\*for the naked eye



## Monitor type 3D displaying



Medical dataset displayed on monitor type HoloVizio unit

"Historically, 3D displays have typically featured some sort of trade off in image quality so that they were never as good as their 2D counterparts. Recent developments in 3D diplaying have demonstrated this not only possible but reasonably cost effective." Insight Media, 3D Technology and Markets, A Study of All Aspects of Electronic 3D Systems, Applications and Markets, 2007

# HoloVizio 128WLD

## Why HoloVizio is true 3D?

User benefits of Holografika technology in 3D display solutions:

- Continuous motion parallax, which provides "look-behind" capability
- Large field of view supports more viewers, and collaborative use
- No fixed viewer positioning required, viewer can freely move in front of the screen
- No optical contradictions, no side effects, discomfort, disorientation in longer, everyday use
- Stable 3D image which doesn't "jump" between views in the horizontal perspective
- Reference points do not move if the viewer is moving and are exactly there where they seem to be (the 3D object position does not depend on the viewers' position)
- No head tracking necessary (no latency or accuracy problems)
- The 3D view can be seen in the entire field of view, no invalid zones
- Any kind of objects or 3D views can be visualized with correct occlusion, vs. wire frame, translucent images only, offered by certain technologies
- Ability to display any type of 3D information and to use different OpenGL based 3D software solutions
- 2D compatibility. No need to switch between 2D and 3D view
- Full frame rate motion and real-time interactivity
- Proper brightness, good visibility under normal lighting conditions



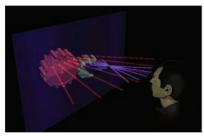


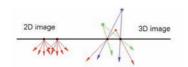




#### The 3D displaying technology that works

The holographic 3D display system developed by Holografika overcomes the limitations of the current 3D displays, reconstructing natural 3D images to a number of viewers in a reasonable field of view, with walkaround possibility without any restrictions.





This is a high-end solution compared to other technologies and fullfils all the requirements of real 3D displaying simultaneously.

### **Design applications** (automotive, architectural, chemical, electronic or game character design, city planning, etc...) CAD\*1 or 3D modeling\*2 Real-time Real-time Rendered reviewing viewing (still or video) designing Medical applications (treatment or surgery nteractive viewing Education/training (school, university, industrial, etc...) planning, medical training, dental, etc...) Interactive model based reviewing HoloVizio 128WLD Real-time 3D viewing Interactive reviewing 4D ultrasound

**T**UDelft

#### Using HoloVizio 128WLD in scientific research

"We are using the HoloVizio 3D display on a daily

**Product name** 

HoloVizio 128WLD

Aspect ratio

16:9

Screen size

32" (~792 mm) diagonal

410 mm x 670 mm

3D resolution

9.8 Mpixel

2D equivalent resolution from one angle

512 x 320 pixel

Input

4 x DVI-I or DVI-D monitor cable (single link)

Compatibility

PC & WorkStation

Viewing angle

50° horizontal

Colour

16 Million (24 bit RGB)

115% NTSC

Dimensions (W x H x D)

944 mm x 602 mm x 445 mm

Mass

Nominal voltage

230 V @50 Hz, 115 V @60 Hz

**Power consumption** 

600 W

3 pole power cable

Light source

LED array

**Operating temperature** 

+5°C ... +40°C

**Relative humidity** 

Max. 80% / 50%

Usage type

Indoor

#### Tested software with HoloVizio systems:

HoloVizio is compatible with applications based on the following common OpenGL-based visualization libraries: OpenInventor, Inventor, Coin3D, OpenSceneGraph, AVS/Express.

**Baby monitoring** (4D sonograf or ultrasound)

- \*1 CAD models ArchiCAD, AutoCAD, Autodesk Inventor, Alias StudioTools, CATIA, CoCreate OneSpace, DesignCAD, Pro Engineer, Rhino, SolidWorks 2007, Unigraphics
- \*2 Models from modeling software 3ds Max, Blender, Bryce, Cinema4D, LightWave 3D, Maya, Softimage XSI
- \*3 Other software Shell 123DI, Visual Molecular Dynamics, 3D Slicer, EON Viewer, Milkshape3D

