schneider digital

Professionelle 3D-Hardware

Insight Vision – Pixel Processor
What you see, is what they get!

Flexible Signal Processor for Powerwall Control

For perfect 4K-Presentations

Plug&Play – Easy Handling

The secret to a perfect 4K-presentation lies in the best possible preparation

Companies projection-visualisation centres increasingly support work flows of entire departments during development tasks and decision making.

Complex content can be displayed analytically during technical discussions amongst several development teams in parallel videoconferencing. The same is possible with presentations of digital data control models or Virtual Reality photorealistic displays of new developments and products.

From adjustment of the VR-display with project management to the perfect presentation of content on a high decision making level. To display the high resolution of a 4K projection 1:1, the preview- and work place still consists of four separate monitors (current status) thus complicating work and preparation especially for colleagues not present at all times. Thanks to the newest development by 3DInsight and Schneider Digital, all project members are now able to work with a high resolution 4k monitor with an accurate 1:1 display in their own operating environment.

Perfect 4K-Display,
save Handling & comfortable Working

With the latest 3D Insight and Schneider Digital development all project members are finally able to work on a high resolution 4K monitor with an accurate display of 1:1 in their own working environment. According to the requirements several work stations canbe installed. Whether preparing data sets and scenarios or presentations: all participants can now rely on the correct display of their data and models, thanks to our PowerWall.

What you see, is what they get!

Plug & Play - ready for use t in just a few minutes!

Installation and initial operation only takes a few minutes - provided that the cabeling is at hand.
Longer distances between the server room and the work station can be bypassed via LWL without a problem. The system is practically maintenance free. Several SLA*s are available for special serviceability requirements.

It´s showtime!

InsightVision: highly flexible signal processor for Powerwall controlling

The innovative InsightVision technology is a flexible system for processing video signals. The signal processor can intake up to 10 input signals (*) and generate up to 6 output signals.

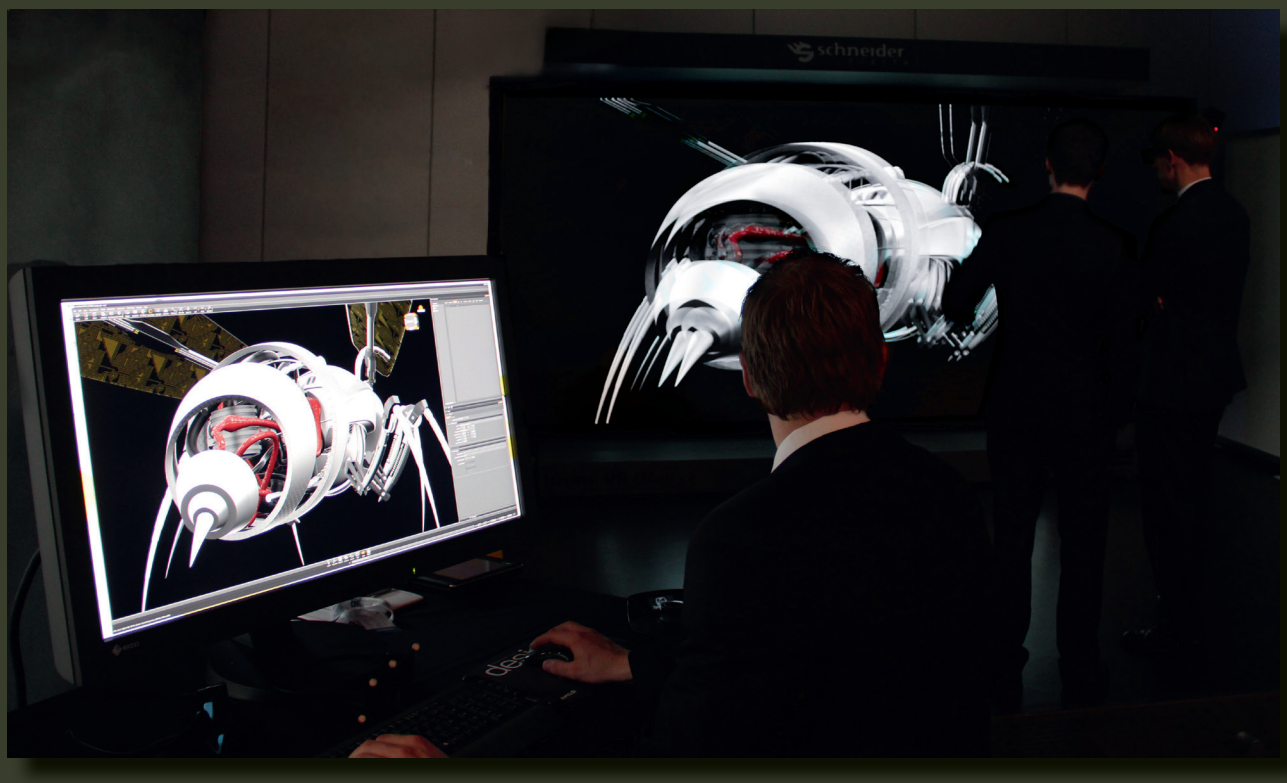
Combination, analysis and scaling of video signals

The transformation of input- and output signals is possible in different ways. For example, several inputs can be combined to a single output signal or seperate inputs can be split into several outputs thus enabling the sim - ultaneous operation of a 4K projector with 4 indepen - dent input signals and a 4K monitor with 2 seperated input signals with one an the same signal source.
InsightVision supports pixel accurate replay as well as scaling of visual content for a target resolution.
In doing so, varying aspect ratios of in- and output signals can be adjusted (cropping, scaling, distortion).

