectors that use PjLink (e.g. Epson or Panasonic, etc). For all other brands, TEOS Player can be integrated to enable signage management.

For full product specifications and features please visit [pro.sony/TEOS](https://pro.sony/TEOS)



# TEOS Manage Specifications

Facility Management	Number of sites/rooms	No limitation
	Advanced analytics	Yes
	Alerts	Yes
Users	Number of users	No limitation
	Database compatibility	Active Directory
	Rights Management	Advanced access customization
Control	IP control	Yes
	Scheduling	Yes
	Sony compatibility	Professional BRAVIA, projectors, tablets*
	Projector	Pjlink IP protocol
	Other displays compatibility	Yes – Samsung SSSP3 or higher; LG (SNMP); Philips (IP control); etc
Reception	Virtual Reception	Yes (TEOS Reception)
	Notifications	SMS and e-mail
	Badge Printing	Yes**
	Guests Database	Yes (Export functions available)
Meeting room	Calendar compatibility	Google Calendar, Microsoft Exchange, Office 365
	Customizable background	Yes
	Customizable inputs titles	Yes
	Lockable secured interface	Yes
	Scheduling	Yes
	Room control	Yes (TEOS Remote)
	Room booking	Yes (TEOS Book) with tablet to show/book/cancel or auto release a meetings
Signage	Content creation	Yes (Simple, and Advanced)
	Main functions	Template design, Facebook, Instagram, Twitter, YouTube, websites, interactive content, PowerPoint, streamings, weather reports, RSS feeds
	Picture format	BMP, JPG, GIF, PNG
	Video format	AVI, MPG, WMV, H264
	Sound format	WAV, MP3, streaming
	Monitoring	Mail
	Scheduling	Yes
	Emergency alarms	Yes
	Content creation elements	Text, image, video element, graphics, TV, website, ticker, date and time, YouTube and audio stream, etc
	External data integration	Function list to show system is open
	Basic signage via email	Yes
	Touch interactive signage	Yes
Deployment	Local server (min requirements)	<ul style="list-style-type: none"> <li>• Min Windows 2012 / 16GB</li> <li>• IIS</li> <li>• Net framework 4.5</li> <li>• MSSQL Server</li> <li>• 40GB of available space</li> </ul>
	Alternative deployment	Cloud
Licences	TEM-SRV100	Server software
	TEM-CO10	License for Simple Control use (1 per device required)
	TEM-MR10	License for Meeting Room use (1 per device required)
	TEM-TA10	License for tablet use (1 per device required)
	TEM-DS10	License for Signage use (1 per device required)
Warranty	Standard warranty	1 year for support and new features firmwares
	Extensions	PSP.TEM100.1X – 1 additional year for support and new features firmware. 1 per device required
		PSP.TEM100.2X – 2 additional years for support and new features firmware. 1 per device required
		PSP.TEM100.4X – 4 additional years for support and new features firmware. 1 per device required

\* TEOS Tablets: TEB-7DSQPM, TEB-10DSQPL, TEB-15DSKP, TEB-22DSK \*\* List of compatible printers available on demand



PrimeSupport  
Pro

PrimeSupport  
On-Demand

For full product specifications  
and features please visit  
[pro.sony/TEOS](http://pro.sony/TEOS)



# Collaboration Solutions

## Vision Exchange

Enhance teaching, learning and business communications with these intuitive, cost effective solutions for real-time knowledge sharing and more focused collaboration.

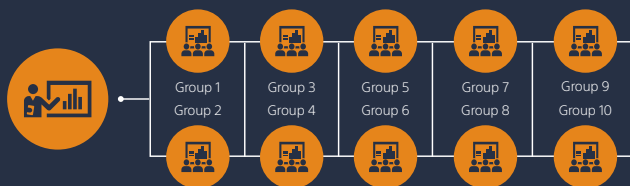
### Active learning

Inspire and engage with our interactive workgroup-based active learning solution for universities, colleges and corporate meeting rooms.

### Share and engage

Let users share multimedia presentation content, bringing in other participants at remote locations to join the discussion as needed.

### Connect 10 workgroups with up-to 6 contributors per group



### Interactive Lecture

Lecturers can easily present using a range of sources and devices, effortlessly switching multiple types of content controlled by a tablet or smartphone. Content can be displayed from virtually any source, including faculty laptop PCs, documents camera and Blu-ray players, whether you're using the main unit of pod software.

You can also share images wirelessly from personal, portable devices (BYOD).

The personal note taker feature supports interactive capture and note-taking. Simply connect to the main material, capture images, write notes and save all content together during live sessions.

For full product specifications and features please visit [pro.sony/presentation-tools](http://pro.sony/presentation-tools)

# The dynamic, collaborative Active Learning Solution

Vision Exchange is the uniquely powerful and intuitive active learning solution that brings together students, lecturers and presenters. Ideal for knowledge sharing and brainstorming ideas, this immersive environment boosts audience engagement by directly involving everyone in the learning process. Cost-effective, flexible and easy to configure, Vision Exchange is ideal for universities and colleges.

## Easily share knowledge and ideas

Vision Exchange lets presenters and lecturers easily share information, with the freedom to move around the teaching space in a truly active learning environment. Information can be shared from teacher to student, student to teacher, or through active collaboration with workgroup sharing. Connect up to 10 workgroups with up to 6 contributors per group.

## Collaboration with any device

Vision Exchange is created for today's BYOD (Bring Your Own Device) classrooms and lecture theatres. Students can work collaboratively in small independent workgroups or clusters, creating content with their own tablets, laptops and smartphones to share wirelessly with other group members, workgroups and lecturers.

## Annotation and whiteboard tools

Lecturers can enhance their presentations with easy-to-use annotation tools: draw and sketch to emphasise what's on screen, or bring up the whiteboard with handy digital tags.

## Easy video collaboration

Video collaboration is possible with native support using Skype for Business, with overlaid annotations or whiteboard images for even more effective communication.

## Lecture capture and recording ready

Every system installed is 'recording ready' making the deployment of lecture capture to every teaching space flexible and simple, without the need for dedicated local room recording hardware.

## Active learning (optional license)

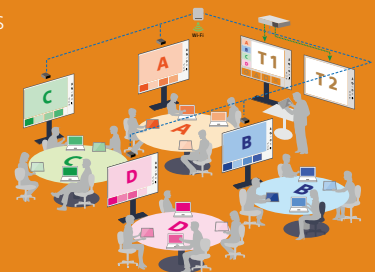
Adding an optional active learning license lets students 'mirror' their own devices and share content with other groups in the room or on the main presentation screen via simple drag-and-drop gestures under the lecturer's control.

## Streaming output (optional license)

Stream content from the main view to a central server for lecture capture, recording or live distribution. Record directly to UbiCast MIRIS Netcapture.

## Scalable and cost effective

Vision Exchange provides a dynamic and flexible solution to suit any teachingspace. It's easy and cost effective to expand Vision Exchange by adding further active workgroup 'pods'.



## Active Learning class workflow



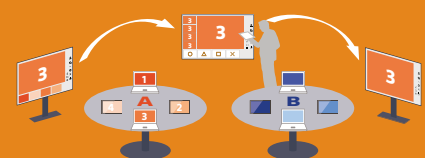
### SHARE TO CLASS

- Easy sharing for teacher's materials (laptop/tablet images, documents, camera, HDMI inputs, etc.).
- Any image on the main view will be shown to all work group POD displays in full screen when "Pod share" button is pressed.



### ACTIVE GROUP DISCUSSION

- Any student can easily mirror their BYOD content. Enhance discussion by simple switching, annotation/digital tag whiteboard mode.
- Teacher can monitor and select any group's information, then share to all other group screens.



### PRESENT AND FEEDBACK

- Quickly drag & drop to share anyone's screen.
- Promptly reflect teacher or student/group comments with real-time annotation to feedback.

# Collaboration solutions for corporate environments

## Conference Rooms

Today's conference rooms often harbour a confusing tangle of cables, switchers, video conferencing systems and other hardware. Hard to set up and operate, they're a frequent cause of wasted time as presenters struggle with awkward wiring instead of focusing on the meeting itself.

Vision Exchange streamlines conference room communications, allowing every participant to concentrate on business with fewer distractions and less stress.

Room occupants can share content from their own laptops, tablets and smartphones, with participants overlaying real-time 'whiteboard' annotations to images presented from their personal devices. Vision Exchange also extends collaboration globally, allowing rich interactive communication with colleagues at remote locations.



## Interactive Collaboration Solution

PEQ-C100	Main unit with HDMI x2 input, including 1st year hardware and software update program
PEQ-C130	Main unit with HDMI x4 input, including 1st year hardware and software update program
PES-C10 <sup>1</sup>	Pod PC software, including 1st year software update program
PEQA-C10	Optional Active Learning software for PEQ-C100/130
PEQA-C30	Optional H.264 IP Streaming software for PEQ-C100/130 & PES-C10

## Hardware and Software Support

PSP.PEQC100.E1X	Additional 1 year Hardware support for PEQ-C100 main unit
PSP.PEQC130.E1X	Additional 1 year Hardware support for PEQ-C130 main unit
PEQ-C1SU	Additional 1 year Software Update Program support for PEQ-C100 and PEQ-C130
PES-C1SU	Additional 1 year Software Update Program support for PES-C10

<sup>\*1</sup> Customer is required to locally provide physical mini 'Pod' PC to specifications provided by Sony.

Features	Vision Exchange PEQ-C100 Main Unit	Vision Exchange PEQ-C130 Main Unit	Vision Exchange PES-C10 POD
Interactive Lecture System	Yes	Yes	Yes
Main Unit for Active Group Learning System	Yes	Yes	No
Active Group Learning	Yes	Yes	Yes
Connected Displays	2	2	1
BYOD Mirror Connections	6 plus # POD views	6 plus # POD views	6
Device Bandwidth Control	Yes	Yes	Yes
HDMI Input	2	4	Yes <sup>3</sup>
Whiteboard, Annotation, Snapshot	Yes	Yes	Yes
Multi Group Sharing	Yes	Yes	No
Multi User Control	Yes	Yes	Yes
Skype 4 Business <sup>2</sup>	Yes	Yes	Yes
Active Learning Option	Yes	Yes	Yes
H264 IP Streaming Option	Yes	Yes	Yes

<sup>\*2</sup> Customer is required to locally provide and install Microsoft Office Skype for Business licensed software.

<sup>\*3</sup> Customer is required to locally provide and purchase HDMI-USB convertor and adaptor unit.

## Training Programme

TRN.EDU.P.1	1 day training covering user operation and administration operation
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See page 5 for further details

Products	Reference	Support	Duration
Vision Exchange Device	PS.PACK4.ADVEXCH.1		1 year
PEQ-C100	PSP.PEQC100.E1X	Hardware	1 year extension
PEQ-C130	PSP.PEQC130.E1X	Hardware	1 year extension

See page 5 for further details

Vision Exchange Hardware

Support for our Collaboration Solutions is available with **PrimeSupportOn-Demand**. One working day (**PSP.CE.INITDAY.1**), initial solution setup (**PSP.CE.TRAINDAY.1**), training delivery (**PSP.CE.ONSITEDAY.1**) or maintenance. We can also deliver resource to adapt the solutions to your requirements (**PSP.CE.CUSTOMDAY.1**) Scope of work must be agreed before intervention.

## Vision Exchange Software Update Programme

Model	Code
<b>PEQ-C100 &amp; PEQ-C130</b> <b>Annual Software Update Program</b> Valid access to install new software versions as released including entitlement of new features, continued BYOD OS device support, vulnerability support and bug fixes.	<b>PEQ-C1SU</b>
<b>PES-C10</b> <b>Annual Software Update Program</b> Valid access to install new software versions as released including entitlement of new features, continued BYOD OS device support, vulnerability support and bug fixes.	<b>PES-C1SU</b>

For full product specifications and features please visit [pro.sony/presentation-tools](http://pro.sony/presentation-tools)



## Sharing your knowledge has never been easier

UbiCast orchestrates every phase of producing and delivering rich video content - from recording and editing to publishing, managing and user analytics.

### A WORLD OF APPLICATIONS

- **Lecture capture:** Digitise lectures and deliver them as searchable, engaging videos.
- **MOOC creation:** Easily create high quality interactive learning videos for Massive Open Online Course programmes.
- **Online training:** Create engaging, flexible video training modules for employees, customers and partners.
- **Webcasting:** Stream conferences and events to a global audience, live or on demand.



### Miris Netcapture

In collaboration with Sony, UbiCast presents **Miris Netcapture!**

Replace in-classroom recorders with software in your datacenter. The Miris Netcapture + Vision Exchange combination makes every classroom capture ready.



No more room booking issues.



Enable every classroom for BYOD at no additional cost.



A scalable and cost-effective solution.

### MediaServer

Your reliable, smart video platform:

- Centralize the delivery of your videos.
- Index your existing content and find precise sequences with a powerful search engine.
- Encourage contribution with WebStudio and the most advanced social learning features.



Index & search



WebStudio: screen & webcam recorder



Cloud or on site deployment

### A social experience for your learners

- Watch your videos in our interactive player.
- Adjust playback speed and image quality.
- Enhance your videos with attachments, comments or even external links associated to a moment of the video.
- Engage your audience with quizzes and surveys.



Social Learning



Polls & Quizzes



Time-based annotations



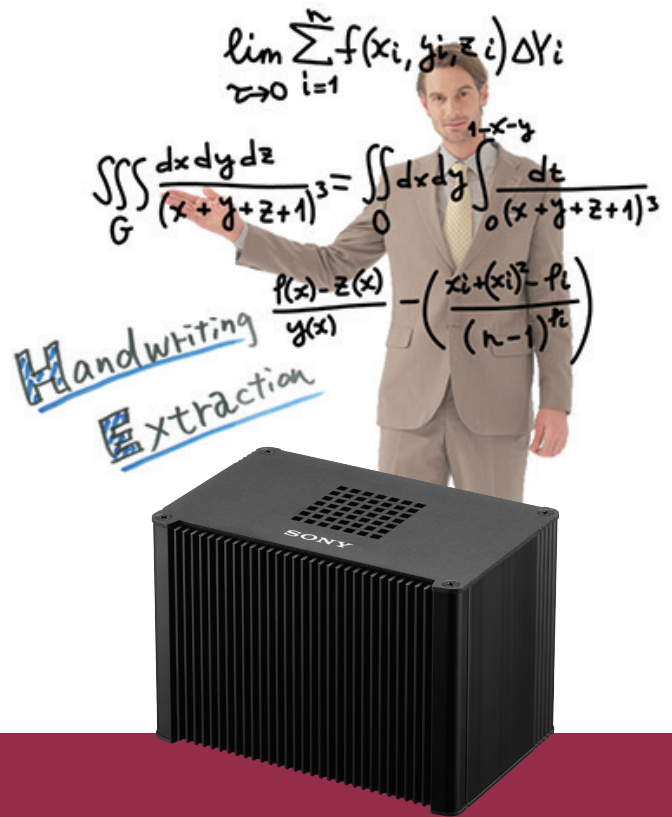
Dynamic Rich Media

With Dynamic Rich Media (DynRM) you are more than just a viewer, you can create the content you want to watch. Click on one of the video tiles to zoom in and focus on the area you are interested in. Up to 6 simultaneous sources can be synchronized.

# Edge Analytics Appliance

Adding more intelligence to every presentation

The REA-C1000 Edge Analytics Appliance brings an exciting new dimension of audience engagement to lectures, MOOCs, government and corporate presentations.



Advanced built-in AI-based video technology analyses the input it receives from connected cameras. The result of this analysis is applied in combination with camera feeds and other image sources to create high-quality video content that can be displayed live or recorded. Acting as the smart hub of a connected AV setup, the compact and light-weight REA-C1000 allows educational institutes and corporate organisations to automatically generate compelling video content in real time – without the expense and complexity of dedicated production teams and specialised additional equipment. The REA-C1000 offers a range of powerful presentation features that are available via optional licenses:

## Handwriting extraction & presenter overlay

The REA-C1000 intelligently extracts handwritten text and diagrams from black and white boards. This can be displayed as a real-time overlay that 'floats' in front of the presenter, allowing audiences to clearly see written content with enhanced colour and contrast as well as gestures and expressions of the presenter.

## Chroma key-less CG overlay\*

Based on Sony's advanced motion detection technology, this feature can extract the presenter's image, overlaying it onto any background image or movie without the need for a dedicated chromakey system or specialist operator.

## PTZ auto tracking

The REA-C1000 can serve as a virtual camera operator, controlling a connected PTZ camera to track the current presenter smoothly, keeping them accurately framed and sharply focused as they move around or turn their back to the audience.

## Focus area cropping\*

Using this feature, an image from one camera can be simultaneously shown as two different output images. Connected to a 4K camera, the REA-C1000 can simultaneously output a wide-angle view in 4K resolution and a cropped view of the same presenter in FHD. The cropped image can also be selectable as static or dynamic.

## Close-up by gesture

The REA-C1000 can react intelligently when an audience member stands up to speak, triggering the camera to zoom in and frame the new speaker.

\* These features will be available through a software update during 2019.





