# VPL-GTZ280

4K SXRD laser projector with 2,000 lumens (up to 5,000 lumens with optional license) output and accurate reproduction of high-speed motion for simulation application

## Overview

**Smooth, precise moving images with 4K clarity and special functions for visual simulation, industrial, defence and virtual CAVE applications**

From flight simulators to virtual CAVE environments for industrial design, the VPL-GTZ280 laser projector delivers high-contrast 4K images with 2,000 lumens light output (up to 5,000 lm with optional license) and smooth, ultra-responsive reproduction of fast-moving action. The long-lasting laser light source is combined with 4K SXRD panel technology to deliver bright, crisply detailed native 4K images (4096 x 2160) with more than four times the resolution of Full HD. Picture quality is further enhanced by Reality Creation upscaling, plus configurable support for HDR (High Dynamic range) and high frame rates to take full advantage of today's premium 4K content - and tomorrow's. A newly developed high speed 4K 120Hz signal processor and three types of black frame insertion modes reduce motion blur and smear. The low transport delay contributes to extremely responsive performance in fast-motion simulator applications. The VPL-GTZ280 is particularly suitable for demanding multi-projection applications in 2D or 3D, with consistently homogeneous brightness. The projector can also be readily configured (with optional licence) for infra red night vision simulation applications. The highly efficient laser light source is rated for a nominal 20,000 hours* (up to 40,000 hrs* in constant brightness mode), for virtually zero maintenance without the need for any lamp exchanges. Long term reliability is assured further by dust-sealed optics. Installers will also appreciate the projector's auto calibration compatibility with leading AV room automation systems, and a robust chassis that can be installed at any angle for maximum flexibility.

*Depends on usage and environment.

## Features

**Native 4K clarity with more than four times the resolution of Full HD**
Advanced SXRD panel technology featured in Sony's digital cinema projectors delivers native 4K (4096 x 2160) resolution images, with no artificial pixel enhancement. Every detail is wonderfully clear and natural, without jagged edges or visible pixels.

**High brightness**
Activating brightness increase mode (requiring optional LSM-BRIN1 license) boosts light output from 2,000 lumens up to 5,000 lumens - ideal for demanding visualisation and simulation applications. In constant brightness mode (requires optional LSM-BRIN1 license), uniform brightness is maintained over the life of the laser light source - ideal for applications where several projectors are used together.

**Super high contrast ratio**
The advance optical engine reduces internal light leakage, for spectacularly high

contrast images with huge amounts of finely-rendered picture detail in dark shots.

**Supports HDR**
Take full advantage of the latest content produced with High Dynamic Range (requires optional LSM-HDR1 license) for sharp contrast and more accurate detail, from searing highlights to richly detailed dark scenes.

**Reality Creation upscaling**
Lower resolution input signals are accurately upscaled to 4K pixel resolution by Sony's advanced Reality Creation engine: you won't see any individual pixels - just beautifully natural 4K images.

**Picture presets for any content**
Eight calibrated presets optimise projected image quality for a wide range of content types including visualisation and simulation applications.

**Long-lasting laser light source**
Thanks to the highly efficient and reliable laser light source, users can benefit from startlingly clear 4K pictures plus up to 20,000 hours* uninterrupted operation (40,000 hours* in constant brightness mode) with no lamp replacement - far longer than conventional lamp based projectors.
*Depends on usage and environment.

**Long lasting, low maintenance optics**
Lens, light source and all optical components are sealed against dust for dependable long-term operation.

**Low transport delay**
Enjoy responsive, lag-free performance with an extremely low transport delay; ideal for fast-moving content.

**Optional high frame rate operation**
Adding the optional LSM-120P1 license allows the SXRD panel to be driven directly by a 120Hz input signal, minimising image blur in fast-moving action scenes.

**High performance edge blending**
Seamlessly edge-blend images from multiple projectors for super-sized, high contrast images with no banding or overlap. Constant brightness mode helps ensure accurately-matched images over long periods of operation.

**Colour correction and colour space adjustment**
Hue, Saturation, Brightness and colour space can be adjusted to suit different installation conditions.

**Quick start**
Don't lose time - laser light source starts instantly, allowing you to start projecting in moments without lengthy lamp warm-up time.

**Motionflow for smoother 4K images**
Motionflow ensures smoother, less blurry on-screen images.

**Smear reduction**
A choice of black insertion ratio modes allows effective reduction of image blur and smear.

**Infra red image projection**
Adding the optional LSM-NVG1 license allows the VPL-GTZ280 to be reconfigured for Night Vision Goggle training and simulation applications.