Positioning, duplicating and shifting of video signals

The InsightVision signal processor can be used like a crossbar. An input signal can be switched on several outputs simul - taneously. This technology is not subject to restrictions of classical crossbars using only one specific input for one output. Instead, an output signal can be composed of parts of several input signals which can be positioned optional thus making picture-in-picture playback possible. Besides the simultaneous display, switching between several video signals is also possible at the push of a button.
This way, several video sources can be operated alternately on one display system.

Synchronous output, low latency and full 3D-stereo support



High performance of InsightVision technology provides a low latency meaning output signals have only a very slight delay. The signal processor guarentees that synchrone input signals are played back as synchrone, eliminating so called tearing effects. It is also possible to play several vertically not synchronized signals or signal groups.

Plug-and-Play and easy handling

The InsightVision signal processor can be easily integrated into existing infra structures. The system is delivered in a maintenance-friendly 19" case thus fitting into most standard rack systems. All you need is a 240V power connection. Connect the signal sources viA DVI, HDMI or VGA to the input of the signal processor and connect the outputs via DVI, HDMI or display port to your displays. The systems operates like a black box and does not require user interaction. You will receive a configuration tailored to your requirements. The accordingly configurated signal processing is auto - matically executed when starting the signal processor. System control is optionally possible via keystroke or network interface, thereby enabling switching between several video sources.

3D Support

The siganl processor is also suited for processing stereoscopic image content containing seperate perspectives for the left and right eye. These perspectives can either be encoded as individual signals or as one signal. There is no cross-market standard of the encoding but rather a variety of different formats. InsightVision allows for the processing and trans - formation of various stereoscopic formats. Separate video signals, each for the left or right eye, can be combined in one output signal so that standard 3D displays and projectors can be controlled. A signal with interlaced perspectives can also be changed into a output signal by arranging both perspectives side-by-side or top-bottom.

(*) maximum 5 parallel signal, no HDCP-Support

SPECIFICATIONS

Insight Vision Signal Processor

Inputs:

10x DVI-I single link(*), max. 5 signals simultaneous
HDMI and VGA via adapter

Resolutions:
- up to 5x 1920x1080 @60Hz
- up to 5x 1920x1200 @60Hz
- QuadHD 3840x2160 @60Hz via 4 signals
- user-specific resolutions and frame rate configurable
- mixed operations with different resolutions and frame rates

Stereoscopic formats:
- side-by-side
- top-bottom
- horizontal/vertical interleave
- checkerboard
- anaglyph
- dual stream (passive)

Synchronisation input (optional):
- 1 x RJ45

Outputs:

4xDisplay port or 6x mini-Display port
(Adapter on HDMI/DVI-D Single Link/DVD-D Dual Link)

Resolutions:
- up to 6x FullHD 1920x1080 @60Hz
- up to 6x 1920x1200 @60Hz
- QuadHD 3840x2160 @60Hz via 4 signals
- QuadHD 3840x2160 @60Hz via 2 signals
- up to 6x 1280x800 @120Hz (stereo)
- up to 6x 1920x1080 @120Hz (stereo)
- up to 6x 1920x1200 @120Hz (stereo)
- user-specific resolutions and frame rate configurable

Stereoscopic formats:
- frame sequential (active)
- side-by-side
- top-bottom
- horizontal/vertical interleave
- checkerboard
- anaglyph
- dual stream (passive)
- 3D-synchronisation signal for aktiv stereo mini-DIN, 3-pole
- syncronisation output (optional): 1x RJ45

Interface:

RJ45 Ethernet 1Gbps
USB, PS/2

Accessories:

VGA-DVI-adapter
(Mini)Display port-DVI adapter
resistor
keyboard, mouse
calibration camera, incl. accessories (optional)

Signal Processing Technology:

3DInsight InsightVision (Node-License)

Band Width:

Input: 692 Gigapixel/s (11.5 Megapixel @60Hz)
Output: 830 Gigapixel/s (13.8 Megaipixel @60Hz)

Power Supply:

240V, max. 750W

Dimensions (WxHxD):

440mmx175mmx435mm

(*) Dual-Link on request, no HDCP-support

The visualization technology of the mini VR Wall isbased on a development by our technology partner, 3D-Insight GmbH. Schneider Digital and 3D Insight are closely connected with a long-standing and comprehensive history of cooperation.