TDM Digital Signage models:  
TDM-DS1Y:  
1 year  
TDM-DS3Y:  
3 years

# TDM Digital Signage

Inspire customers with affordable, effective digital signage

Operate your screens from a centralised or decentralised location with the content you want – anytime and any place. You can now do it all with our new generation of digital signage software.



## Multiple screens and locations simultaneously

You can place content both centrally and decentrally on a single or even a cluster of screens from one operating system.



## Alerts

Possibility to send alerts centrally.



## RSS feeds

Keep up on all the latest news, weather forecasts, traffic reports and stock market information.



## Show images

Show your favourite images via a media library.



## Show websites

Ability to show websites.



## Interactive

Possibility to show specific content based on an action.



## Streaming video

YouTube, Vimeo, RTSP. It is even possible to show parts of videos.



## Social media

Feeds from e.g. Twitter, Facebook and LinkedIn.



## Live statistics

Based on emotion detection.

TDM Digital Signage is developed for **SONY**



PrimeSupport  
Elite

See page 5 for  
further details

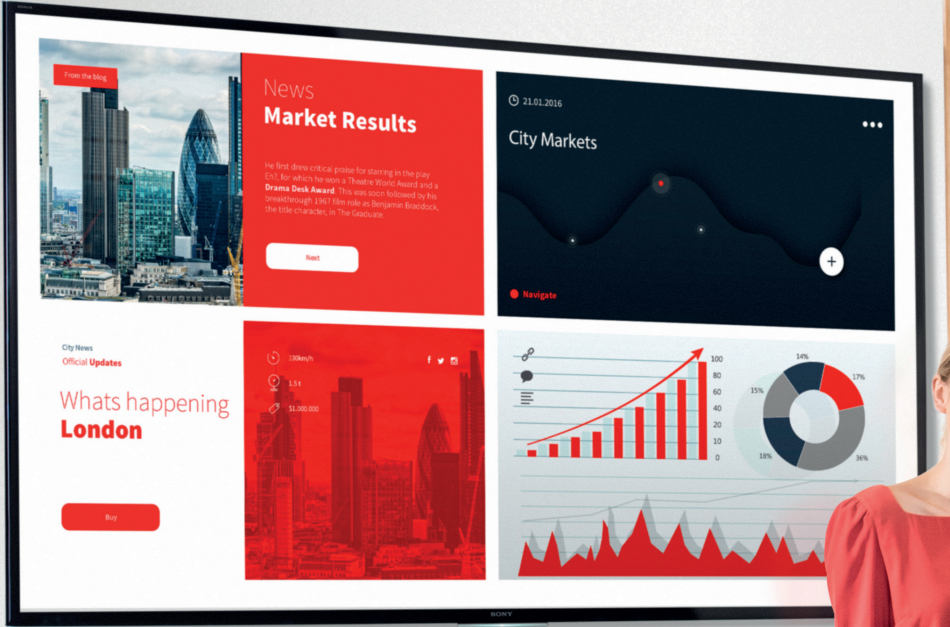


PrimeSupport  
On-Demand

See page 5 for  
further details

For full product specifications  
and features please visit  
[pro.sony/professional-displays](http://pro.sony/professional-displays)





# Crystal LED

## Display System

The ultimate big-screen display solution, delivering ultra-real visual experiences on virtually any scale.

### Crystal LED Display System

- Spectacularly immersive high-contrast images with unprecedented depth and detail.
- Crystal clarity, with no image artefacts or picture noise.
- Exceptionally wide viewing angle, with no colour shift from any viewpoint.
- Seamless images on any scale, with no visible gaps or tiling lines between display modules.



SONY

Crystal LED

Sony Solutions

## A blank canvas comes to life

Crystal LED turns the world's biggest ideas into thrilling visual reality – from automotive and industrial product design, theme parks, museums and galleries to corporate lobbies, boardrooms and broadcast studios.



### Industrial Design

#### Redefining reality

Our ultimate display solution brings the world's biggest ideas to life in the world of industrial product design and manufacturing. Simulate every step of the design process with groundbreaking, borderless design. Multiple panels can be seamlessly tiled to create super-sized displays with any dimension or aspect ratio and no bezels or visible gaps.



### High End Retail

#### Overwhelming visuals on any scale

With 10-bit colour depth, wide colour gamut (140% of sRGB) and a maximum rate of 120 frames per second, our Crystal LED display system offers astonishing pictures and superb contrast at more than 1,000,000:1. And with brightness of up to 1000 cd/m<sup>2</sup> (1000 nits), your customers will experience every fine detail.



### Corporate Boardrooms

#### A stunning image at any angle

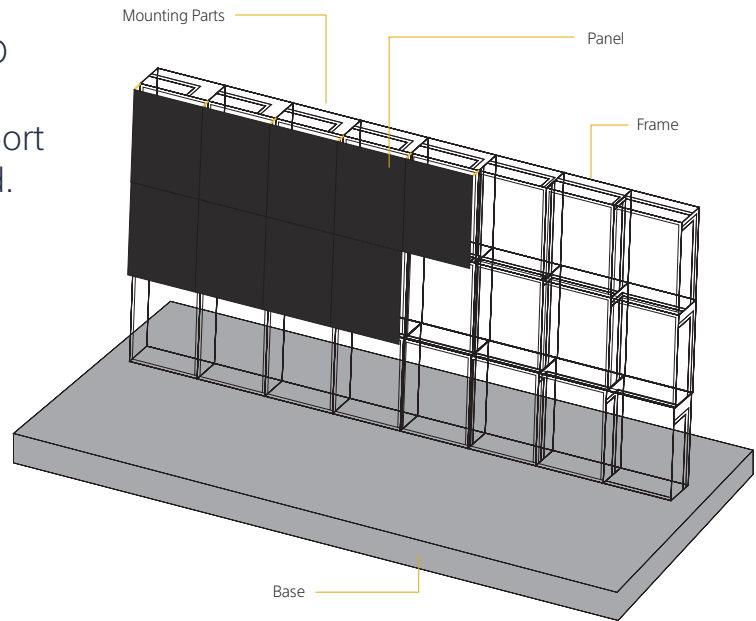
Our Crystal LED display system offers a viewing angle of virtually 180 degrees so that anyone, no matter where they are in the room, can see the full picture, even in dimly lit environments. And because moving images are blur-free with near-instant response and a maximum refresh rate of 120 fps, it's perfect for bringing video conferences to life.

# Crystal-LED Display

Sony's dedicated team of Crystal-LED specialist engineers manage the full design, installation, service and support so you have complete peace of mind.

## Crystal LED Display Base & Frame

Multiple Crystal LED Display Units and controller are integrated with the customised base and frame to create a complete large-scale display solution. The highly rigid frame structure ensures excellent positioning accuracy and stability for each display module. The accompanying base unit is carefully installed, using digital levelling measurement to ensure absolutely precise alignment.



Crystal LED Display Unit - ZRD-2



Crystal LED Display Controller - ZRCT-200

Specifications	Crystal LED Display Unit - ZRD-2
Method	Self Light Emitting Display
Light emission device	Sony Original Developed Super Micro LED (RGB in 1pixel)
Pixel pitch	1.26mm
Black area	>99% (Ratio of display area except lighting point area)
Unit resolution (W x H)	320 x 360 (115,200pixels)
Unit size (mm/inch) (W x H x D)	403.2 x 453.6 x 100 / 15 7/8 x 17 7/8 x 4
Unit area (sqm/sqft)	0.18 / 1.97
Unit weight (kg/lb)	10.0 kg / 22 lb. 0.74 oz.
Cell module resolution (W x H)	80 x 120 (9,600pixels)
Cell module size (mm/inch) (W x H)	100.8 x 151.2 / 3 31/32 x 5 15/16
Cell module configuration (W x H)	4 x 3 in 1 unit (12 Cell Modules in 1 unit)
Brightness (nit = cd/m2)	Maximum 1,000, Colour Temp D93
Contrast ratio	more than 1,000,000:1
Viewing angle	Almost 180°(H/V)
Display native Colour space	140% wider than sRGB
Input signal	10bit
Signal interface	1 in 1out (2x RJ45) (Unit-Controller or Unit-Unit)
Signal cable (Unit-Controller, Unit-Unit)	Cat.7 Ethernet Cable
Power In/Out	1 AC Inlet, 1 AC Outlet (AC Inlet: IEC C13, AC Outlet: IEC C14 x1)
Power requirements	AC200-240V, 50/60 Hz, Single Phase
Average power consumption (per Unit)	100W
Average power consumption (per sqm)	550W (approx.)
LED lifespan (half brightness)	87,600hour
Storage temperature	-20°C-60°C
Operation humidity	20-80% (No condensation)
Storage humidity	20-80% (No condensation)

Specifications	Crystal LED Display Controller - ZRCT-200
Maximum control number of display unit	72(6unit/1port x 12port)
Maximum input resolution	W3840 x H2160
Maximum input frame rate	120p
Video input	HDMI (HDMI2.0a) x 2 *HDCP Compliant, DisplayPort(DP1.2) x 2
Unit output	RJ45 x 12
Maximum power consumption	90W
Controller size (mm) (W x D x H)	440 x 349 x 65 (without protrusions) 440 x 367.3 x 75 (incl. protrusions) *1.5U 19inch Rack
Controller size (inch) (W x H x D)	17 3/8 x 13 3/4 x 2 5/8 (without protrusions) 17 3/8 x 14 15/32 x 2 15/16 (incl. protrusions) *1.5U 19inch Rack
Storage temperature	-20°C-60°C
Operation humidity	20-80% (No condensation)
Storage humidity	20-80% (No condensation)

For full product specifications and features please visit [pro.sony/Crystal-LED](http://pro.sony/Crystal-LED)

See page 5 for further details  
PrimeSupport Bespoke



# Projectors

From classrooms and offices to lecture halls and auditoriums, Sony projectors deliver outstanding quality, reliability and energy-efficiency in every kind of venue.

## Installation projectors

### Outstanding image quality

Our laser projectors are ideal for a wide range of high-end business, education or large-scale applications. The powerful Z-Phosphor laser light source is teamed with Sony's advanced 3LCD projection engine to deliver extremely bright, rich, and stable colours. For everyday applications and environments, our lamp projectors offer the same advanced 3LCD projection engine with cost-effective features that deliver the same high-quality performance.

### Highlights - laser or lamp technology

- Powerful, WUXGA & WXGA resolution images.
- Models range from 4,000 to 12,000 colour and white light output.
- Easy, flexible installation.
- Energy-saving features.

## Business and education projectors

### Including portable and Ultra Short Throw

For classrooms or meeting spaces, our portable and desktop projectors are lightweight, durable and easy-to-use, combining outstanding performance with cost-efficiency. Wireless connectivity enables presentation direct from your PC. If space is limited, our Short Throw and Ultra Short Throw models produce big, bright images without needing to be far from the screen, whiteboard or wall.

### Highlights

- 3LCD BrightEra™ technology.
- Smart ECO features.
- Long lamp life.
- Options with XGA or WXGA resolution.
- Models range from 2,600 to 4,300 colour and white light output.



PrimeSupport  
Pro

See page 5 for  
further details



PrimeSupport  
Elite

See page 5 for  
further details



19%

### GERMANY

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### RUSSIA

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74%

### CHINA

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41%

# D-200 Series



Four compact and lightweight economical desktop projectors for office and classroom, offering high performance, superior quality and ease of use.

## High Image Quality

XGA and WXGA resolution, our new D-200 Series projectors feature new Vivid Mode for a much more brilliant, richer and stable colour experience.

## Easy Connectivity

Two HDMI ports and a USB power supply port (5V 2A max) simplify connection with laptops plus other devices like 'stick' computers and smart dongles.

## Auto On and Quick Off

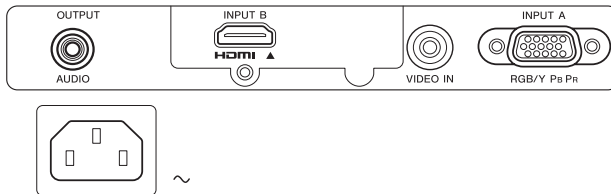
Connecting to a PC automatically turns the projector on and Quick Off feature makes the projectors extremely easy to use.

## D-200 Series

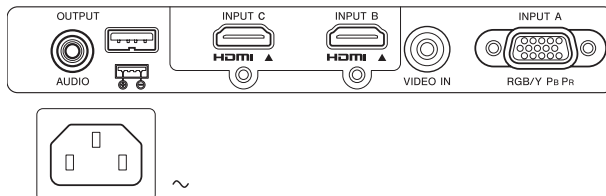


### Connector Panel Information

Rear connector panel for VPL-DX221 projector



Rear connector panel for VPL-DX241, DX271 and DW241 projectors



## D-200 Series

### Replacements



**LMP-D214**  
Replacement projector lamp

### Optional Accessories



**PAM-210**  
Ceiling mount



**PAM-0.5M**  
Extension pole & ceiling plate



**PAM-1.0M**  
Extension pole & ceiling plate



**PAM-1.5M**  
Extension pole & ceiling plate

### Featuring



**BrightEra™**  
Long Lasting Optics

PrimeSupport  
Pro

See page 5 for further details

Reference	Included Service PS.VPLB1.12X.L1		PS.VPL. DSERIES.1Y	PS.VPL. DSERIES.3Y	PS.LMP. DSERIES.2Y
Support	Projector	Lamp	Projector	Projector	Lamp
Duration	2 year swap service	1 year or 1000 h	+1 year (Total 3 years)	+3 years (Total 5 years)	+ 2 years or 2000 h (Total 3 years or 3000h)

For full product specifications and features please visit [pro.sony/projectors-desktop](http://pro.sony/projectors-desktop)

Specifications			VPL-DX221	VPL-DX241	VPL-DX271	VPL-DW241
Display system	3 LCD		•	•	•	•
Size of effective display area	0.63"(16mm) x 3, Aspect ratio: 4:3		•	•	•	
	0.59" (15 mm) x 3, BrightEra Aspect ratio: 16:10					•
Number of pixels	2,359,296 (1024x768 x 3) pixels		•	•	•	
	3,072,000 (1280 x 800 x 3) pixels					•
Projection lens	Manual Focus		•	•	•	•
	Zoom	Powered/Manual	Manual			
		Ratio	Approx. x1.2	Approx. x1.3		
Throw Ratio		1.47-1.77	1.37-1.80	1.37-1.80	1.36-1.77	
Light source	Ultra high pressure mercury lamp / 215 W type		•	•	•	•
Recommended lamp replacement time*3	Lamp mode:	High	3,000H (4,000H)			
		Standard	5,000H (7,000H)			
		Low	10,000H (10,000H)			
Filter cleaning			1000 H			
Screen size			30" to 300" (0.76 m to 7.62 m)			
White & Colour Light output*1	Lamp mode:	High	2,800lm	3,300lm	3,600lm	3,100lm
		Standard	1,900lm	2,300lm	2,300lm	2,100lm
		Low	1,600lm	1,900lm	1,900lm	1,800lm
Contrast ratio (full white / full black)*2			4000:1			
Speaker			1 W x 1 (monaural)			
Displayable scanning frequency	Horizontal		19 kHz to 92 kHz			
	Vertical		48 Hz to 92 Hz			
Display resolution	Computer signal input		Maximum display resolution: UXGA 1600 x 1200 dots			
	Video signal input		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			
Colour System			NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N			
Keystone correction (Max.)*4	Vertical	+/- 30 degrees	•	•	•	•
OSD language	23-languages	English, French, German, Italian, Spanish, Portuguese, Japanese, Chinese (簡體), Korean, Russian, Thai, Arabic, Turkish, Polish, Vietnamese, Farsi, Indonesian, Hungary, Greek, Czech, Slovak, Rumania				
Operating Instructions languages (Note 1)			English, Germany, French, Italy, Spanish, Russian, Chinese, Japanese, Taiwanese			
INPUT OUTPUT (Computer / Video / Control)	INPUT A		RGB / Y PB PR input connector: Mini D-sub 15 pin female Audio input connector: Stereo mini jack			
	INPUT B		HDMI input connector: HDMI 19-pin, HDCP support Audio input connector: HDMI audio support			
	INPUT C		HDMI input connector: HDMI 19-pin, HDCP support Audio input connector: HDMI audio support			
	VIDEO IN		Video input connector: Phono jack			
	OUTPUT		Audio output connector: Stereo mini jack (Via USB Type A)			
	POWER SUPPLY		5V 2A power supply			
Acoustic noise*5	Lamp mode:	High	< 41dB			
		Standard	< 38dB			
		Low	< 35dB			
Operating temperature / Operating humidity			0°C to 35°C (32°F to 95°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 - 240V, 2.9A to 1.1A, 50Hz/60Hz			
Power consumption	AC 100 V to 120 V	High	293 W	284 W	304 W	304 W
		Standard	217 W	231 W	232W	231 W
		Low	194 W	210 W	207 W	198 W
	AC 220 V to 240 V	High	269 W	269 W	282 W	283 W
		Standard	206 W	221 W	218 W	219 W
		Low	185 W	199 W	195 W	198 W
Power consumption (Standby Mode)	AC 100 V to 120 V	0.5 W	•	•	•	•
	AC 220 V to 240 V	0.5 W	•	•	•	•
Power consumption (On Mode)	AC 100 V to 120 V		279W	260W	265W	264W
Heat dissipation	AC 100 V to 120 V		998 BTU/h	968 BTU/h	1037BTU	
	AC 220 V to 240 V		938 BTU/h	914 BTU/h	982 BTU	
Body Colour			White (Bottom : Gray)			
Dimensions (W x H x D)			325.1 x 90.0x 233.2 mm			
Dimensions (W x H x D) (without protrusions)			325.1 x 79.8 x 230.5 mm			
Mass			Approx. 2.7kg (5.9 lb)			
Battery for the remote	Category		Lithium Battery			
	Type		CR2025			
Supplied accessories			Remote commander RM-PJ8 (1), Battery CR2025 (1), HD15pin Cable (1.8m) (1), AC power cord (1), Lens Cap (1), Carrying Case (1), Operating Instructions (CD-ROM) (1), Operating Instructions (Paper)(1), Quick Reference Manual (1), Safety Regulation (1), Warranty card (1),			

\*1 The values are estimated.