### 120Hz signal processing for 4K active 3D
The high-speed 120Hz drive achieves smooth, easy-on-the-eye Frame Doubled or Dual Input 3D (requires optional license LSM-120P1) at 60p per eye with full 4K resolution, for impressively smooth, immersive stereoscopic simulations.

### Industry standard RF 3D compatible
The projector's built-in RF transmitter synchronises with any RF 3D glasses for wider coverage and greater stability, with no need for an external transmitter.

### Greater installation flexibility
Install the projector horizontally, vertically , upside down or at any angle with no restrictions. The rugged chassis allows projectors to be stacked directly on top of one another. Projectors can also be stacked side by side with no cabling restrictions.

### Auto calibration
Auto calibration adjusts RGB colour levels as well as white point over the lifespan of the laser light source for consistently beautiful images over time.

### Whisper quiet operation
Extra-low noise fan with one-way air flow and liquid cooling system ensures extra-quiet operation for minimised audience disruption. High altitude mode adjusts fan rate for efficient operation at altitudes above 1500m.

## Specifications

| Display System | |
| --- | --- |
| Display System | 4K SXRD panel, projection system |

| Display device | |
| --- | --- |
| Size of effective display area | 0.74" x 3 |
| Number of pixels | 26,542,080 (4096 x 2160 x 3) pixels |

| Projection lens*1 | |
| --- | --- |
| Focus | Powered |
| Zoom | Powered |

| Light Source | |
| --- | --- |
| Light Source | Laser diode |

| Light output | |
| --- | --- |
| Light output | 2,000 lm<br>5,000 lm using the LSM-BRIN1 optional upgrade |

| Color light output | |
| --- | --- |
| | 2,000 lm |

| | |
|---|---|
| Color light output | 5,000 lm using the LSM-BRIN1 optional upgrade |

## Contrast ratio

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|---|---|
| Contrast ratio | Up to 20,000:1*2 (native contrast) |

## Accepted digital signals*3

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|---|---|
| Accepted digital signals*3 | 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 (using LSM-120P1 optional upgrade) |

## Color bit depth

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|---|---|
| Color bit depth | Up to 10 bit |

## INPUT OUTPUT (Computer/Video/ Control)

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|---|---|
| Display Port | 4 inputs (HDCP 1.3 x 2, HDCP 1.3 for V Split x 2), Digital (RGB) |
| TRIGGER | 2 connectors, Mini jack, DC 12V Max.100 mA |
| REMOTE | RS-232C, D-sub 9-pin (female) |
| LAN | RJ45, 10BASE-T/100BASE-TX |
| IR IN / OUT | IN:1, Out:1 , Mini jack |
| SYNC | IN:1, Out:1 |
| USB | Type A |

## OSD languages

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|---|---|
| OSD languages | 18-languages (English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Arabic, Polish) |

## Acoustic noise

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| Acoustic noise | 30 dB ~ 35 dB*2 |

## Operating temperature / Operating humidity

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|---|---|
| Operating temperature / Operating humidity | 5°C to 40°C (41°F to +104°F)/20% to 80% (no condensation) |

## Storage temperature / Storage humidity

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

## Power requirements

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|---|---|
| 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

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| Power consumption | MAX. 1.2 kW |
| Power consumption (Standby Mode) | 0.4 W (When "Remote Start" is set to "Off") |
| Power consumption (Networked Standby Mode) | 0.6 W (LAN) (When "Remote Start" is set to "On") |

## Heat dissipation

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|---|---|
| Heat dissipation | 4092 BTU/h |

## Dimensions

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|---|---|
| Dimensions (W x H x D) | 550 x 228 x 750 mm (21 21/32 x 8 31/32 x 29 17/32 in) (without protrusions) 550 x 262 x 750 mm (21 21/32 x 10 5/16 x 29 17/32 in) |

## Mass

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|---|---|
| Mass | Approx. 40 kg / 88 lb (excluding lens) |

## Supplied accessories

| | |
|---|---|
| Supplied accessories | RM-PJ29 Remote Commander (1), Size AA (R6) Manganese Batteries (2), AC Power Cord (1), Operatin Instructions (CD-ROM) (1) |

| Notes | |
|---|---|
| *1 | The lenses are optional accessories |
| *2 | This value is approximate. Depends on the projector setting condition and usage environment |
| *3 | 60p,30p,24p include 59.94/60Hz, 29.97Hz/30Hz, 23.98Hz/24Hz |

## Related products



**LSM-BRIN1**

3000lm Brightness Increase License for VPL-GTZ280



**LSM-NVG1**

NVG Support License for VPL-GTZ280



**LSM-HDR1**

HDR Gamma License for VPLGTZ280



**LSM-120P1**

120 Hz License for VPL-GTZ280

Gallery