3DInsight GmbH was founded in 2007 by members of the faculty for graphic data processing and visualization at the Technical University of Chemnitz. The cumulative years of experience of the staff in the fields of 3D projection, stereoscopic viewers, motion tracking, real-time rendering, distributed rendering, 3D content rendering and geometric modeling for the core competencies of the team.

3D content rendering and geometric modeling for the core competencies of the team. The main areas of business currently concentrate on the conception and installation of custom-built stereoscopic projection systems and VR systems, plus engineering services in these fields. The custom-built systems range from small, mobile rear projection systems to stationary, large-area, multi-segment projection solutions. The realization of innovative hardware installations is complemented by the development of high-quality visualization software for a number of application areas.

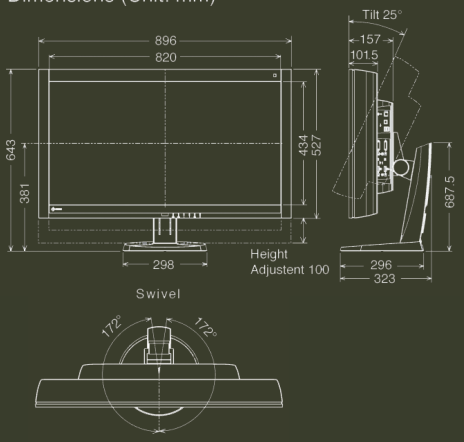
SPECIFICATIONS DuraVision FDH3601

Panel Size	92 cm / 36.4“ (923 mm diagonal)
Active Display Size (H x V)	817.1 x 430.9 mm
Viewing Angles (H, V)	176°, 176° (at contrast ratio of 10:1)
Brightness	700 cd/m²
Contrast Ratio (typical)	1000: 1
Response Time (typical)	Black-white-black: 25 ms (On/O); Gray-to-gray: 8 ms
Native Resolution	4.096 x 2.160
Pixel Pitch	0.1995 x 0.1995 mm
Display Colors	8-bit: 16.77 million from a palette of 278 trillion (maximum) 10-bit: 1.07 billion from a palette of 278 trillion (maximum)
Cabinet Color	Black
Dot Clock	DVI-D: 310 MHz, DisplayPort: 290 MHz
Digital Scanning Frequency (H, V)	31 - 140 kHz, 29.5 - 61 Hz, (VGA TEXT supported)
Video Input Terminals	DVI-D (dual link) x 2, DisplayPort x 2
USB Ports / Standard	1 upstream, 2 downstream / USB 2.0
Plug & Play	VESA DOC 2B
Power Requirements	AC 100 - 120 V, 200 - 240 V: 50 / 60 Hz
Power Consumption	162 W (typical), 350 W (maximum)
Power Save Mode	Less than 6 W
Height Adjustment Range	100 mm
Tilt / Swivel / Pivot	25° Up / 172° Right, 172° Left / -
Dimensions (W x H x D)	With Stand: 896 x 543 - 643 x 323 mm Without Stand: 896 x 527 x 157 mm
Net Weight (with / without Stand)	27.9 kg (AC adapter included) / 23.2 kg
Preset Modus	sRGB, Text, User1, User2, User3
EcoView Setting	EcoView Sense (presence sensor)
Screen Adjustment	Position
Color Adjustment	Brightness, Contrast, Gamma, Temperature, Saturation, Hue, Gain, Reset
Power Management	Power Save, Power Indicator
Other Settings	Input Selection, Input Preset, Mode Preset, OSD Menu Settings (Languages, Position), Signal Info, Monitor Info, All Reset; Key Lock, DC5V Output, Resolution, Reset
Certifications and Standards	CB, TÜV/GS, cTÜVus, FCC-B, Canadian ICES-003-B, TÜV/S, VCCI-B, C-Tick, RoHS, WEEE
Supplied Accessories	AC power cord, AC adapter, dual link signal cable (DVI-D ~ DVI-D) x 2, signal cable (DisplayPort ~ DisplayPort) x 2, USB cable, Utility Disk (RadiCS LE, ScreenManager Pro for Medical, user‘s manual), 4 screws for mount option, warranty card
Warranty	Two Years, 24-hour use

Suitable, certified graphics cards for high end and ultra highend areas:

model	memory	simultaneously usable monitor outputs
NVIDIA Quadro 6000	6 GB RAM	2
NVIDIA Quadro K5000	4 GB RAM	4
NVIDIA Quadro 5000	2,5 GB RAM	2
NVIDIA Quadro 4000	2 GB RAM	2
AMD FirePRO W9000	6 GB RAM	6
AMD FirePRO W8000	4 GB RAM	4
AMD FirePRO W7000	4 GB RAM	4
AMD Fire Pro V9800	4 GB RAM	6
AMD Fire Pro V8800	2 GB RAM	4
AMD Fire Pro V7900	2 GB RAM	4

Dimensions (Unit: mm)



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