\*2 This value is average with lamp dimming.

\*3 The figures are approximate. They vary depending on the environment or how the projector is used. Jigyoku cannot guarantee them.

\*4 The picture quality may deteriorate when the V Keystone function is used for it is an electrical correction.

\*5 The figures are approximate. They vary depending on the environment or how the projector is used.

# E-400 Series



Ideal for education applications, these compact, energy efficient portable projectors offer excellent image quality plus affordable running costs.

### Bright, high contrast images

Fill classrooms and meeting rooms with bright, detail-packed images. High 20,000:1 contrast ratio ensures crisp, images and text that stand out in any environment.

### Wider connectivity options

Project from a networked computer, or present wirelessly from laptops, tablets and smartphones. Dual HDMI ports for standard and latest wireless adaptors and direct USB display connection.

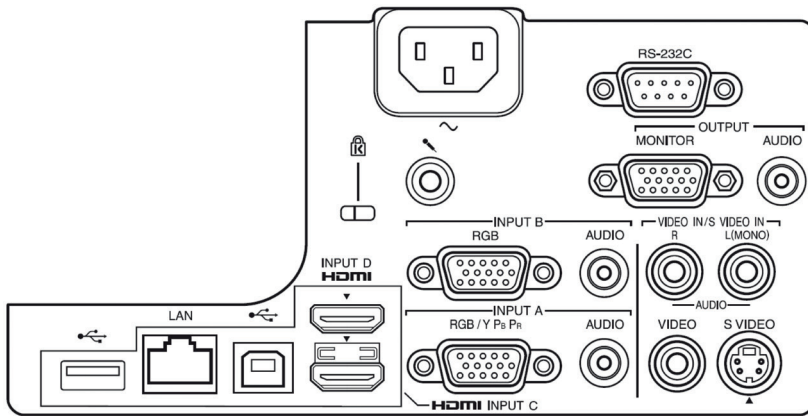
### Affordable ownership costs

Smart energy-saving features plus up to 10,000 hours lamp replacement intervals contribute to low ownership costs and reduced maintenance.

## E-400 Series

### Connector Panel Information

Rear connector panel for the VPL-EX435, VPL-EX455, VPL-EW435 and VPL-EW455 projectors



## E-400 Series

### Replacements



**LMP-E221**  
Replacement projector lamp

### Optional Accessories



**IFU-WLM3**  
USB wireless module



**PAM-210**  
Ceiling mount



**PAM-0.5M**  
Extension pole & ceiling plate



**PAM-1.0M**  
Extension pole & ceiling plate



**PAM-1.5M**  
Extension pole & ceiling plate

### Featuring



See page 5 for further details

Reference	Included Service PS.VPLB3.123.L3		PS.VPL. SESERIES.2Y	PS.VPL. SESERIES.3YL	PS.VPL. SESERIES.5YL
Support	Projector	Lamp	Projector	Projector	Projector
Duration	3 years	3 years or 3000 h	+2 years (Total 5 years)	3 years repair & loan	+2 years repair extension & 5 years loan product

For full product specifications and features please visit [pro.sony/projectors-desktop](http://pro.sony/projectors-desktop)



Specifications			VPL-EW455	VPL-EW435	VPL-EX455	VPL-EX435
Display system	3 LCD		•	•	•	•
Size of effective display area	0.59"(15mm) x 3 BrightEra LCD Panel Aspect ratio 16:10		•	•		
	0.63"(16 mm) x 3 BrightEra LCD Panel Aspect ratio 4:3				•	•
Number of pixels			3,072,000 (1280x800 x 3) pixels		2,359,296 (1024x768 x 3) pixels	
Projection lens	Manual Focus		•	•	•	•
	Throw Ratio		1.37:1 to 1.80:1			1.47:1 to 1.77:1
Light source			Ultra high pressure mercury lamp 225W type			
Recommended lamp replacement time*1	Lamp mode:	High				4,000 H
		Standard				6,000 H
		Low				10,000 H
Filter cleaning*1			10,000 H			
Screen size			30" to 300" (0.76 m to 7.62 m)			
White & Colour Light output*2	Lamp mode:	High	3500 lm	3100 lm	3600 lm	3200 lm
		Standard	2500 lm	2200 lm	2500 lm	2300 lm
		Low	2100 lm	1900 lm	1900 lm	1800 lm
Contrast ratio (full white / full black)*3			20000:1			
Speaker			16W (monaural)			
Displayable scanning frequency	Horizontal		15khz to 92khz			
	Vertical		48 Hz to 92 Hz			
Display resolution	Computer signal input		Maximum display resolution: 1600 x 1200 dots, fV:60Hz			
	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			
Colour System			NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PALN, PAL60			
Keystone correction (Max.)*4	Vertical		+/-20 degrees		+/-30 degrees	
OSD language	27-languages		English, French, German, Italian, Spanish, Portuguese, Japanese, Chinese, Korean, Russian, Dutch, Norwegian, Swedish, Thai, Arabic, Turkish, Polish, Vietnamese, Farsi, Finnish, Indonesian, Hungary, Greek, Czech, Slovakia, Romania			
INPUT OUTPUT (Computer / Video /Control)	INPUT A		RGB / Y PB PR input connector: Mini D-sub 15 pin female/ Audio input connector: Stereo mini jack			
	INPUT B		RGB input connector: Mini Dsub 15 pin female/Audio input connector: Stereo mini jack			
	INPUT C		HDMI input connector: HDMI 19-pin, HDCP support/Audio input connector: HDMI audio support			
	INPUT D		HDMI input connector: HDMI 19-pin, HDCP support/Audio input connector: HDMI audio support			
	S VIDEO IN		S Video input connector: Mini DIN 4-pin			
	VIDEO IN		Video input connector: Phono jack			
	OUTPUT		MONITOR output connector: Mini D-sub 15 pin female/Audio output connector: Stereo mini			
	Y PB/CB PR/CR		Component: Mini D-sub 15 pin female			
	REMOTE		D-sub 9-pin male/RS232C			
	LAN		RJ-45, 10BASE-T/100BASE-TX			
	USB		Type-A & Type-B			
MICROPHONE IN		Mini Jack				
Acoustic noise*5	Lamp mode:	Low	29dB			
Operating temperature / Operating humidity			0°C to 40°C / 32°F to 104°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, 3.4 A to 1.5 A, 50 Hz / 60 Hz		•			
	AC 100 V to 240 V, 3.2A to 1.4 A, 50 Hz / 60 Hz			•		
	AC 100 V to 240 V, 3.4 A to 1.5 A, 50 Hz / 60 Hz				•	•
Power consumption	AC 100 V to 120 V	High	332 W	318 W	333 W	
		Standard	270 W	260 W	270 W	
		Low	233 W	232 W	233 W	
	AC 220 V to 240 V	High	319 W	306 W	320 W	
		Standard	261 W	252 W	260 W	
		Low	225 W	226 W	25 W	
Power consumption (when "Standby mode" is set to "Low")	AC 100 V to 120 V		0.5 W			
	AC 220 V to 240 V		0.5 W			
Power Consumption (Networked Standby Mode)	AC 100 V to 120 V	5.5W(LAN) / 6.0W (optional WLAN module) / 6.2W (ALL Terminals and Networks Connected, when "Standby Mode" is set to "Standard")				
	AC 220 V to 240 V	5.8W(LAN) / 6.3W (optional WLAN module) / 6.6W (ALL Terminals and Networks Connected, when "Standby Mode" is set to "Standard")				
Standby Mode / Networked Standby Mode Activated			Approx. 10 Minutes			
Wireless Network(s) On/Off Switch			Press the MENU button, then select [Connection/Power] > [WLAN Settings] > [WLAN Connection] > Select On or Off			
Heat dissipation	AC 100 V to 120 V		1133 BTU	1085 BTU	1136 BTU	
	AC 220 V to 240 V		1088 BTU	1044 BTU	1092 BTU	
Dimensions (W x H x D) (without protrusions)			Aprox. 365 x 96.2 x 252 mm (14 3/8 X3 25/32 X9 29/32 ")			
Mass			Approx. 3.9kg (8.6 lb )			
Supplied accessories			RM-PJ8 Remote Commander (1), Lithium battery: CR2025 (1), AC Power Cord (1), Operating Instructions (CDROM) (1), Quick Reference Manual (1) Lens cap (1)			
Optional Accessories			LMP-E221, IFU-WLM3 (WLAN module)			

\*1 This figure is expected maintenance time, not guaranteed time.  
The actual value depends on the environment and how the projector is used.

\*2 The values are estimate.

\*3 The value is average.

\*4 The picture quality may deteriorate when the V Keystone function is used for it is an electrical correction.

\*5 The figures are approximate. They vary depending on the environment or how the projector is used.

# E-500 Series



These portable projectors fill larger rooms with bright, high-impact images. Smart features make the most of today's integrated AV/IT environments.

## High brightness, high contrast images

Fill larger classrooms and meeting rooms with powerful output up to 4300 lumen brightness. High 20,000:1 contrast ratio ensures crisp, images and text.

## Wider connectivity options

Project from a networked computer, or present wirelessly from laptops, tablets and smartphones. Dual HDMI ports for standard and latest wireless adaptors and direct USB display connection.

## Affordable ownership costs

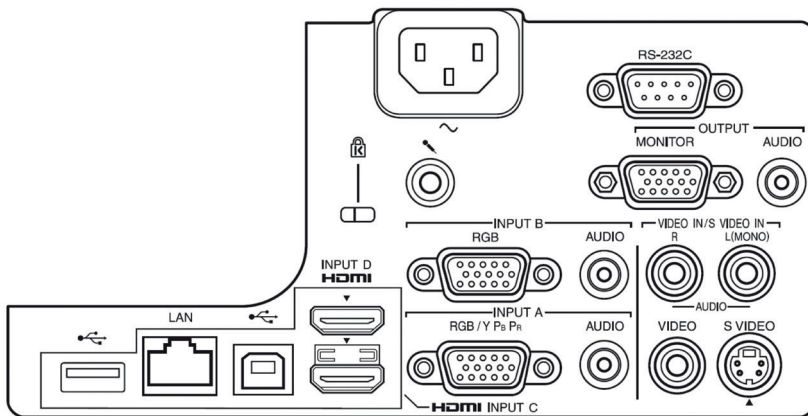
Smart energy-saving features like Auto Mode and Lamp Dimming, plus up to 10,000 hours lamp replacement intervals contribute to low ownership costs and reduced maintenance.

## E-500 Series



### Connector Panel Information

Rear connector panel for the VPL-EX575, VPL-EW575, and VPL-EW578 projectors



## E-500 Series

### Replacements



**LMP-E221**  
Replacement projector lamp

### Optional Accessories



**IFU-WLM3**  
USB wireless module



**PAM-210**  
Ceiling mount



**PAM-0.5M**  
Extension poles & ceiling plate



**PAM-1.0M**  
Extension poles & ceiling plate



**PAM-1.5M**  
Extension poles & ceiling plate

### Featuring



See page 5 for further details

Reference	Included Service PS.VPLB3.123.L3		PS.VPL. SESERIES.2Y	PS.VPL. SESERIES.3YL	PS.VPL. SESERIES.5YL
Support	Projector	Lamp	Projector	Projector	Projector
Duration	3 years	3 years or 3000 h	+2 years (Total 5 years)	3 years repair & loan	+2 years repair extension & 5 years loan product

For full product specifications and features please visit [pro.sony/projectors-desktop](http://pro.sony/projectors-desktop)

Specifications			VPL-EW578	VPL-EW575	VPL-EX575
Display system	3 LCD		•	•	•
Size of effective display area	0.75" (19mm) x 3 BrightEra LCD Panel Aspect ratio 16:10		•	•	
	0.63" (16 mm) x 3 BrightEra LCD Panel, Aspect ratio: 4:3				•
Number of pixels	3,072,000 (1280x800 x 3) pixels		•	•	
	2,359,296 (1024x768 x 3) pixels				•
Projection lens	Manual Focus		•	•	•
	Throw Ratio		110:1 to 1.79:1		1.40:1 to 2.27:1
Light source	Ultra high pressure mercury lamp 225W type				
Recommended lamp replacement time*1	Lamp mode:	High	4,000 H		
		Standard	6,000 H		
		Low	10,000 H		
Filter cleaning / replacement cycle (Max.)*1		10,000 H			
Screen size		30" to 300" (0.76 m to 7.62 m)			
White & Colour Light output*2	Lamp mode:	High	4300 lm		4200 lm
		Standard	3200 lm		3000 lm
		Low	2400 lm		2300 lm
Contrast ratio (full white / full black)*3		20000:1(SYQ) 12000:1(C1)			
Speaker		16W (monaural)			
Displayable scanning frequency	Horizontal		15 kHz to 92 kHz		
	Vertical		48 Hz to 92 Hz		
Display resolution	Computer signal input		Maximum display resolution: 1600 x 1200 dots, fV:60Hz		
	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		
Colour System		NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60			
Keystone correction (Max.)*4	Vertical		+/-20 degrees		+/-30 degrees
OSD language	27-languages	English, French, German, Italian, Spanish, Portuguese, Japanese, Chinese, Korean, Russian, Dutch, Norwegian, Swedish, Thai, Arabic, Turkish, Polish, Vietnamese, Farsi, Finnish, Indonesian, Hungary, Greek, Czech, Slovakia, Romania			
INPUT OUTPUT (Computer / Video / Control)	INPUT A		RGB / Y PB PR input connector: Mini D-sub 15 pin female/Audio input connector: Stereo mini jack		
	INPUT B		RGB input connector: Mini D-sub 15 pin female/Audio input connector: Stereo mini jack		
	INPUT C		HDMI input connector: HDMI 19-pin, HDCP support/Audio input connector: HDMI audio support		
	INPUT D		HDMI input connector: HDMI 19-pin, HDCP support/Audio input connector: HDMI audio support		
	S VIDEO IN		S Video input connector: Mini DIN 4-pin		
	VIDEO IN		Video input connector: Phono jack		
	OUTPUT		MONITOR output connector: Mini D-sub 15 pin female/Audio output connector: Stereo mini		
	Y PB/CB PR/CR		Component: Mini D-sub 15 pin female		
	REMOTE		D-sub 9-pin male/RS232C		
	LAN		RJ45, 100BASE-TX (Shared with HDBaseT)		RJ-45, 10BASE-T/100BASE-TX
	USB		Type-A & Type-B		
	MICROPHONE IN		Microphone jack: Mini Jack		
Acoustic noise*5	Lamp mode:	Low	29dB		
Operating temperature / Operating humidity		0°C to 40°C / 32°F to 104°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, 3.5 A to 1.5 A, 50 Hz / 60 Hz		•	•	•
	AC 100 V to 240 V, 3.4 A to 1.5 A, 50 Hz / 60 Hz				
Power consumption	AC 100 V to 120 V	High	344 W	332 W	333 W
		Standard	278 W	270 W	270 W
		Low	241W	233 W	233 W
	AC 220 V to 240 V	High	328 W	319 W	320 W
		Standard	270 W	261 W	260 W
		Low	234 W	225 W	225 W
Power consumption (when "Standby mode" is set to "Low")	AC 100 V to 120 V		0.5 W		
	AC 220 V to 240 V		0.5 W		
Power Consumption (when "Standby Mode" is set to Standard")	AC 100 V to 120 V		5.5W(LAN) / 6.0W (optional WLAN module) / 6.2W (ALL Terminals and Networks Connected)		
	AC 220 V to 240 V		5.8W(LAN) / 6.3W (optional WLAN module) / 6.6W (ALL Terminals and Networks Connected)		
Standby Mode / Networked Standby Mode Activated		Approx. 10 Minutes			
Wireless Network(s) On/Off Switch		Press the MENU button, then select [Connection/Power] > [WLAN Settings] > [WLAN Connection] > Select On or Off			
Heat dissipation	AC 100 V to 120 V		1174 BTU	1133 BTU	1136 BTU
	AC 220 V to 240 V		1119 BTU	1088 BTU	1092 BTU
Dimensions (W x H x D) (without protrusions)		Approx. 365 x 96.2 x 252 mm (14 3/8 X3 25/32 X9 29/32 ")			
Mass		Approx. 4.1kg (9 lb)		Approx. 4 kg (8.8 lb)	
Supplied accessories		RM-PJ8 Remote Commander (1), Lithium battery: CR2025 (1), AC Power Cord (1), Operating Instructions (CDROM) (1), Quick Reference Manual (1) Lens cap (1)			
Optional Accessories		LMP-E221, IFU-WLM3 (WLAN module)			

\*1 This figure is expected maintenance time, not guaranteed time.  
The actual value depends on the environment and how the projector is used.

