

# LASER smart VR-Wall

## 6K Resolution in 3D-Stereo



- State-of-the-art Laser projection technology for over 10 years of use
- 55% more brightness compared to its predecessor (Gen-1)
- 650% increase in contrast (15.000:1)
- 120Hz stereo technology with full 6K resolution per eye



Only 75cm construction depth



Camera-based color space calibration



Optionally integrated tracking

## LASER smart VR-Wall Highlights

- Service life of the LASER at maximum brightness: approx. 10 years (usage time 5x 8 hours per week)
- 55% more brightness compared to its predecessor (Gen-1)
- 650% increase in contrast compared to the predecessor (15,000:1)
- Highest usable resolution of 5,760 x 2,400 pixels, 120 Hz stereo technology with full 6K resolution per eye
- Smallest pixel size of just 0.8 mm for a razor-sharp image with completely even light distribution and no hot spots
- Cluster-capable and maximally scalable! Up to 16 devices can create a synchronous overall picture
- Revolutionary, camera-based color space calibration for the best possible, most homogeneous overall image - allows the use of the full color space, even in 3D stereo mode, without loss of quality in blend zones
- Signal/display latency as low as 1-frame (20 milliseconds); enables VR interaction without any lag
- Only 75 cm construction depth, therefore minimum space requirements. Due to the self-supporting frame structure on castor wheels, the wall can be integrated into a standard office room without any building conversion effort
- Brilliant front projection, no shadowing by the actor in front of the VR wall, allows unrestricted interaction and image viewing right up to the projection screen

6K

3D

120Hz





Intelligent Pixel-Processor Technology



Picture-in-Picture (PIP) Mode from multiple sources



Upgradable Laser light sources

# LASER smart VR-Wall – Gen-3 Laser Power Wall with 6K resolution in 3D-stereo

High-resolution visualization for a perfect VR/AR experience

The 3rd generation of the LASER smart VR-Wall is the further developed successor to the successful smart VR-Walls from Schneider Digital. With the latest laser projection, innovative and patented pixel processing technology, a camera-based color space calibration from 3D Insight, it is the reference in the field of mobile power walls with front projection.

## Maximum compatibility and configuration options

- Tracking certification by ART, VICON & WorldVIZ for professional VR/AR interaction



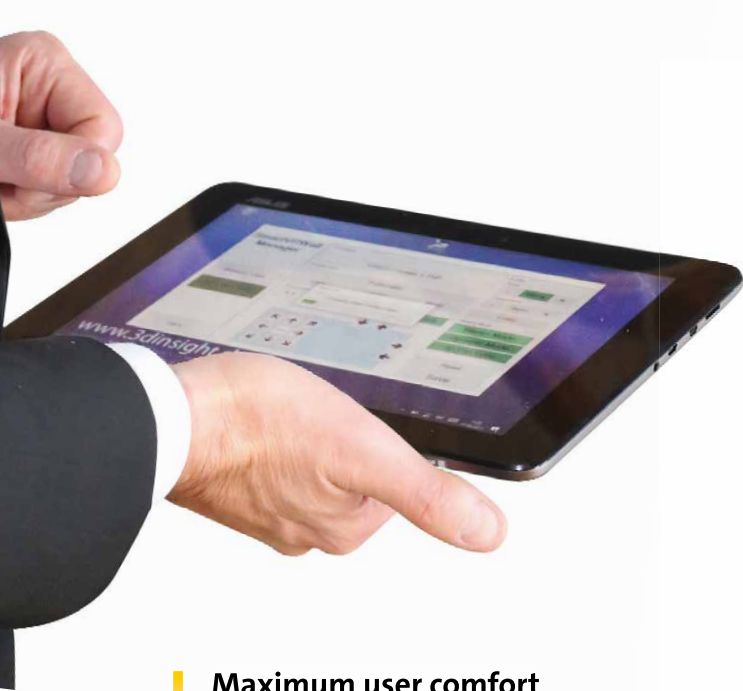
- Plug & Play support for all common 2D and 3D applications (Linux, Macintosh, Windows, graphic clusters, video conferences...)
- Software certification by Autodesk, Dassault, ESI, Siemens and many others



- Available in an aspect ratio of 23,5:10 as Cinemascope 275 and Cinemascope 315, optionally also available in special sizes
- Any type of rear projection, as well as L-benches, 3- or 5-sided VR caves can all be realized with the pixel processing and blending technology of the smart VR-wall

## Investment security and future viability guaranteed

- Scalable plug & play monitor interface (DP 1.2), independent of operating system, supports all common 2D, 3D and stereo applications
- 100% synchronous input signal processing enables perfect cluster feeds from up to 16 workstations
- Digital matrix technology:
  - routing many inputs to many projectors
  - scaling many inputs to one projector
  - splitting one input to many projectors
- Projector scaling and stacking by pixel processor technology
- Upgradable Laser light sources for maximum investment security, future-proof
- Excellent value for money
- No additional expenses for lenses, projection screen, air conditioning or building conversion and planning costs. Lowest maintenance and follow-up costs thanks to Laser technology



