HOLOVIZIO™

Natural 3D displaying*

for the naked eye

Large-scale 3D displaying

Realistic 3D visualization of rendered content on HoloVizio 720RC

"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 720RC

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

HOLOGRAFIKA

The 3D displaying technology that works

The holographic 3D display system developed by Holografika overcomes the limitations of the current 3D displays, reconstructing nat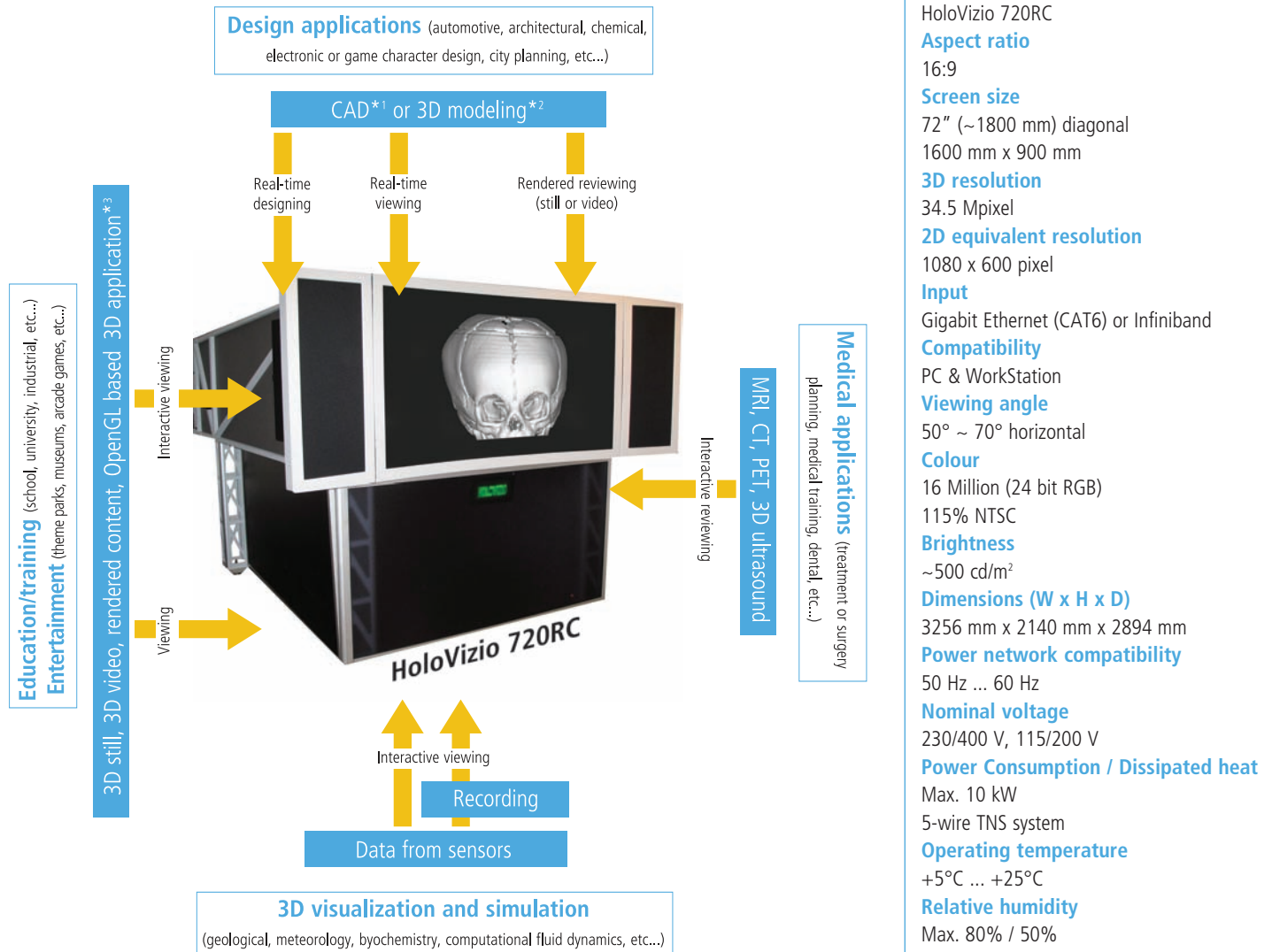ural 3D images to a number of viewers in a reasonable field of view, with walk-around possibility without any restrictions.
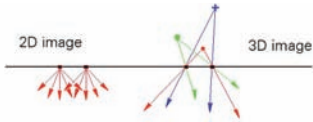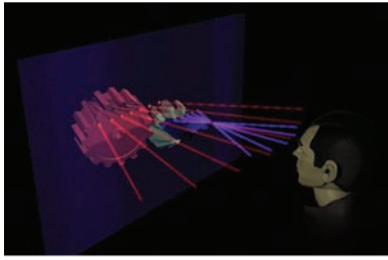
This is a high-end solution compared to other technologies and fullfils all the requirements of real 3D displaying simultaneously.

CRS4 Visual Computing
http://www.crs4.it/vic/

Users of a HoloVizio 720RC system

"CRS4 research activities focus on enhancing spatial understanding of massive 3D data through the development of novel interactive rendering systems harnessing the perceptual cues delivered by 3D displays. The main applications include exploration of large volumetric datasets generated by medical data acquisition devices and time-critical visualization of gigantic point clouds and triangle meshes generated by 3D scanning and numerical simulation."

CRS4 Visual Computing, Italy

Design applications (automotive, architectural, chemical, electronic or game character design, city planning, etc...)

CAD*¹ or 3D modeling*²

Real-time designing | Real-time viewing | Rendered reviewing (still or video)

Education/training (school, university, industrial, etc...)
Entertainment (theme parks, museums, arcade games, etc...)

3D still, 3D video, rendered content, OpenGL based 3D application*³

Interactive viewing

Viewing

Medical applications (treatment or surgery planning, medical training, dental, etc...)

MRI, CT, PET, 3D ultrasound

Interactive reviewing

HoloVizio 720RC

Interactive viewing

Recording

Data from sensors

3D visualization and simulation
(geological, meteorology, byochemistry, computational fluid dynamics, etc...)

Product name
HoloVizio 720RC

Aspect ratio
16:9

Screen size
72" (~1800 mm) diagonal
1600 mm x 900 mm

3D resolution
34.5 Mpixel

2D equivalent resolution
1080 x 600 pixel

Input
Gigabit Ethernet (CAT6) or Infiniband

Compatibility
PC & WorkStation

Viewing angle
50° ~ 70° horizontal

Colour
16 Million (24 bit RGB)
115% NTSC

Brightness
~500 cd/m²

Dimensions (W x H x D)
3256 mm x 2140 mm x 2894 mm

Power network compatibility
50 Hz ... 60 Hz

Nominal voltage
230/400 V, 115/200 V

Power Consumption / Dissipated heat
Max. 10 kW
5-wire TNS system

Operating temperature
+5°C ... +25°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.

*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

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