\*2 The values are estimate.

\*3 The value is average.

\*4 The picture quality may deteriorate when the V Keystone function is used for it is an electrical correction.

\*5 The figures are approximate. They vary depending on the environment or how the projector is used.

# Ultra Short Throw Series\*



Three ultra short throw projectors that create shadowless presentations. Dual pen interactivity and PC-less functionality available. Energy efficient, wireless-ready with eco-friendly capabilities.

## Ultra Short throw distance

Produces a 2.03m (80-inch) diagonal screen size image from only 43cm (17.1-inch) or 46cm (18.2-inch) away from the screen.

## Easy to adjust to any whiteboard

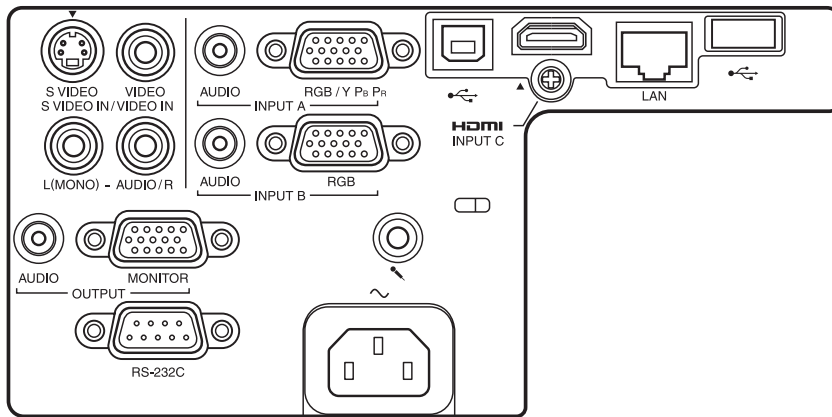
Adjustable optical zoom and lens shift for speedy, fuss-free installation in any classroom. Generous connections simplify hook-ups with PCs, DVD players, microphones and other AV devices.

## Ultra Short Throw Series



### Connector Panel Information

Rear connector panel for the VPL-SX631, VPL-SW631, VPL-SW636C



## S-Series

### Replacements



**LMP-E220**  
Replacement projector lamp

### Optional Accessories



**IFU-WLM3**  
USB wireless module



**IFU-PN250A**  
Interactive Pen replacement  
for VPL-SW636C model only



**IFU-PN250B**  
Interactive Pen replacement  
for VPL-SW636C model only

### Featuring



PrimeSupport  
Pro

See page 5 for further details

Reference	Included Service PS.VPLB3.123.L3		PS.VPL. SESERIES.2Y	PS.VPL. SESERIES.3YL	PS.VPL. SESERIES.5YL
Support	Projector	Lamp	Projector	Projector	Projector
Duration	3 years	3 years or 3000 h	+2 years (Total 5 years)	3 years repair & loan	+2 years repair extension & 5 years loan product

\* Ultra Short Throw Series will be discontinued from April 2019

For full product specifications  
and features please visit  
[pro.sony/short-throw](http://pro.sony/short-throw)

Specifications			VPL-SX631	VPL-SW631	VPL-SW636C	
White & Colour Light output	3,300 lumens (High mode)		•	•	•	
Size of effective display area	0.59" (15 mm) x 3 BrightEra LCD Panel, Aspect ratio: 16:10			•	•	
	0.63" (16 mm) x 3 BrightEra, Aspect ratio: 4:3		•			
Number of pixels	3,072,000 (1280 x 800 x 3) pixels			•	•	
	2,359,296 (1024 x 768 x 3) pixels		•			
Contrast ratio (full white / full black) <sup>*1</sup>			3000:1			
Light source			Ultra high pressure mercury lamp / 255 W type			
Recommended lamp replacement time <sup>*2</sup>	Lamp mode:	High	4,000 H			
		Standard	6,000 H			
		Low	10,000 H			
Filter cleaning <sup>*3</sup>			Same time as the lamp replacement is recommended			
Projection lens	Zoom	Optional: Manual (Approx. x1.03)	•	•	•	
	Focus	Manual	•	•	•	
	Lens shift	Manual, Vertical: +/- 3.1% Horizontal: +/- 2.3%		•		
		Manual, Vertical: +/- 3.7% Horizontal: +/- 2.3%			•	•
Throw ratio	0.27:1 (0.267 - 0.274:1)		•	•	•	
Keystone correction	Max. Vertical: +/- 5 degrees		•	•		
	Max. Vertical: +4/- 1 degrees				•	
Acoustic noise	Lamp mode:	High	35dB			
		Standard	32dB			
		Low	28dB			
OSD language	27-languages	English, French, German, Italian Spanish, Portuguese, Japanese, Chinese, Traditional Chinese, Korean, Russian, Dutch, Norwegian, Swedish, Thai, Arabic, Turkish, Polish, Vietnamese, Farsi, Finnish, Indonesian, Hungarian, Greek, Czech, Slovakia, Romanian Simplified Chinese, Traditional Chinese, Korean, Thai, Vietnamese, Arabic, Farsi, Finnish, Indonesian, Hungarian, Greek				
Display resolution	Computer signal input		Maximum display resolution: UXGA 1600 x 1200 dots <sup>*3</sup>			
	Video signal input		480/60i, 480/60p, 575/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p			
INPUT OUTPUT (Computer / Video / Control)	INPUT A		RGB / Y PB PR input connector: Mini D-sub 15 pin female Audio input connector: Stereo mini jack			
	INPUT B		RGB input connector: Mini D-sub 15 pin female Audio input connector: Stereo mini jack			
	INPUT C		HDMI input connector: HDMI 19-pin, HDCP support Audio input connector: HDMI audio support			
	VIDEO IN		Video input connector: Phono jack			
	S VIDEO IN		S Video input connector: Mini DIN 4-pin			
	Monitor OUT		Monitor output connector: Mini D-sub 15-pin			
	Audio OUT		Stereo mini			
	Built in Interactive capability				•	
	Dual Pen				•	
	Auto Calibration				•	
	PC Free Interactive				•	
	Driver less				•	
	RS-232C		D-sub 9-pin male			
	MICROPHONE INPUT		Mini jack			
LAN		RJ-45, 10BASE-T/100BASE-TX				
USB		Type-A, Type-B				
Speaker			Speaker 16 W (monaural)			
Operating temperature / Operating humidity			0°C to 40°C (32°F to 104°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 100V to 240V. 3.3 A to 1.5 A, 50 Hz / 60 Hz		•	•	•	
	AC 100V to 240V. 3.5 A to 1.6 A, 50 Hz / 60 Hz					
Power consumption AC 100 V - 120 V	Lamp mode:	High	305 W	330 W	341 W	
		Standard	261 W	261 W	274 W	
		Low	232 W	231 W	266 W	
Power consumption AC 220 V - 240 V	Lamp mode:	High	294 W	330 W	328 W	
		Standard	252 W	252 W	245 W	
		Low	225 W	224 W	239 W	
Power consumption (Standby Mode)	AC 100 V to 120 V	0.5 W	•	•	•	
Heat dissipation	AC 100 V to 120 V		1041 BTU	1126 BTU	1163 BTU	
	AC 220 V to 240 V		1003 BTU	1092 BTU	1119 BTU	
Outside Dimensions (W x H x D) (without protrusions)			Approx: 372 x 138 x 382mm (14 21/32 x 5 7/16 x 15 1/32 inches)			
Mass			6.0kg (13 lb)		6.3kg (14 lb)	
Network Standby (LAN/WLAN) mode power consumption (Std / Low)	AC 100 V - 120 V	5.6 W / 5.9 W	•	•	•	
	AC 220 V - 240 V	5.6 W / 6.2 W	•	•	•	
Supplied accessories	PSS-645 Wall Mount, RM-PJ8 Remote Commander (1), Lithium battery: CR2025 (1), AC Power Cord (1), Operating Instructions (CD-ROM) (1), Quick Reference Manual (1), Application Software (CD-ROM) (1), Warranty card (1), Safety Regulations/QRM (1), Security Label (1)					
Optional Accessories	Replacement lamp (LMP-E220), Wireless LAN Module (IFU-WLM3), IFU-PN250A (1), IFU-PN250B (1)					

\*1 This value is an average.

\*2 The figures are the expected maintenance time and not guaranteed. They will depend on the environment or how the projector is used.

\*3 The figures are approximate. They vary depending on the environment or how the projector is.

# CH-Series



Four Installation models that raise the bar with higher resolution images and the same energy efficiency, TCO, image quality, brightness and stylish design that comes with our other C-Series range.

### HDBaseT

Allows simple connectivity using an HDBaseT digital interface, multi signal transmission system, providing a single cable, cost-effective, long-distance, and high-quality digital transmission solution\*.

### Audio / Speaker bypass

When set to "Always On," the speaker / microphone is available via Audio Input A.

### WUXGA resolution installation projectors

4000 - 5000 lumens brightness.

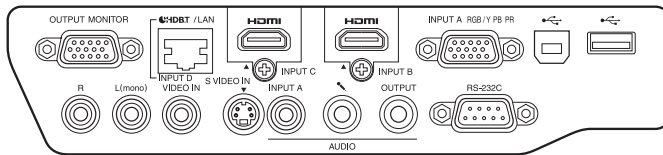
\* VPL-CH355 and VPL-CH375 only

## CH-Series

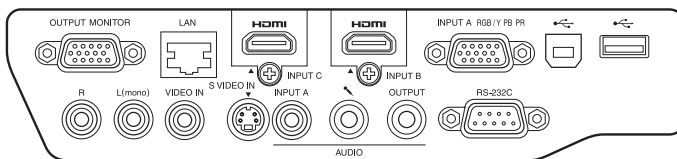


### Connector Panel Information

Rear connector panel for the VPL-CH355 & VPL-CH375 projectors



Rear connector panel for the VPL-CH350 & VPL-CH370 projectors



## CH-Series

### Replacements



**LMP-C250**  
Replacement projector lamp (CH350/CH355)



**LMP-C281**  
Replacement projector lamp (CH370/CH375)

### Optional Accessories



**IFU-WLM3**  
USB wireless module



**PAM-210**  
Ceiling mount



**PAM-0.5M**  
Extension pole & ceiling plate



**PAM-1.0M**  
Extension pole & ceiling plate



**PAM-1.5M**  
Extension pole & ceiling plate

### PrimeSupport Pro

See page 5 for further details

Reference	Included Service PS.VPLB3.123.L1	PS.LMP.FC SERIES.2Y
Support	Projector	Lamp
Duration	3 years	1 years or 1000 h
		+ 2 years or 2000 h (Total 3 years or 3000 h)

### PrimeSupport Elite

See page 5 for further details

Reference	PSPVPLC-SER.EXC.3	PSPVPLC-SER.EXC.5
Support	Projector	Projector
Duration	5 years	5 years

### Featuring



For full product specifications and features please visit [pro.sony/installation](http://pro.sony/installation)

Specifications			VPL-CH350	VPL-CH355	VPL-CH370	VPL-CH375
Display system	3 LCD system		•	•	•	•
Size of effective display area	0.64" (16.3 mm) × 3, Aspect ratio: 16:10		•	•	•	•
Number of pixels	6,912,000 (1920 × 1200 × 3) pixels		•	•	•	•
Projection lens	Zoom	Optional: Manual (Approx. x1.45)	•	•	•	•
	Focus	Manual	•	•	•	•
	Lens shift	Manual (Vertical: +/- 5%, Horizontal: +/- 4%) Horizontal: +/- 2.3%	•	•	•	•
	Throw ratio	1.5:1 to 2.2:1	•	•	•	•
Light source	Ultra high pressure mercury lamp / 250 W type		•	•		
	Ultra high pressure mercury lamp / 280 W type				•	•
Recommended lamp replacement time*2	Lamp mode:	High	3,000 H		2,500 H	
		Standard	4,000 H		3,000 H	
		Low	5,000 H		3,500 H	
Filter cleaning			Same time as the lamp replacement is recommended			
Screen size	40" to 300" (1.02 m to 7.62 m) (measured diagonally)		•	•	•	•
White & Colour Light output	Lamp mode:	High	4000 lm		5000 lm	
		Standard	3200 lm		3600 lm	
		Low	2600 lm		3100 lm	
Contrast ratio (full white / full black)	2500: 1		•	•	•	•
Acoustic noise	Lamp mode:	High	36dB		38dB	
		Standard	33dB		35dB	
		Low	29dB		29dB	
Display scanning frequency	Horizontal	19 kHz - 92 kHz	•	•	•	•
	Vertical	48 Hz - 92 Hz	•	•	•	•
Display resolution	Computer signal input		Maximum display resolution: 1920 × 1200 dots <sup>1</sup> Panel display resolution: 1920 × 1200 dots			
	Video signal input		480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p, 1080/24p			
Colour system	NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N		•	•	•	•
Keystone correction	Vertical: Max. +/- 30 degrees, Horizontal: Max. +/- 20 degrees		•	•	•	•
OSD language	24-languages	English, French, German, Italian, Spanish, Portuguese, Japanese, Simplified Chinese, Traditional Chinese, Korean, Russian, Dutch, Norwegian, Swedish, Thai, Arabic, Turkish, Polish, Vietnamese, Farsi, Indonesian, Finnish, Hungarian, Greek)				
INPUT OUTPUT (Computer / Video /Control)	INPUT A	RGB / Y PB PR input connector:	Mini D-sub 15-pin (female)			
		Audio input connector:	Stereo mini jack			
	INPUT B / INPUT C	HDMI input connector:	HDMI 19-pin, HDCP support			
	S VIDEO IN	S video input connector:	Mini DIN 4-pin			
	VIDEO IN	Video input connector:	Phono jack			
	OUTPUT	Monitor output connector*2:	Mini D-sub 15-pin (female)			
		Audio output connector*5:	Stereo mini jack			
	REMOTE		D-sub 9-pin (male)			
	SPEAKER		12 W x 1 (monaural)			
	MICROPHONE INPUT		Mini jack			
	LAN		RJ45, 100BASE-TXT / 100BASE-TX	RJ45, 100BASE-TX (Shared with HDBaseT)	RJ45, 100BASE-TX	RJ45, 100BASE-TX (Shared with HDBaseT)
	HDBaseT	RJ45, 4 Play		•		•
	USB		Type-A, Type-B			
Operating temperature / Operating humidity	0°C to 40°C (32°F to 104°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, 3.6 A to 1.6 A, 50/60 Hz		•	•		
	AC 100 V to 240 V, 3.9 A to 1.7 A, 50/60 Hz				•	•
Power consumption AC 100 V - 120 V	Lamp mode:	High	353 W		388 W	
		Standard	285 W		315 W	
		Low	265 W		279 W	
Power consumption AC 220 V - 240 V	Lamp mode:	High	334 W		367 W	
		Standard	272 W		299 W	
		Low	254 W		266 W	
Power consumption (Standby Mode)	AC 100 V to 120 V		4.7W / 0.5W	6.1W / 0.5W	4.7 / 0.3W	6.1W / 0.3W
	AC 220 V to 240 V		4.9W / 0.5W	6.2W / 0.5W	4.9 / 0.5W	6.2W / 0.5W
Heat dissipation	AC 100 V to 120 V		1204 BTU		1323 BTU	
	AC 220 V to 240 V		1139 BTU		1252 BTU	
Outside Dimensions (W x H x D) (without protrusions)			Approx. 406 × 113 × D 330.5 mm (15 31/32 × 4 7/16 × 13 in)			
Mass			Approx. 5.7 kg / 12 lb			
Supplied accessories			RM-PJ8 Remote Commander (1), Lithium battery: CR2025 (1), AC Power Cord (1), Lens cap (1), Quick Reference Manual (1), Operating Instructions (CD-ROM) (1), Presentation Station for Network Presentation application (CDROM) (1)			

\*1 Available for VESA Reduced Blanking signal.

\*2 From INPUT A.

# P-Series Laser Projectors



Compact, versatile laser projectors with excellent picture quality and easy maintenance: the bright choice for education and corporate environments.



### Spectacular image quality

Powerful Z-Phosphor laser light source and advanced BrightEra 3LCD projection engine deliver detail-packed images with high 5000 lumens of colour brightness.

### Flexible installation

Position the projector freely at any angle, on its side or even upside down. HDBaseT reduces cabling for simpler integration.

### Long life, less maintenance

Reliable, long-lasting laser light source offers up to 20,000 hours virtually maintenance-free operation.

### Discreet partner for any presentation space

Stylish blend-in design with tidy cable management and low fan noise.