## Maximum user comfort and ease of use

- Intuitive touchpad control via tablet PC for convenient use of all VR Wall functions (picture-in-picture, split screen, black screen, still image, etc.)
- Collaborative project processing (co-review)  
Compatible with all software and hardware-based video conferencing systems (TEAMS, ZOOM, Cisco, Polycom, Jabra, etc.)
- Compatible with Barco ClickShare™ or comparable systems
- Minimal hardware requirement for 4K mono operation: just a single workstation or laptop with one output is sufficient
- Simultaneous use by three (3) teams (signal sources)  
Can be expanded to eight (8) signal sources teams/workstations or laptops)
- Freestanding, self-supporting construction offers maximum room & location independence
- Castor wheels provide maximum mobility
- Extremely short set-up and conversion times of just one day
- Low noise emissions due to the latest laser projector technology



## International References

- German Aerospace (DLR), Weßling / Germany
- VW, Argentina (Design)
- LG-VANS, South Korea (Design)
- DAELIM Motors, South Korea (Design)
- Honda, Thailand (CATIA + IC:IDO)
- AUDI, China (IC:IDO)
- Daimler, Böblingen / Germany (Design)
- Daimler, China (Design)
- Audi, Ingolstadt / Germany (IC:IDO)
- ASML, Netherlands (Siemens NX)
- Johnson & Johnson, Belgium (chemical visualization)
- Zurich University for Applied Sciences (CATIA)
- Vienna Technical University (Siemens NX)
- Munich Technical University (UNITY)
- Bochum University (CATIA, SolidWorks, VRED)

DAIMLER

SIEMENS  
*Ingenuity for life*



AIRBUS

Johnson & Johnson



TUM



HONDA

ASML

### Patented technology and highest quality

Internationally patented German Technology:  
Pixel processing Pat.Nr. 1020120024428  
High performance calibration Pat.No. 102013011954

Highest software, hardware and Build Quality: Designed, Engineered and Made in Germany



LASER SMART VR-WALL - TECHNICAL SPECIFICATIONS

	Cinemascope 315	Cinemascope 275
Net Resolution	5,760 x 2,400 Pixel	
Max. DisplayPort EDID	8,000 x 4,000 Pixel	
Usable Resolution	>12 Megapixel @ 120Hz	
Stereo Technology	Active, RF shutter glasses, full 6K resolution per eye	
Stereo Formats (input)	Dual Head: Side-by-Side, Top-Bottom, quad-buffer OpenGL & DirectX	
Display Size (W x H)	5.30 m x 2.25 m	ca. 4.70 m x 2.00 m
Total Size (W x H x D)	5.46 m x 3.12 m x 0.75 m	4.96 m x 2.73 m x 0.75 m
Minimum Setup Distance from Wall	9 cm	
Pixel Size	0.9 mm	approx. 0.8 mm
Aspect Ratio	23.5:10	
Color Bit Depth	24bit RGB (16.7 Mio. colors)	
Projection Setup	Front projection (with stereo technology)	
Projektion Screen	foil-covered & vibration-free hardscreen	
Luminosity (summarized)	6 x 4,500 Ansi-Lumen (27,000 total)	
Luminosity (reflected, merged)	approx. 2,270 Ansi-Lumen per m²	approx. 2,870 Ansi-Lumen per m²
Contrast	3,000,000 : 1	
Viewing Angle	+/- 85° degrees (170° degrees total)	
Gain	approx. 0.9	
Light Engines	Modified Dual Wheel DLP Technology, 1,920 x 1,200 @ 120 Hz each	
Number of Light Engines	6 units	
Lamp Type / Life Span	LASER, approx. 20,000 hrs or 10 years of usage (5x 8h per week) at full brightness	
Calibration (geometric & radiometric)	automatic, camera-based	
Video Inputs (standard)	4 x DisplayPort 1.2	
Optional: Additional Video Inputs for Media Management	8 x HDMI 1.3 / DVI; 4 x HDMI 2.0 (4K/60 Hz); 4 x DisplayPort 1.2	
Product Highlights	Cluster-capable - up to 16 sources can generate a synchronous full-screen picture Almost entirely latency-free by just one frame (20 milliseconds) patented color-space calibration	
Power Consumption	approx. 3,500 Watt	
Weight	approx. 500 kg	approx. 445 kg

## State-of-the-art Laser Projector Technology

The state-of-the-art ultra-short distance projectors used in the smart VR wall feature laser technology and 4,500 ANSI lumens of luminosity each. The projectors are the ideal choice for the challenging integration into the new generation of the smart VR-wall. With a throw ratio of 0.25, each projector produces a 160 cm wide image from just 40 cm away. By joining six (6) projectors a unified screen size of 5.3m x 2.25m can be realized. With a 3D-stereo resolution of 1,920 x 1,200 (WUXGA) per projector, the SuperColor™ technology meets the highest demands for a combined image output of 5,760 x 2,400 pixels and a contrast ratio of 3 million:1. Moreover, the projector Laser light sources are rated for a reliable service life of approx. 20,000 hours at maximum image brightness.



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