

zSight 1920-100™

HD1080 and WUXGA Professional HMD with wide field of view



Note: head strap not shown in above picture

The zSight 1920-100™ is a professional-grade HMD with WUXGA (1920x1200) OLED displays, 98 degree field of view, comfortable and lightweight packaging, low power consumption and integrated peripherals. It is an excellent choice for a variety of design, simulation, advanced training, imaging, and remote presence applications.

The zSight 1920-100 sets a new performance standard in professional HMDs

Key Features

- Bright, crisp, high-contrast display that uses the latest in OLED microdisplay technology. Full-color WUXGA 1920x1200 pixels per eye.
- Patented optical design delivers exceptional performance:
 - 98 degree diagonal field of view per eye
 - <2% geometrical distortion
 - 23 mm eye relief
 - 12 mm eye box
- Operates with single or dual HDMI/DVI inputs.
- Integrated 3 DOF tracker, stereo audio and microphone
- Self contained: no need for bulky external control electronics.
- Rugged, lightweight, and comfortable: 350 grams (12 oz)
- Accepts low power DC or USB power input. Optional battery operation.
- Compatible with the Sensics low-latency high-performance wireless video option for truly portable, untethered operation.
- Removable rubber mask controls level of occlusion
- Adjustable and padded head strap



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Specifications subject to change without notice. Nov 2012

KEY SPECIFICATIONS

IMAGE

Binocular FOV	98° diagonal: 90° x 40° HxV. 50% overlap between the eyes
Display Resolution	OLED SXGA 1920x1200 full-color pixels per eye.
Contrast ratio	>10000:1
Luminance	10 fL
Color depth	24 bit
Eye relief	23mm, eyeglasses compatible

INTERFACE

Video format	Single or dual HDMI/DVI 60Hz input
Supported input resolutions	WUXGA 1920x1200, HD1080 (1920x1080), SXGA (1280x1024)
3D stereo	Yes, by using dual video inputs or single side-by-side input
Audio	Integrated microphone and stereo sound. Audio is provided via embedded in HDMI signal.
3D Stereo	Yes
Power consumption	<4 Watts
Power input	AC adapter. DC/USB. Battery power option.
Pushbuttons	Buttons on HMD reported via USB interface

INTEGRATED_TRACKER

Sampling frequency	125 Hz
Interface	USB
Pitch/Roll Accuracy	0.75°
Degrees of freedom	3 DOF (Yaw/Pitch/Roll)

MECHANICAL

Weight	Approx. 350 gram
IPD	52-72 mm
Eye box	12 mm
Eye relief	23 mm

WIRELESS VIDEO AND BATTERY OPTION

Frame rate	60 Hz
Latency	~1 mSec
Tracking data	In-band downlink data of head tracking, ~4 mSec latency
Operating frequency	5 GHz band
Bandwidth	20/40 MHz
Distance	Typically Up to 30 meters. Line of sight not required.
Audio	Stereo on HDMI signal or with separate audio input
Battery Technology	Rechargeable Lithium Ion
Time between charges	2 hours typical for HMD and wireless video link, 6 hours without wireless link

ORDERING INFORMATION

Part number	ZSIGHT-1920-100
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