## P-Series

### Connector Panel Information



Rear connector panel for the VPL-PHZ10 & VPL-PWZ10 projectors



### PrimeSupport Pro

See page 5 for further details

Reference	Included Service PS.LASERPROJ.5		
Support	Projector	Laser	
Duration	5 years	12000 hours	
Type of service	Return to base for repair		

### PrimeSupport Elite

See page 5 for further details

Reference	PSPVPLP-SER.EXC.5		PSPVPLP-SER.HVY.5	
Support	Projector	Laser	Projector	Laser
Duration	5 years	12000 hours	5 years	20000 hours
Type of service	Swap for like for like, new unit			

## P-Series

### Optional Accessories



### Featuring



For full product specifications and features please visit [pro.sony/laser](http://pro.sony/laser)



Specifications			VPL-PHZ10	VPL-PWZ10
White & Colour Light output	3 LCD system		•	•
Size of effective display area	0.76" (19.3 mm) x 3 BrightEra LCD Panel		•	•
Number of pixels Size of effective display area	WUXGA: 6,912,000 (1920 x 1200 x 3) pixels		•	•
	WXGA: 3,072,000 (1280 x 800 x 3) pixels		•	•
	Aspect ratio: 16:10		•	•
Projection lens	Zoom		Manual (Approx. x1.45)	
	Focus		Manual	
	Lens shift		Manual (Vertical: +20%~+55%, Horizontal: +/- 10%)	
	Throw ratio		1.28~1.88:1	
	Focal length(mm) / Aperture		f=21.37mm - 31.25mm f/ 1.50-1.95	
Light source			Laser + Phosphor	
Filter cleaning			20,000 H	
White & Colour Light output <sup>1</sup>	Lamp mode:	High	5,000 lm	
		Standard	4,000 lm	
		Low	3000 lm	
Contrast ratio (full white / full black) <sup>2</sup>		500,000:1		
Key stone correction (Max) <sup>3</sup>		Horizontal: +/- 30 degrees Vertical: +/- 20 degrees		
Power requirements		AC 100 V to 240 V, 4.3 A to 1.7 A, 50 Hz / 60 Hz		
Speaker		16W (monaural)		
Display scanning frequency	Horizontal		15 kHz to 92 kHz	
	Vertical		48 Hz to 92 Hz	
Display scanning frequency	Computer signal input		Maximum display resolution: 1920 x 1200 dots	
	Video signal input		NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 575/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p	
Colour system		NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL-60		
OSD language	27-languages		English, French, German, Italian, Spanish, Portuguese, Japanese, Chinese(簡・繁), Korean, Russian, Dutch, Norwegian, Swedish, Thai, Arabic, Turkish, Polish, Vietnamese, Farsi, Finnish, Indonesian, Hungary, Greek, Czech, Slovakia, Romania	
Operating Instructions languages		English, Germany, French, Italy, Spanish, Russian, Simplified Chinese, Japanese, Arabic		
INPUT OUTPUT (Computer / Video / Control)	INPUT A		RGB / Y PB PR input connector: Mini D-sub 15 pin female Audio input connector: Stereo mini jack	
	INPUT B		HDMI input connector: HDMI 19-pin, Digital RGB/YPBPR, HDCP support, HDMI audio support	
	INPUT C		HDMI input connector: HDMI 19-pin, Digital RGB/YPBPR, HDCP support, HDMI audio support	
	INPUT D		HDBaseT interface connector: RJ45, 4 play (Video, Audio, LAN (100BASE-TX), RS-232C)	
	VIDEO IN		Video input connector: Phono Jack Audio input connector: Shared with INPUT A	
	OUTPUT		Audio output connector: Stereo mini jack	
	REMOTE		D-sub 9-pin (male) / RS232C	
	LAN		RJ45,100BASE-TX (Shared with HDBaseT)	
Acoustic noise <sup>4</sup>	Lamp mode:	High	36dB	
		Standard	28dB	
		Low	25dB	
Operating temperature / Operating humidity		0°C to 40°C (32°F to 104°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 consumption AC 100 V - 120 V	Lamp mode:	High	424 W	
		Standard	287 W	
		Low	217 W	
Power consumption AC 220 V - 240 V	Lamp mode:	High	403 W	
		Standard	279 W	
		Low	211 W	
Power consumption (when "Standby mode" is set to "Low")	AC 100 V to 120 V		0.5 W	
	AC 220 V to 240 V		0.5 W	
Power Consumption (Networked Standby Mode)	AC 100 V to 120 V		369W	
	AC 220 V to 240 V		353W	
Power Consumption (Networked Standby Mode)	AC 100 V to 120 V		12.5W(LAN) / 13.2W (optional WLAN module) / 16.8W(HDBaseT)/17.4W (ALL Terminals and Networks Connected, when "Standby Mode" is set to "Standard")	
	AC 220 V to 240 V		11.9W(LAN) / 12.6W (optional WLAN module) / 17.0W(HDBaseT)/17.6W (ALL Terminals and Networks Connected, when "Standby Mode" is set to "Standard")	
On mode power consumption	AC 100 V to 120 V		369W	
	AC 220 V to 240 V		353W	
Heat dissipation	AC 100 V to 120 V		1446BTU	
	AC 220 V to 240 V		1374BTU	
Body Colour (Colour Code)	White/Gray		•	•
Dimensions (W x H x D)		Approx. 510 x128.5 x 354.6mm		
Outside Dimensions (W x H x D) (without protrusions)		Approx. 510 x 113 x 354.6 mm		
Mass		Approx. 8.7 kg		
Supplied accessories		Remote commander (RM-PJ8), Battery (CR2025), AC power cord, Operating instructions (CD-ROM), Quick Reference Manual, Warranty card, Security label, Flyers (WEEE) / (EU battery direction), Application software (CD-ROM)		
Battery for the remote commander of the projector		Lithium Battery / CR2025 / 1		

<sup>1</sup> The values are estimates.

<sup>2</sup> This value is average with lamp dimming.

<sup>3</sup> The picture quality may deteriorate when the V Keystone function is used for it is an electrical correction.

<sup>4</sup> The figures are approximate. They vary depending on the environment or how the projector is used.

# F-Series Lamp Projectors\*



Model: VPL-FH60/65  
Black and Lensless models are available

WUXGA resolution for the most demanding venues that require the highest resolutions, brightest projections and highly sophisticated features. The F-Series delivers powerful performance, optional lenses, longer life and low maintenance.

### Edge-Blend and Warp capabilities

Built-in GUI and PC software for multi projector image blending with warping (VPL-FH60/65).

### Reality creation

Clarity in every pixel. Sony's process technology and proprietary algorithm creates pixel mapping that is as close to the original as you can get (VPL-FH60/56 projectors).

### DICOM capabilities

Display X-ray and MRI images that conform to GSDF (Grayscale Standard Display Function).

### Side by Side content

Displays two different images / content from two different input sources.

## F-Series

### Optional Accessories



**LMP-F272**  
(FH31)  
Replacement lamp



**LMP-F370**  
(VPL-FH65)  
Replacement lamp



**LMP-F280**  
(VPL-FH60)  
Replacement lamp

### Ceiling mount and extension poles for VPL-FH31/60/65 and VPL-FHZ58/61/66



**PAM-310**  
Ceiling mount



**PAM-0.5M**  
Extension pole & ceiling plate



**PAM-1.0M**  
Extension pole & ceiling plate



**PAM-1.5M**  
Extension pole & ceiling plate

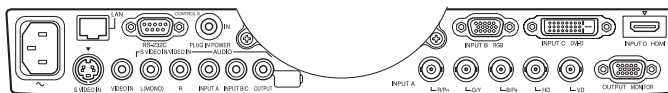
### Featuring



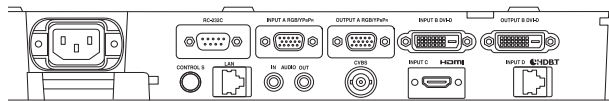
## F-Series

### Connector Panel Information

Rear connector panel for the VPL-FH31 projector



Rear connector panel for VPL-FH60/65 projectors



### PrimeSupport Pro

See page 5 for further details

Reference	Included Service PS.VPLB3.123.1		PS.VPL.FC SERIES.2Y
Support	Projector	Lamp	Lamp
Duration	3 years	1 years or 1000 h	+ 2 years or 2000 h (Total 3 years or 3000h)

### PrimeSupport Elite

See page 5 for further details

Reference	PSP.VPLF-SER.EXC.3	PSP.VPLF-SER.EXC.5
Support	Projector	Projector
Duration	3 years	5 years

\* VPL-FH31 will be discontinued from April 2019

For full product specifications and features please visit [pro.sony/installation](http://pro.sony/installation)

**Vitamin B<sub>5</sub>**  
**Pantothenic acid**

Molecular Formula  
 $C_9H_{17}NO_6$

Structural Formula

**B<sub>5</sub>**

- N Nitrogen
- C Carbon
- O Oxygen
- H Hydrogen

CC(O)(C(=O)NCC(=O)O)CO

Specifications			VPL-FH31
Display device	3 LCD		•
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	Focus		Manual
	Zoom - Powered/Manual		Manual
	Zoom - Ratio		Approx. x 1.6
	Throw Ratio		1.39:1 to 2.23:1
Lens shift	Powered/Manual		Manual
	Range Vertical		+60%
	Range Horizontal		+/- 32%
Light source	Type/Wattage		Ultra high pressure mercury lamp / 330 W type
	System		330 W type
Recommended lamp replacement time*2	Lamp mode:	High	3,000 H
		Standard	4,000 H
Filter cleaning*2	15000 H Same as the lamp replacement is recommended		•
Screen size*4	40" to 600" (1.02 m to 15.24 m) (measured diagonally)		•
White & Colour Light output	Lamp mode:	High	4300 lm
		Standard	3400 lm
Contrast ratio (full white / full black)*3			2000:1
Displayable scanning frequency	Horizontal		14 kHz to 93 kHz
	Vertical		47 Hz to 93 Hz
Display resolution	Computer signal input		Maximum display resolution: 1920 x 1200 dots *4
	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, 1080/24p
Colour System			NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N
Keystone correction (Max.)	Vertical		+/- 30 degrees
	Horizontal		+/- 30 degrees
OSD language	23-languages		English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Polish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Vietnamese, Arabic, Farsi, Indonesian, Finnish, Hungarian
INPUT OUTPUT (Computer / Video / Control)	INPUT A		RGB / Y PB PR input connector: 5BNC (female)/Audio input connector: Stereo mini jack
	INPUT B		RGB input connector: Mini D-sub 15-pin (female) Audio input connector: Stereo mini jack (shared with INPUT C)
	INPUT C		DVI-D input connector: DVI-D 24-pin (Single link), HDCP support Audio input connector: Stereo mini jack (shared with INPUT B)
	INPUT D		HDMI input connector: HDMI 19-pin, HDCP support
	S VIDEO IN		S video input connector: Mini DIN 4-pin Audio input connector: Pin jack (x2) (shared with VIDEO IN)
	VIDEO IN		Video input connector: Pin jack Audio input connector: Pin jack (x2) (shared with S VIDEO IN)
	OUTPUT A		Monitor output connector*5: Mini D-sub 15-pin (female), Audio output connector*6: Stereo mini jack (variable out)
	REMOTE		RS-232C connector: D-sub 9-pin (female)
	LAN		RJ-45, 10BASE-T/100BASE-TX
	IR (Control S)		Control S input connector: Stereo mini jack
Acoustic noise	Lamp mode:	Standard	30 dB
Operating temperature / Operating humidity			0°C to 40°C (32°F to 104°F) / 35% to 85% (no condensation)
Storage temperature / Storage humidity			-20°C to +60°C (-4°F to +140°F) / 10% to 90% (no condensation)
Power requirements			AC 100 V to 240 V, 4.0 A to 1.6 A, 50/60 Hz
Power consumption Lamp mode: High	AC 100 V to 120 V		400 W
	AC 220 V to 240 V		380 W
Power consumption (Standby Mode* is set to "Low")	AC 100 V to 120 V		0.2 W
	AC 220 V to 240 V		0.3 W
Power Consumption (Networked Standby Mode)	AC 100 V to 120 V		9.2 W (LAN)
	AC 220 V to 240 V		10.4 W (LAN)
Heat dissipation	AC 100 V to 120 V		1365 BTU/h
	AC 220 V to 240 V		1297 BTU/h
Dimensions (W x H x D) (without protrusions)			Approx. 390 x 134 x 463 mm
Mass			Approx. 8.3 kg (18 lb)
Supplied accessories			Remote commander (RM-PJ19)

\*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.

\*5 From INPUT A and INPUT B.

\*6 Works as an audio switcher function. Output from a selected channel; not available in

\*7 Available via BKM-FW16.

Specifications (cont.)			VPL-FH60	VPL-FH65
Display device	3 LCD		•	•
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	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	
	Range Vertical		-5%, +60%	
	Range Horizontal		+/- 32%	
Light source	Type/Wattage	High pressure mercury lamp	280 W type	330 W type
Recommended lamp replacement time*2	Lamp mode:	High	3,000 H	
		Standard	4,000 H	
Filter cleaning*2			20,000 H Same as the lamp replacement is recommended	
Screen size*1			40" to 600" (1.02 m to 15.24 m) (measured diagonally)	
White & Colour Light output	Lamp mode:	High	5000 lm	6000 lm
		Standard	3200 lm	4400 lm
Contrast ratio (full white / full black)*3			2000:1	
Displayable scanning frequency	Horizontal		15 kHz to 92 kHz	
	Vertical		48 kHz to 92 kHz	
Display resolution	Computer signal input		Maximum display resolution: 1920 x 1200 dots *4	
	Video signal input		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 only; 1080/60p, 1080/50p, 1080/24p	
Colour System			NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60	
Keystone correction (Max.)	Vertical		+/- 30 degrees	
	Horizontal		+/- 30 degrees	
OSD language	24-languages		English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Polish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Vietnamese, Arabic, Farsi, Finnish, Indonesian, Hungarian, Greek	
INPUT OUTPUT (Computer / Video / Control)	INPUT A	RGB / Y PB PR input connector:	RGB / Y PB PR input connector: Mini D-sub 15-pin (female) Audio input connector: Stereo mini jack	
	INPUT B	RGB input connector:	DVI input connector: DVI-D 24-pin (single link), HDCP support Audio input connector: Shared with Input A	
	INPUT C	HDMI input connector:	HDMI input connector: HDMI 19-pin, HDCP support Audio input connector: HDMI Audio Support	
	INPUT D	Audio input connector:	HDBaseT interface connector: RJ45, 4 play (Video, Audio, LAN, Control)	
	S VIDEO IN	HDMI input connector:	Video input connector: BNC, Audio input connector: Shared with input A	
	VIDEO IN	S video input connector:	Monitor output for Input A Connector: Mini D-sub 15-pin (female) Audio output connector: Stereo mini jack	
	OUTPUT	Audio input connector:	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 A Connector:	D-sub 9-pin (male) / RS232C	
	LAN	Audio input connector:	RJ45, 10BASE-T/100BASE-TX	
	IR (Control S)	Monitor output for Input B Connector:	Control S input connector: Stereo mini jack Plug in power DC 5V	
Acoustic noise	Lamp mode:	Standard	28 dB	
Operating temperature / Operating humidity			0°C to 40°C (32°F to 104°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, 4.3A to 1.8A, 50 Hz / 60 Hz		•	
	AC 100 V to 240 V, 5.0A to 2.1A, 50 Hz / 60 Hz			•
Power consumption Lamp mode:	AC 100 V to 120 V	High	429 W	498 W
		Standard	268 W	346 W
	AC 220 V to 240 V	High	416 W	483 W
		Standard	216 W	337 W
Power consumption (Standby Mode* is set to "Low")	AC 100 V to 120 V		0.5 W	
	AC 220 V to 240 V		0.5 W	
Power Consumption (Networked Standby Mode)	AC 100 V to 120 V		15.0 W (LAN) / 15.0 W (HDBaseT) / 15.0 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")	
	AC 220 V to 240 V		13.3 W (LAN) / 13.3 W (HDBaseT) 13.3 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")	
Heat dissipation	AC 100 V to 120 V		1464 BTU/h	1699 BTU/h
	AC 220 V to 240 V		1419 BTU/h	1648 BTU/h
Dimensions (W x H x D) (without protrusions)			Approx. 460 x 169 x 515 mm (18 1/8 x 6 21/32 x 20 9/32 inches) 15/32 x 12 7/32 inches	
Mass			Approx. 13 kg (28 lb)	
Supplied accessories	RM-PJ27 Remote RM-PJ27 Remote Commander (1), Size AA (R6) batteries (2), AC Power Cord (1), Plug holder (1), Terminal (1) RM-PJ27 Remote Commander (1), Size AA (R6) batteries (2), AC Power Cord (1), Plug holder (1), Terminal, Size AA (R6) batteries (2), AC Power Cord (1), Plug holder (1), Terminal Cover (1), Quick Reference Manual (1), Operating Instructions (CD-ROM) (1)			

\*1 Specifications based on VPL-Z4111 (VPL-FH290L &amp; VPL-FH2120L)

\*2 The values are estimate.

\*3 This figure is expected maintenance time, not guaranteed time. The actual value depends on the environment and how the projector is used.

\*4 The figures are approximate. They are dependent on the environment or how the projector is used.

\*5 The picture quality may deteriorate when the V Keystone function is used for it is an electrical correction.

# F-Series Laser Projectors



Model: VPL-FHZ90L/120L  
Black and Lensless models are available

Sony's flagship laser projectors for larger and more demanding venues requiring the best in technology, resolution and highly sophisticated features. Delivers powerful performance, optional lenses, up to 20,000 hours of life and attractive TCO.

Laser light projectors with Sony 3LCD BrightEra™ Panel Technology

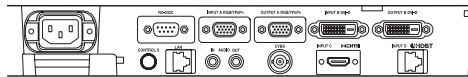
In a world first, Sony has combined a highly efficient laser light source with 3LCD BrightEra™ technology. This unique combination delivers exceptionally bright, high contrast pictures with excellent colour accuracy and stability, plus high efficiency and significantly greater durability for reduced lifetime ownership costs.



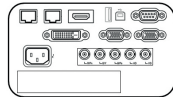
## F-Series

### Connector Panel Information

Rear connector panel for the VPL-FHZ58, VPL-FHZ61, VPL-FHZ70, VPL-FHZ66 & VPL-FHZ75 projectors



Rear connector panel for the VPL-FHZ90L and VPL-FHZ120L projectors



## F-Series

Ceiling mount and extension poles for VPL-FH31/60/65 and VPL-FHZ58/61/66



**PAM-310**  
Ceiling mount



**PAM-0.5M**  
Extension pole & ceiling plate



**PAM-1.0M**  
Extension pole & ceiling plate



**PAM-1.5M**  
Extension pole & ceiling plate

### Featuring



### PrimeSupport Pro

See page 5 for further details

Reference	F Laser models (VPL-FHZ58, FHZ61, FHZ70, FHZ66, & FHZ75) Included Service PS.LASERPROJ.5		
Support	Projector	Laser	
Duration	5 years	12000 hours	
Type of service	Return to base for repair		

### PrimeSupport Elite

See page 5 for further details

Reference	F Laser models (VPL-FHZ58, FHZ61, FHZ70, FHZ66, & FHZ75) PSP.VPL-FZ.EXC.5      PSP.VPL-Z-HB.EXC.5			
Support	Projector	Laser	Projector	Laser
Duration	5 years	12000 hours	5 years	20000 hours
Type of service	Swap for like for like, new unit			

### PrimeSupport Pro

See page 5 for further details

Reference	F laser high brightness (VPL-FHZ90L & VPL-FHZ120L) PS.HBPROJ.5		
Support	Projector	Laser	
Duration	5 years	20000 hours	
Type of service	Return to base for repair		

### PrimeSupport Elite

See page 5 for further details

Reference	F laser high brightness (VPL-FHZ90L & VPL-FHZ120L) PSP.VPL-Z-HB.HVY.5		
Support	Projector	Laser	
Duration	5 years	20000 hours	
Type of service	Swap for like for like, new unit		



Specifications			VPL-FHZ58	VPL-FHZ61	VPL-FHZ70	VPL-FHZ66	VPL-FHZ75
Display system	3LCD System		•	•	•	•	•
Size of effective display area	0.76" (19 mm) x 3 BrightEra LCD Panel, Aspect ratio: 16:10		•	•	•	•	•
	1" 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. x1.6				
	Throw Ratio		1.39:1 to 2.23:1				
Lens shift	Powered/Manual		Powered				
	Range Vertical		-5% / +60% <sup>15</sup>	-5% / +60% <sup>15</sup>	-5% / +70%	-5% / +60% <sup>15</sup>	-5% / +70%
	Range Horizontal		+/- 32%				
Light source	Type		Laser diode				
Laser life <sup>14</sup>	Light output mode: Standard		20,000 H				
Filter cleaning / replacement cycle (Max.) <sup>12</sup>			20,000 H				
Auto filter cleaning			•	•	•	•	•
Screen size (Max)			40" to 600" (depending on projection lens)				
White & Colour Light output <sup>2</sup>	Lamp mode:	Standard	4,200 lm	5,100 lm	5,500 lm	6,100 lm	6,500 lm
		Middle	3,000 lm	3,500 lm	5,100 lm	4,000 lm	6,100 lm
Contrast ratio (full white / full black) <sup>13</sup>			500,000:1				
Colour calibration			•	•	•	•	•
Displayable scanning frequency	Horizontal		15 kHz to 92 kHz				
	Vertical		48 Hz to 92 Hz				
Display resolution	Computer signal input <sup>14</sup>		Maximum display resolution: 1920 x 1200 dots				
	Video signal input		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)				
Colour System			NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60				
Keystone correction (Max.) <sup>11,18</sup>	Vertical		+/- 30 degrees				
	Horizontal		+/- 30 degrees				
INPUT OUTPUT (Computer / 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)				
	INPUT E						
	INPUT F						
	INPUT G						
	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 output 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				
OSD language	24-languages	English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Polish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Vietnamese, Arabic, Farsi, Finnish, Indonesian, Hungarian, Greek					
Acoustic noise	Standard		32 dB		34 dB		32 dB
	Middle		28 dB		28 dB		28 dB
Operating temperature / Operating humidity <sup>15</sup>	0°C to 45°C (32°F to 109°F) / 20% to 80% (no condensation)		•	•		•	
Storage temperature / Storage humidity <sup>15</sup>	-10°C to +60°C (14°F to +140°F) / 20% to 80% (no condensation)		•	•		•	
Power requirements			AC 100 V to 240 V, 50 Hz / 60 Hz				
Power consumption Lamp mode: High <sup>15</sup>	AC 100 V to 120 V		367 W	420 W		515 W	
	AC 220 V to 240 V		352 W	408 W		497 W	
Power consumption (Standby mode)	AC 100 V to 120 V		0.5 W				
	AC 220 V to 240 V		0.5 W				
Power Consumption (Network Standby Mode) <sup>15</sup>	AC 100 V to 120 V		15.0 W (LAN) 19.4 W (HDBaseT) 19.4 W (All Terminals / Networks) (when "Standby Mode" set to "Standard")				
	AC 220 V to 240 V		13.3 W (LAN) 17.4 W (HDBaseT) 17.4 W (All Terminals / Networks) (when "Standby Mode" set to "Standard")				
Body colour			White / Black Available				
Dimensions (W x H x D) (without protrusions)			Approx. 460 x 169 x 515 mm, 18 1/8 x 6 21/32 x 20 9/32 inches				
Mass			16 kg (34 lb)				
Supplied accessories	Remote commander		RM-PI27				
Optional accessories	Projection Lens		PAM 310, PAM-0.5M / PAM-1.0M / PAM-1.5M VPLL-3003 / 3007 / Z3009 / Z3010 / Z3024 / Z3032				

\*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.

\*5 To be updated for VPL-FHZ70 &amp; VPL-FHZ75

\*6 The values are estimate.

\*7 This figure is expected maintenance time, not guaranteed time.

The actual value depends on the environment and how the projector is used.

\*8 The picture quality may deteriorate when the V Keystone function is used for it is an electrical correction.

\*9 When using BKM-PI20

Correct as of February 2019. Subject to change.



Specifications (cont.)			VPL-FH290L	VPL-FH2120L
Display system	3LCD System		•	•
Size of effective display area	0.76" (19 mm) x 3 BrightEra LCD Panel, Aspect ratio: 16:10			
	1" 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. x1.5
	Throw Ratio			1:30:1 to 1.96:1
Lens shift	Powered/Manual			Powered
	Range Vertical			+/- 99%
	Range Horizontal			+/- 51%
Light source	Type			Laser diode
Laser life *4	Light output mode: Standard			20,000 H
Filter cleaning / replacement cycle (Max.) *2			10,000 H (service maintenance)	
Auto filter cleaning			•	•
Screen size (Max)			40" to 600" (depending on projection lens)	
White & Colour Light output *6	Lamp mode:	Standard	9,000 lm	12,000 lm
		Middle	8,000 lm	10,000 lm
Contrast ratio (full white / full black)			∞:1	∞:1
Colour calibration			•	•
Displayable scanning frequency	Horizontal		15 kHz to 92 kHz	
	Vertical		48 Hz to 92 Hz	
Display resolution	Computer signal input *4		Maximum display resolution: 1920 x 1200 dots	
	Video signal input		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), 1080/30p*5	
Colour System			NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60	
Keystone correction (Max.) *1*8	Vertical		+/- 30 degrees	
	Horizontal		+/- 30 degrees	
INPUT OUTPUT (Computer / Video /Control)	INPUT A		RGB / Y PB PR input connector: 5 BNC (female)	
	INPUT B		RGB input connector: Mini D-sub 15-pin (female)	
	INPUT C		DVI input connector: DVI-D 24-pin (single link), HDCP support HDCP: v1.4	
	INPUT D		HDMI input connector: HDMI 19-pin, HDCP support HDCP: v1.4	
	INPUT E		HDBaseT interface connector: RJ45, 3 play	
	INPUT F		Optional adaptor slot for 3G-SDI Input Adaptor (BKM-PJ20)	
	INPUT G		USB Port: HTML Viewer Type-A x 1	
	VIDEO IN		Video input connector: BNC, Audio input connector: Shared with input A	
	OUTPUT A		Monitor output for Input A	
	OUTPUT B		Input B Connector: Mini D-sub 15-pin (female)	
	REMOTE		D-sub 9-pin (male) / RS232C	
	LAN		RJ45, 10BASE-T/100BASE-TX/1000BASE-T/1000BASE-TX	
	IR (Control S)		Stereo mini jack, Plug in power DC5V	
OSD language	24-languages	English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Polish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Vietnamese, Arabic, Farsi, Finnish, Indonesian, Hungarian, Greek		
Acoustic noise	Lamp mode:	Standard	39 dB	42 dB
		Middle	39 dB	39 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, 50 Hz / 60 Hz	
Power consumption Lamp mode: High	AC 100 V to 120 V		840 W	1076 W
	AC 220 V to 240 V		814 W	1033 W
Power consumption (Standby mode)	AC 100 V to 120 V		0.50 W	
	AC 220 V to 240 V		0.50 W	
Power Consumption (Network Standby Mode)	AC 100 V to 120 V		21.6W (LAN) 26.5W (HDBT) 26.6W (All Terminals / Networks) (when "Standby Mode" set to "Standard")	
	AC 220 V to 240 V		21.3W (LAN) 26.5W (HDBT) 26.6W (All Terminals / Networks) (when "Standby Mode" set to "Standard")	
Body colour			White / Black Available	
Dimensions (W x H x D) (without protrusions)			Approx. 544 x 205 x 564 mm	
Mass			26 kg	27 kg
Supplied accessories	Remote commander		RM-PJ30	
Optional accessories	Projection Lens		VPLL-4008, Z4111 (Standard), Z4015, Z4019, Z4025, & Z4045	

\*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.

\*5 To be updated for VPL-FH270 &amp; VPL-FH275

\*6 The values are estimate.

\*7 This figure is expected maintenance time, not guaranteed time.

The actual value depends on the environment and how the projector is used.

\*8 The picture quality may deteriorate when the V Keystone function is used for it is an electrical correction.

\*9 When using BKM-PJ20

Correct as of February 2019. Subject to change.

## VPL-FHZ58/61/66, VPL-FHZ70, VPL-FHZ75, FH60/65

## Optional Bayonet Lenses

	<b>VPLL-3003</b> WUXGA: 0.33:1		<b>VPLL-3007</b> WUXGA: 0.65:1		<b>VPLL-Z3009</b> WUXGA: 1.0-1.39:1
	<b>VPLL-3010</b> WUXGA: 1.0-1.39:1		<b>VPLL-Z3024</b> WUXGA: 2.34 - 3.19		<b>VPLL-Z3032</b> WUXGA: 3.18 - 4.84

## VPL-FHZ90L, FHZ120L

## Optional Lenses

	<b>VPLL-4008</b> WUXGA: 1.00:1		<b>VPLL-Z4111</b> WUXGA: 1.30 - 1.96 Standard		<b>VPLL-Z4015</b> WUXGA: 1.85 - 2.44
	<b>VPLL-Z4019</b> WUXGA: 2.41 - 3.07		<b>VPLL-Z4025</b> WUXGA: 3.02 - 5.58		<b>VPLL-Z4045*</b> WUXGA: 5.56 - 7.50

\* VPLL-Z4045 max mechanical shift 9.6:1

For full product specifications and features please visit [pro.sony/installation](http://pro.sony/installation)





# BRAVIA

## 4K Professional Displays

Bring the spectacular depth and quality of 4K to your business with the latest range of ultra-slim, energy efficient BRAVIA Professional Displays. Installation friendly and easy to manage, they're ideal for presenting your best image in a wide range of environments, from retail spaces to meeting rooms, lecture theatres and communal areas.

### See every detail in 4K

The 4K resolution LCD panel (3840 x 2160 pixels) ensures incredible colour, contrast and realism, with four times the detail of Full HD. All models are HDR compatible, displaying a wider range of brightness levels for a level of detail and realism beyond anything you've seen before.

### Superior displays designed for business

Portrait, advanced control, professional mode, optional interactive compatibility, 24/7 operation or an embedded HTML5 platform for easy digital signage creation; our BRAVIA 4K Displays are designed to suit all professional needs.

### Personalise BRAVIA your way

BRAVIA suits any business application with a range of personalisation options and built-in solutions, including TEOS solutions, Touchscreen solution, Meeting Room solution, Media Player, TDM Digital Signage, Smart Automation, Screen Mirroring and Android Applications Store\*.

### Highlights

- Brilliant 4K image quality with powerful 4K X1 processor and Reality Creation.
- Embedded HTML5 platform for easy digital signage.
- Copy custom settings to multiple screens via USB memory.
- Slim, stylish and installation friendly with versatile control options.
- Touchscreen option.
- 24/7 operation and reliable high-brightness panel.

 PrimeSupport  
Pro

See page 5 for  
further details

\*Some solutions may be chargeable



# Do more with BRAVIA built-in solutions

## Bring the incredible depth and quality of 4K resolution to your business or university

### Built-in Meeting-Room solution

Standard and enhanced interface in meeting rooms with smart features, and efficient automated systems for input management. There's no need for extra controllers in the room and settings stay exactly as they have been programmed.

### Built-in mirroring (TEOSConnect)\*

Great for collaborative working, TEOSConnect allows smooth, speedy wireless screen mirroring from laptops, directly to BRAVIA Professional Displays. It's available as an easy-to-install app, with no extra hardware needed.

### Built-in workplace management solution (TEOSManage)\*

Sony BRAVIA Professional Displays are fully compatible with TEOSManage. Intelligent workspaces can now have complete control of all of their connected devices and content in boardrooms, meeting rooms, offices, public areas and other locations. Plus, there's no player required.

### Built-in Android Applications Store

Endless possibilities to display what you need, without external devices, through dedicated applications.

### Built-in Digital Signage Platform\* (TDM Digital Signage)

Create and generate your signage content simply and without limitation. This easy-to-use authoring tool lets you combine text, graphics, video, social media feeds and other live web content to produce dynamic marketing messages.

#### The total touchscreen solution

Turn your BRAVIA into an interactive touchscreen with our IR and capacitive technology overlays. Designed to fit seamlessly onto the BRAVIA screen, it's easy to set up and allows 10 multi-touch points for greater interaction.

#### Looks great in every light

The screen overlay's tough anti-glare surface ensures optimum visibility, even in the sunniest environments.

#### Quick and easy to install and set up

Simple, fuss-free installation and set up allows deployment of your interactive touchscreen solution in minutes.







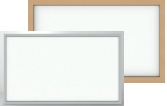


\*Chargeable option

Specifications		FW-43BZ35F	FW-49BZ35F	FW-55BZ35F	FW-65BZ35F	FW-75BZ35F	FW-85BZ35F	
General features	Screen size (diagonal)	43"	49"	55"	65"	75"	85"	
	Brightness (cd/m <sup>2</sup> )***	505 cd/m <sup>2</sup>			620 cd/m <sup>2</sup>			
	Native contrast ratio	3,500:1			4,000:1			
	Dynamic contrast ratio	over 1 million						
	Response time (ms)	5	8	5			6	
	Display resolution	4K (3840x2160)						
	Compatible with HDR	Yes (HDR10, HLG)						
	Aspect ratio	16:9						
Display features	Portrait compatibility	Yes						
	Dimming type	Frame Dimming						
	Display device	LCD						
	Backlight type	Edge LED						
	Operating system	Android 7.0						
	Processor	X1						
Video specs	Operation time	24/7						
	Wide Mode	Wide zoom/Normal/Full/Zoom/14:9						
	4:3 Default	Yes						
	Video Processing	4K X-Reality PRO						
	Motionflow	Motionflow XR 800Hz (Native 100Hz)						
	Triluminos	Yes						
	Viewing angle (Right/Left/Up/Down)	178 (89/89/89/89)						
	Video Signal (HDMI)	4096x2160p(24,60Hz), 3840x2160p(24,30,60Hz), 1080p(30,60Hz), 1080i(60Hz), 720p(30,60Hz), 720i(60Hz), 480p, 480i						
4K 60P quality format	Up to 18Gbps; 4K 60p 4:4:4(8bit), 4:2:2(8,10,12bit), 4:2:0(8,10bit) HDR included for HDMI 1/2/3/4							
Audio specs	Speaker position	Down Firing						
	Audio Power Output	10W + 10W						
	Invisible speaker	Yes						
Professional features	Professional Hidden Mode	Yes						
	HDMI auto wake-up	Yes						
	HTML5 platform	Yes						
	Multicast / IPTV	Yes (UDP/RTP)						
	Compatible with TDM Digital Signage	Yes						
	Available storage	16 GB						
Network specs	Compatible TDM content	Customised design, text, pictures, videos, YouTube, traffic, weather, public information, Facebook, Twitter, PowerPoint and more.						
	Wi-Fi Direct	Yes						
	Wi-Fi Certified	Yes						
	DLNA	Network Client / Network Renderer						
	Firmware update	Yes (network or USB)						
	Internet Browser	Yes (Opera)						
Convenience features	Wireless LAN	Integrated						
	USB HDD REC	Yes						
	USB Play (contents)	MPEG1:MPEG1/MPEG2PS:MPEG2/MPEG2TS(HDV,AVCHD):MPEG2,AVC/MP4(XAVC EG4,HEVC/AVI:Xvid,MotionJpeg/ASF(WMV):VC1/ MOV:AVC,MPEG4, MotionJpeg/MKV:Xvid,AVC,MPEG4,VP8.HEVC/WEBM:VP8/3GPP:MPEG4,AVC/MP3/ASF(WMA)/ WAV/MP4AAC/FLAC/JPEG						
	On screen clock	Yes						
	Sleep timer	Yes						
Control specs	On/Off timer	Yes						
	Google Cast	Yes						
	IP Control	Yes						
Inputs and outputs	RS-232C Control	Yes (jack 3.5)						
	HDMI CEC	Yes						
	HDCP	2.2 (for HDMI1/2/3/4)						
	Composite Video Input(s)	1 (Rear Hybrid w/Component)						
	Component Video (Y/Pb/Pr) Input(s)	1 (Rear Hybrid w/Composite)						
	HDMI™ Connection(s) (Total)	4(3Side/1Rear)						
	Analog Audio Input(s) for HDMI (Total)	1(Rear)						
	Digital Audio Output(s)	1 (Rear)						
Audio Out	1 (Side/Hybrid w/HP and Subwoofer Out)							
Design features	USB	3 (side)						
	Ethernet Connection(s)	1 (side)						
	Finish (Surface Colour)	Black						
	Table Top Stand	Separate (assembly required)						
Environment specs	VESA® Hole Spacing Compatible	Yes (10.0x20.0 cm)	Yes (20.0x20.0 cm)	Yes (30.0x20.0 cm)	Yes (30.0x30.0 cm)	Yes (40.0x30.0 cm)	Yes (40.0x40.0 cm)	
	Light Sensor	Yes						
	Energy Label							
	Screen size (measured diagonally)							
	Power Consumption (in Standby)	0.50 W						
	Power Consumption (in Operation)	76 W	88 W	103 W	120 W	149 W	233 W	
	Lead content	Yes						
	Mercury content (mg)	0.0						
	Dynamic Backlight Control	Yes						
	Power Saving Mode / Back Light Off Mode	Yes						
AC Power Input	AC Adapter			1 (Rear)				

Specifications (cont.)		FW-43BZ35F	FW-49BZ35F	FW-55BZ35F	FW-65BZ35F	FW-75BZ35F	FW-85BZ35F	
Measurements	Display Only (WxHxD)	96.5x56.9x5.8(1.69) cm	109.8x64.4x5.8(1.72) cm	123.1x71.3x5.2(1.41) cm	145.0x83.6x5.2(1.41) cm	167.3x96.3x5.4(1.68) cm	191.1x109.8x7.3 cm	
	Display with Stand (WxHxD)	96.5x62.8x27.9 cm	109.8x70.3x27.9 cm	123.1x77.6x31.5 cm	145.0x90.0x31.5 cm	167.3x103.1x37.1 cm	191.1x117.6x42.9 cm	
	Package Carton (WxHxD)	107.0 x 69.5 x 14.8 cm	118.8 x 77.6 x 14.8 cm	133.2x81.7x15.8 cm	156.5 x 94.6 x 17.9 cm	188.4 x 108.3 x 18.8 cm	208.2 x 123.3 x 36.9 cm	
Weight	Display Only	10.8 Kg	13.2 Kg	19.1 Kg	25.6 Kg	38.9 Kg	44.1 Kg	
	Display with Stand	11.3 Kg	13.7 Kg	20 Kg	26.5 Kg	40.1 Kg	46.2 Kg	
	Package Carton	16 Kg	19 Kg	26 Kg	35 Kg	53 Kg	64 Kg	
Optional accessories	TDM Digital Signage 1-year license	TDM-DS1Y						
	TDM Digital Signage 3-years license	TDM-DS3Y						
	TEOS Manage Control license	TEM-CO10						
	TEOS Manage Meeting Room license	TEM-MR10						
	TEOS Manage Signage license	TEM-DS10						
	TEOS Connect Mirroring license	TEC-SC100						
	10 point IR touch overlay	TO-1343-IR10	TO-1349-IR10	TO-1355-IR10	TO-1365-IR10	TO-1375-IR10	TO-1385-IR10	
	10 point Capacitive touch overlay	TO-1343-CA10	TO-1349-CA10	TO-1355-CA10	TO-1365-CA10	TO-1375-CA10	-	
	White cover	FC-1343/W	FC-1349/W	FC-1355/W	FC-1365/W	FC-1375/W	FC-1385/W	
	Wood cover	FC-1343/WO	FC-1349/WO	FC-1355/WO	FC-1365/WO	FC-1375/WO	FC-1385/WO	
	Wallmount bracket	SU-WL450/PSE				SU-WL450/PSE (optional)		-
	VGA to HDMI cable	CAB-VGAHDMI1						
RS232 jack cable	RS232 jack cable CAB-RSJA1							

## BZ35-Series

### Optional Accessories

	<b>CAB-VGAHDMI1</b> VGA to HDMI cable		<b>CAB-RSJA1</b> RS232 jack cable		<b>TEOS Connect license</b> TEC-SC100
	<b>TEOS Manage licenses</b> TEM-CO10 TEM-MR10 TEM-DS10		<b>TDM digital signage</b> software licenses TDM-DS1Y: 1 year TDM-DS3Y: 3 years		<b>SU-WL450/PSE Wall Mount</b>
	<b>Frontcover accessories</b>		<b>Totems</b>		<b>Touch overlays</b>

See page 5 for further details

PrimeSupport Pro

Reference	Included Service PS.B2B.3	PSP.FW43BZ35.2X	PSP.FW49BZ35.2X	PSP.FW55BZ35.2X
Duration	3 years Advanced Exchange	2 years extension, total 5 years	2 years extension, total 5 years	2 years extension, total 5 years
Reference	PSP.FW65BZ35.2X	PSP.FW75BZ35.2X	PSP.FW85BZ35.2X	PSP.FW-4K.100.5
Duration	2 years extension, total 5 years	2 years extension, total 5 years	2 years extension, total 5 years	2 years extension, total 5 years

For full product specifications and features please visit [pro.sony/professional-displays](http://pro.sony/professional-displays)



# Visual Imaging Cameras

Sony's professional Full HD visual imaging cameras take your communications to a new level.

## Visual Imaging Cameras

Smooth, silent operation combined with a powerful zoom range: you'll capture every presenter and contributor in crisp, high definition with our PTZ colour cameras. The SRGs feature Sony's unique View-DR and XDNR technology, ensuring complete clarity even in very poor light. Control is easy, over standard IP networks with intuitive PC software, including the option to stream content over the internet (SRG-300SE).

## Highlights

- Powerful 30x optical zoom (SRG-300H, SRG-300SE and SRG-360SHE).
- View-DR and XDNR – unique Sony technologies for clarity in poor light (SRG range).
- IP streaming – stream (live or recorded) conferences, lectures and events (SRG-300SE and SRG-360SHE).



PrimeSupport  
Pro

See page 5 for  
further details



PrimeSupport  
Elite

See page 5 for  
further details





Specifications		SRG-360SHE	SRG-300SE	SRG-300H	
Camera	Image Sensor	1/2.8" Exmor CMOS, Number of Effective Pixels: Approx. 2.1 Megapixels			
	Signal System	1080/59.94p, 50p, 1080/59.94i, 50i, 720/59.94p, 50p	1080/59.94p (A/B), 50p (A/B), 29.97p, 25p, 1080/59.94i, 50i, 720/59.94p, 50p, 29.97p, 25p	1080/59.94p, 50p, 29.97p, 25p 1080/59.94i, 50i, 720/59.94p, 50p, 29.97p, 25p	
	Minimum Illumination (50 IRE)	High Sensitivity Mode: 0.35lx (50IRE, F1.6, 30fps) High Sensitivity Mode: 0.7 lux (50IRE, F1.6, 60fps) Normal Mode: 1.4lx (50IRE, F1.6, 30fps) Normal Mode: 2.8lx (50IRE, F1.6, 60fps)			
	S/N Ratio	50 dB			
	Gain	Auto/Manual (0 to +43 dB)			
	Day/Night Mode	Yes			
	Shutter Speed	1/1 to 1/10000			
	Exposure Control	Auto, Manual, Priority AE (Shutter, Iris), Exposure Compensation, Bright			
	White Balance	Auto, Indoor, Outdoor, One-push Auto, ATW, Manual			
	Zoom	Optical Zoom: 30x, Digital Zoom: 12x			
	Focusing System	Auto/Manual			
	Horizontal Viewing Angle	65° (Wide)			
	Focal Length	f = 4.3mm (Wide) to 129mm (Tele) F1.6 to 4.7			
	Minimum Object Distance	10 mm (Wide) to 1200 mm (Tele)			
Camera Features	Pan/Tilt Angle	Pan: ±170° Tilt: +90°/-30°	Pan: ±170° Tilt: +90°/-20°		
	Pan/Tilt Speed (Max.)	Pan: 60°/sec Tilt: 60°/sec	Pan: 100°/sec Tilt: 90°/sec		
	Preset Position	256 (16 by Visca, 256 by CGI)		16	
	Wide-D	View-DR (59.94fps 90dB/29.97fps 130db)			
	Noise Reduction	Yes			
	Image Stabilizer	Yes			
	Image Flip	Yes			
	PTZ Sync	Yes	No	No	
	PTZ Trace	Yes	No	No	
	Interface	Video Output	3G-SDI, HDMI, IP <sup>*4</sup>	3G-SDI, IP	HDMI
		MIC Input	Mini-phone (3.5φ)×2 (MIC/Line Selectable)	RCA x1 (LINE), Mini-phone (3.5φ) x1 (MIC) (selectable)	No
		Line Input	Mini-phone (3.5φ)×2 (MIC/Line Selectable)	RCA x1	No
		Network Port	Yes		
		Camera Control Interface	RJ-45 <sup>*5</sup>	RJ-45, 9-Pin PHOENIX Block	RJ-45, 8-Pin DIN, 9-Pin PHOENIX Block
Camera Control IR		Yes	No	Yes	
Camera Control Protocol		RS-422, VISCA over IP, CGI, S700PTP	RS-422, VISCA over IP, CGI	RS-422, RS-232, VISCA over IP	
Sync System		INT			
General	Power Requirements	DC 12V (DC 10.8 to 13.2V)			
	Power Consumption	25.5W	16.8 W		
	PoE	PoE+	No		
	Operating Temperature	0 °C to 40 °C			
	Storage Temperature	-20 °C to 60 °C			
	Dimensions* (W x H x D)	159 x 187.5 x 200.5mm	157 x 164 x 163mm		
	Mass	Approx. 2.1kg	Approx. 1.4kg		
	Body Colour	White with black	White/Black		
	Mountable Angle	≤±15°			
	Ceiling Mount	Yes			
IR Remote Controller	Yes				
Ventilation Mechanism	Yes				
Supplied Accessories	IR Remote Commander (1), AC Power Adaptor (1), Ceiling Bracket (2), Wire Rope (1), HDMI Cable Retainer (1), Screw M3 x8 (9), Screw M2.6 x6 (1)	AC Power Adaptor (1), AC Power Cable (1), Ceiling Bracket (2), RS-422 Connector Plug (1), Wire Rope (1), Screw M3 x8 (9)	AC Power Adaptor (1), AC Power Cable (1), IR Remote Commander (1), CD-ROM (Operating Instructions) (1), Ceiling Bracket (2), RS-422 Connector Plug (1), Wire Rope (1), Screw M3 x8 (8)		
IP Streaming / Video	Resolution	1920 x 1080, 1280 x 720, 960 x 540, 720 x 480	1920 x 1080, 1280 x 720, 1024 x 576, 960 x 536, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 640 x 360, 352 x 288, 320 x 184	-	
	Compression Format	H.264	H.264, JPEG	-	
	Maximum Frame Rate	H.264: 60 fps (1920 x 1080)			
	Bitrate Compression Mode	CBR/VBR (selectable)			
	Range of Bitrate Setting	Up to 32 Mbps			
	Adaptive Rate Control	No	Yes	-	
	Multi Streaming Capability	3			
Maximum Number of Clients	5				
Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP, HTTP, DHCP, DNS, RTP/RTCP, RTSP, HTTPS, SNMP, VISCA over IP	IPv4, TCP, UDP, ARP, ICMP, IGMP, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, RTSP over HTTP, IPv6, HTTPS, SNMP (v1, v2c, v3), SSL	-		
Audio	Channel	2	1	-	
	Codec	AAC LC			
	Audio Setting Option	Auto Gain Control (ALC), Equalizer			
Network	Multicast Streaming Support	Yes			
	ONVIF Conformance	No			
	Wireless Network Authentication	No	IEEE802.1X		
System Requirements	Operating System	Windows 7 (32/64bit), Windows 8.1 Pro (32/64bit)*1, Windows 10 Pro (32/64bit)*2 Authorized editions: Windows 7: Ultimate, Professional, Windows 8.1: Pro, Windows 10: Pro	Microsoft Windows Vista (32bit), Windows 7 (32/64bit), Windows 8 Pro (32/64bit)*3, Windows 8.1 Pro (32/64bit)*3 Authorized editions: Windows Vista: Ultimate, Business, Windows 7: Ultimate, Professional, Windows 8: Pro, Windows 8.1: Pro, Microsoft DirectX 9.0c or higher	-	
	Processor	Intel Core i7, 2.8 GHz or higher. Or Intel Core i3 / Intel Core i5 / Intel Core i7 (with built-in Intel HD Graphics)			
	Memory	2GB or more			
	Web Browser	Windows Internet Explorer Ver. 11.0*, Google Chrome Ver. 50.0	Windows Internet Explorer Ver. 7.0, Ver. 8.0, Ver. 9.0, Ver. 10.0*, Ver. 11.0*. Firefox Ver.19.0, Safari Ver.5.1, Google Chrome Ver.25.0		

\* The values for dimensions are approximate.

\*1 If you use Windows 8.1, use the Internet Explorer for the desktop user interface (desktop UI).

\*2 If you use Windows 10, turn off the tablet mode.

\*3 In case of Windows 8 or Windows 8.1, use the Internet Explorer desktop user interface (desktop UI) edition.

\*4 With PoE+ simultaneous output is limited to 3G-SDI and single IP stream.

\*5 Cascade connection is not available.



Specifications		SRG-120DH	SRG-120DS	SRG-120DU
Camera	Image Sensor	1/2.8" Exmor CMOS		
	Image Sensor (Number of Effective Pixels)	Approx. 2.1 Megapixels		
	Signal System	1080/59.94p, 50p, 29.97p, 25p, 1080/59.94i, 50i, 720/59.94p, 50p, 29.97p, 25p	1080/59.94p (A/B), 50p (A/B), 29.97p, 25p, 1080/59.94i, 50i, 720/59.94p, 50p, 29.97p, 25p	1080/59.94p, 50p, 29.97p, 25p, 720/59.94p, 50p, 29.97p, 25p, 15p
	Minimum Illumination (50 IRE)	High Sensitivity Mode: 0.4lx (50IRE, F1.8, 30fps) High Sensitivity Mode: 0.9lx (50IRE, F1.8, 60fps) Normal Mode: 1.8lx (50IRE, F1.8, 30fps) Normal Mode: 3.6lx (50IRE, F1.8, 60fps)		
	S/N Ratio	50 dB		
	Gain	Auto/Manual (0 to +43 dB)		
	Day/Night Mode	No		
	Shutter Speed	1/1 to 1/10000		
	Exposure Control	Auto, Manual, Priority AE (Shutter, Iris), Exposure Compensation, Bright		
	White Balance	Auto, Indoor, Outdoor, One-push Auto, ATW, Manual		
	Optical Zoom	12x		
	Digital Zoom	12x		
	Focusing System	Auto/Manual		
	Horizontal Viewing Angle	71° (Wide)		
	Focal Length	f = 3.9mm (wide) to 46.8 mm (Tele) F1.8 to 2.0		
	Minimum Object Distance	10 mm (Wide) to 1500 mm (Tele)		
Pan/Tilt Angle	Pan: ±100° Tilt: ±25°			
Pan/Tilt Speed (Max.)	Pan: 300°/sec Tilt: 126°/sec			
Preset Position	16			
Camera Features	Wide-D	View-DR (59.94fps 90dB/29.97fps 130db)		
	Noise Reduction	Yes		
	Image Stabilizer	No		
	Image Flip	No		
	PTZ Sync	No		
	PTZ Trace	No		
Interface	Video Output	HDMI	3G-SDI	USB
	MIC Input	No		
	Line Input	No		
	Network Port	Yes		
	Camera Control Interface	8-Pin DIN, RJ-45		8-Pin DIN, RJ-45, USB 2.0/3.0
	Camera Control IR	Yes		
	Camera Control Protocol	RS-232, VISCA, VISCA over IP		RS-232, VISCA, VISCA over IP, UVC
	Sync System	INT		
General	Power Requirements	DC 12V (DC 10.8 to 13.2V)		
	Power Consumption	16.8 W		
	PoE	No		
	Operating Temperature	0 °C to 40 °C		
	Storage Temperature	-20 °C to 60 °C		
	Dimensions* (W x H x D)	153 x 156 x 153 mm		
	Mass	Approx. 1.6kg		
	Body Colour	Silver		
	Mountable Angle	<±15°		
Ceiling Mount	No			
Supplied Accessories	AC Power Adaptor (1), AC Power Cable (1) IR Remote Commander (1), CD-ROM (Operating Instructions) (1)			
Can be used for applications such as video collaboration client software via USB & UVC control			Skype, Skype for Business, Hangout, WebEx, other similar applications**	

See page 5 for further details					
PrimeSupport Pro					
Reference	Included service PS.VIDEOCONF.3	PSP. SDCAMERA.4	PSP. SDCAMERA.5	PSP. HDCAMERA.4	PSP. HDCAMERA.5
Duration	3 years	1 year repair extension, total 4 years	2 years repair extension, total 5 years	1 year repair extension, total 4 years	2 years repair extension, total 5 years

See page 5 for further details			
PrimeSupport Elite			
Reference	PSP. HDCAMERA. RL3	PSP. HDCAMERA. RL4	PSP. HDCAMERA. RL5
Duration	3 years repair & loan	4 years repair & loan	5 years repair & loan

### SRG Series

#### Optional Accessories



**PCS-A1**  
Omnidirectional Microphone

\* The values for dimensions are approximate.  
\*\* Real customer environment requires local test.

For full product specifications and features please visit [pro.sony/network-camera-systems](http://pro.sony/network-camera-systems)

# BRC Series



From TV studios and sports stadiums to auditoriums, lecture theatres and houses of worship – our sophisticated, dependable BRC remote cameras capture and stream broadcast-quality video footage in detail-packed 4K or Full HD.



4K



HD



HD

Specifications		BRC-X1000 (4K)	BRC-H900 (HD)	BRC-H800 (HD)
Camera	Image sensor	1.0-type Exmor R CMOS	1/2-type Exmor CMOS x3	1.0-type Exmor R CMOS
	Signal System	2160/29.97p, 25p, 23.98p, 1080/59.94p, 50p, 59.94i, 50i, 720/59.94p, 50p, 2160/23.98p, 1080/23.98p	1080/59.94i, 50i, 720/59.94p, 50p, NTSC, PAL	1080/59.94p, 50p, 59.94i, 50i, 720/59.94p, 50p, 1080/23.98p
	4K Video Output	Dual link 3G-SDIx2, HDMI	–	–
	HD Video Output	3G-SDIx4, HDMI	HD-SDI, Component (Y/Pb/Pr) or RGB	3G-SDIx2, HDMI
	SD Video Output	–	SD-SDI, Composite, Y/C	–
	Minimum Illumination	1.7 lux (50IRE, F2.8, 1/30s, Max Gain)	4 lux (50IRE, F1.9, Max Gain)	1.7 lux (50IRE, F2.8, 1/30s, Max Gain)
	Optical Zoom	12x	14x	12x
	Clear Image Zoom	24x (HD), 18x (4K)	–	24x
	Tele Convert Mode	Off, 2x, *1920x1080 only	–	Off, 2x, *1920x1080 only
	Horizontal Viewing Angle	64.6 degree (Wide)	59.6 degree (Wide)	64.6 degree (Wide)
	Preset positions	100	16	100
	Serial Control	RS-422	RS-422, RS-232C	RS-422
	IP Control	Yes	Yes (Option)*	Yes
	ND filter	Yes	No	Yes
	External sync	Yes	Yes	Yes
	Paint control from RCP	Yes	Yes (Option)*	Yes
Power	DC10.8V to 13.2V, PoE+	DC10.8V to 13.2V	DC10.8V to 13.2V, PoE+	

For full product specifications and features please visit [pro.sony/network-camera-systems](http://pro.sony/network-camera-systems)

\* CNA-1 and HZC-BRCN1 are required.

# UMC-S3CA

With an ultra-high sensitivity of ISO 409600\* and internal recording, this compact 4K video camera is ideal for a wide range of remote shooting applications in almost total darkness.



This lens is optional

## Crisp, clear 4K video and still images, even in near darkness

With an ultra-high sensitivity of ISO 409600\*, the UMC-S3CA captures crisp, clear 4K/29.97P/25P colour video and low-noise 12 megapixel still images in minimum illumination conditions of 0.004 lx. The 35 mm full-frame Exmor™ sensor captures significantly more incident light than conventional cameras,

while the image processing extremely enhances the high sensitivity with very low noise. Area-specific noise reduction selectively divides the image into areas based on patterns (such as edges, textures and evenly coloured areas like blue skies) to efficiently reduce noise and improve image quality.

Detail reproduction technology helps to accurately depict details with a more natural sense of dimension.

\* Standard ISO 100-102400, expandable to 50-409600

# RM-IP10



## Up to 5 controllers can operate on a single network

- Up to 5 RM-IP10 control panels can be used on a single network allowing shared control and simultaneous multi-operator control of large camera systems.

## Simple RJ-45 (10Base-T/100Base-TX) connection for easy connection

- The RM-IP10 links to an IP network with via a RJ-45 connector providing very easy, low cost and speedy installation.

## Control of up to 112 SRG/BRC cameras via IP

- The RM-IP10 remote control panel gives you control of up to 112 BRC cameras over an IP network.

## Additional ability to use VISCA control

- The RM-IP10 can also control up to 7 SRG/BRC cameras over a traditional VISCA (Video System Control Architecture) network.

# RM-IP500



## Control up to 100 BRC or SRG cameras via IP

- SRG-300 and SRG-120 series are newly supported.

## High-quality control of PTZF functions

- Pan and tilt adjustment with joystick.
- Zoom control either via joystick or a separate seesaw lever.
- Adjustable speed control of PTZF via dedicated dials.

## Store and recall camera presets

- Up to 100 presets (camera angles and settings) can be stored.
- Presets can be recalled instantly via the numeric keypad.

## Simple set-up

- Automatic IP address assignment of connected cameras.
- Auto assignment of camera



# Visual Simulation and Visual Entertainment

Every projector in our simulation and visualisation line-up delivers stunning high contrast, native 4K images. At more than four times the resolution of Full HD, it guarantees an astonishingly detail-packed experience, with richer colour and unbeatable image quality.

Whether you're creating a flight simulation for pilot training, a Planetarium, or sharing a finely-detailed visualisation for an automotive design, all projectors can provide you with the very best picture.

For full product specifications and features please visit [pro.sony/simulation-projectors](https://pro.sony/simulation-projectors)

 PrimeSupport Pro	 PrimeSupport Elite	 PrimeSupport On-Demand	 PrimeSupport Bespoke	See page 5 for further details
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# Laser Light Source Projectors



Sony combines the best of its projection technologies, 4K SXRD imagery and laser light source technology, to create projectors with native 4K resolution.

## VPL-GTZ280

High-speed signal processing, fast motion blur reduction, infrared light output for night vision, and vibration resistance - all ideal for visualisation, simulation and training applications.



- Exclusive SXRD chip provides native 4K resolution and high contrast ratio.
- 2,000 lumens brightness (5,000 lumens with optional upgrade)
- Quad DisplayPort inputs
- 4K 3D capability for reliable simulation\*.
- Deep blacks reduce white band visibility for multi-projector blending.
- Long life optics, up to 20,000h (up to 40,000h in low brightness mode).
- Dust resistance by sealed optics.
- Constant brightness mode and periodic auto calibration for enduring image quality.
- High speed motion functions: 4K 120Hz input, smear reduction, transport delay reduction\*.
- Infrared light output for night vision simulation\*.
- Angle-free installation and vibration endurance for motion based system.
- Whisper quiet operation less than 35dB.
- HDR (High Dynamic Range) Gamma\*.

## VPL-GTZ270

4K SXRD up to 5000 lumens. An extremely high contrast ratio, high dynamic range and wide colour space - ideal for visual entertainment applications including planetariums, theme parks, and museums.



- Exclusive SXRD chip provides native 4K resolution and high contrast ratio.
- Flexible input capabilities: 2 x DisplayPort, 2 x HDMI
- 'Reality Creation' upscaling.
- HDR (High Dynamic Range)\*.
- Wide Colour Space - covers full DCI range and simulated BT2020.
- 4K 3D capability.
- Deep blacks reduce white band visibility for multi-projector blending.
- Less maintenance.
- Long life optics, up to 20,000h (up to 40,000h in low brightness mode).
- Dust resistance by sealed optics.
- Angle-free installation.
- Constant brightness mode and periodic auto calibration for enduring image quality.
- Robust chassis for easy handling and self stack capability.
- Whisper quiet operation less than 35dB.

\*Optional



Specifications		VPL-GTZ280	VPL-GTZ270	VPL-GTZ240
Display system		4K SXRD panel, projection system		
Size of effective display area		0.74" x 3		
Number of pixels		26,542,080 (4096 x 2160 x 3) pixels		
Projection lens <sup>2</sup>	Focus	Powered		
	Zoom	Powered		
Light source		Laser diode		
Light output	Standard	2,000 lm	5,000 lm	2,000 lm
	using the LSM-BRIN1 optional upgrade	5,000 lm	-	-
Colour light output	Standard	2,000 lm	5,000 lm	2,000 lm
	using the LSM-BRIN1 optional upgrade	5,000 lm	-	-
Contrast ratio	Native (conditions apply)	Up to 20,000:1*1 (native contrast)	Up to 20,000:1*1	16,000:1 *1
	Dynamic	∞	∞	∞
Accepted digital signals <sup>3</sup>	VGA, SVGA, XGA, WXGA (1280x768), Quad-VGA, SXGA, 720x480/60p, 720x576/50p, 1280x720/50p, 1280x720/60p, 1920x1080/24p, 1920x1080/50p, 1920x1080/60p, 3840x2160/24p, 3840x2160/50p, 3840x2160/60p, 3840x2160/100p, 3840x2160/120p, 4096x2160/24p, 4096x2160/50p, 4096x2160/60p, 4096x2160/100p, 4096x2160/120p	•	•	
	VGA, SVGA, XGA, WXGA (1280x768), Quad-VGA, SXGA, 720x480/60p, 720x576/50p, 1280x720/50p, 1280x720/60p, 1920x1080/50i*4, 1920x1080/60i*4, 1920x1080/24p, 1920x1080/50p, 1920x1080/60p, 3840x2160/24p, 3840x2160/25p*4, 3840x2160/30p*4, 3840x2160/50p, 3840x2160/60p, 4096x2160/24p, 4096x2160/25p*4, 4096x2160/30p*4, 4096x2160/50p, 4096x2160/60p	•	•	
Accepted signals	480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p, 1080/24p, 3840 x 2160/24p, 3840 x 2160/25p, 3840 x 2160/30p, 3840 x 2160/50p, 3840 x 2160/60p, 4096 x 2160/24p, 4096 x 2160/25p, 4096 x 2160/30p, 4096 x 2160/50p, 4096 x 2160/60p			•
Colour bit depth		Up to 10 bit	Up to 12 bit via HDMI / Up to 10 bit via Display Port	Up to 12 bit
OSD language	18-languages	English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Arabic, Polish		
INPUT OUTPUT (Computer/Video/ Control)	HDMI 1 / HDMI 2	2 inputs (HDCP 2.2 x 2), Digital (RGB/Y Pb/Cb Pr/Cr)		•
	DISPLAY PORT	4 inputs (HDCP 1.3 x 2, HDCP 1.3 for V Split x 2), Digital (RGB)		•
		2 inputs (HDCP 1.3 x 1, HDCP 1.3 for V Split x 1), Digital (RGB)		
	TRIGGER	2 connectors, Mini jack, DC 12V Max.100 mA		
	ROMOTE	RS-232C, D-sub 9-pin (female)		•
		RS-232C, D-sub 9-pin (male)		•
	LAN	RJ45, 10BASE-T/100BASE-TX		
	IR IN / OUT	IN:1, Out:1, Mini jack		
SYNC	IN:1, Out:1			
USB	Type A			
Acoustic noise	Standard	30 dB ~ 35 dB*1		39 dB
Operating temperature / Operating humidity	5°C to 40°C (41°F to +104°F)/20% to 80% (no condensation)		•	•
Storage temperature / Storage humidity	-10° to + 60° (14°F to +140°F)/20% to 80% (no condensation)		•	•
Power requirements	AC 220 V to 240 V, 6 A, 50/60 Hz (For Europe and China) AC 100 V to 240 V, 12 A to 6 A, 50/60 Hz (For the other countries)		•	•
Power consumption: High	MAX. 1.2 kW			
Power consumption (Standby mode, When "Remote Start" is set to "Off")	0.4 W			
Power Consumption (Networked Standby Mode, When "Remote Start" is set to "On")	0.6 W			
Heat dissipation		4092 BTU/h	4092 BTU/h	1671 BTU/h
Dimensions (W x H x D) (without protrusions)	550 x 228 x 750 mm (21 21/32 x 8 31/32 x 29 17/32 in)		•	•
	560 x 223 x 496 mm (22 1/16 x 8 25/32 x 19 17/32 in)			•
Dimensions (W x H x D)	550 x 262 x 750 mm (21 21/32 x 10 5/16 x 29 17/32 in)		•	•
	560 x 230 x 496 mm (22 x 9 x 19.5 in)			•
Mass		Approx. 40 kg / 88 lb (excluding lens)	Approx. 40 kg / 88 lb (excluding lens)	19.5 kg / 43 lb (without lens)
Supplied accessories	RM-PJ29 Remote Commander (1), Size AA (R6), Manganese Batteries (2), AC Power Cord (1), Operating Instructions (CD-ROM) (1), Safety Regulations (5)			

\*1 This value is approximate. Depends on the projector setting condition and usage environment

\*2 The lenses are optional accessories

\*3 60p,30p,24p include 59.94/60Hz, 29.97Hz/30Hz, 23.98Hz/24Hz

\*4 Available via HDMI input

## VPL-GTZ270, VPL-GTZ280, VPL-GTZ240

### Optional accessories



VPLL-Z7008  
0.80:1 to 1.02:1



VPLL-Z7013  
1.27:1 to 2.73:1



# VPL-VZ1000ES



Compact 4K Ultra Short Throw laser light source projector, suited to corporate environments, retail spaces, galleries, museums and home cinema use.

- Project 4K images up to 305cm diagonal size onto a screen or wall.
- Z-Phosphor laser light source and SXRD panel technology for stunning images with 2,500 lumens brightness.
- Up to 20,000 hours operation with virtually no maintenance.
- TRILUMINOS™ Display for cinema-like colour gamut.
- HDR compatible for wider brightness level range.
- Can be operated floor-standing, ceiling mounted or used for rear projection.
- Extensive connectivity with 4x HDMI inputs.
- Quiet operation with low fan noise.

Specifications		VPL-VZ1000ES
Display system		4K SXRD panel, projection system
Display device		0.74" x 3 SXRD
Number of pixels		26,542,080 (4096 x 2160 x 3) pixels
Projection lens	Focus	Powered (Approx. x1.02)
	Zoom	Powered
	Lens shift	Powered, Vertical: +/-6%, Horizontal: +/-3%
Light source		Laser diode
Screen size		80" to 120" (2030 mm to 3050 mm)
Light output (Lamp mode: High)		2500 lm
Colour light output (Lamp mode: High)		2500 lm
Contrast ratio		∞:1 (dynamic contrast)
Accepted digital signals*1		VVGA, SVGA, XGA, WXGA(1280x768), Quad-VGA, SXGA, 720x480/60p, 720x576/50p, 1280x720/50p, 1280x720/60p, 1920x1080/50i, 1920x1080/60i, 1920x1080/24p, 1920x1080/50p, 1920x1080/60p, 3840x2160/24p, 3840x2160/25p, 3840x2160/30p, 3840x2160/50p, 3840x2160/60p, 4096x2160/24p, 4096x2160/25p, 4096x2160/30p, 4096x2160/50p, 4096x2160/60p
INPUT OUTPUT (Computer / Video / Control)	HDMI (HDCP 2.2)	HDMI (x4)
	REMOTE	RS-232C, D-sub 9-pin
	LAN	RJ-45, 10Base-T/100BASE-TX
	IR IN	Mini Jack
	USB	Type A, DC 5V, Max. 500 mA
Operating temperature (Operating humidity)		5°C to 35°C (41°F to 95°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, 4.2 A to 1.8 A, 50/60 Hz
Power consumption		420 W

PrimeSupport Pro		See page 5 for further details
Reference	Included Service PS.LASPROJPD.3	
Support	Projector	Optical Block & Laser
Duration	3 years	7000h

PrimeSupport Elite		See page 5 for further details
Reference	PSPVPLVZ1000.2X	
Support	Projector	Optical Block & Laser
Duration	2 years extension, total 5 years	12000h

Featuring

For full product specifications and features please visit [pro.sony/simulation-projectors](http://pro.sony/simulation-projectors)








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