



nVisor ST50

Professional see-through compatible head-mounted display

PRODUCT SPECIFICATIONS

Optical

FOV, Vertical	32°
FOV, Horizontal	40°
FOV, Binocular (diagonal)	50°
See-Thru Transmission	44%
Pupil Size	10, Non-Real mm
Eye Relief	23 mm
Geometric Distortion	-2% Maximum (Barrel)
Brightness (MAX)	23 fL
Contrast (Min.)	10000:1
Image Defect Criteria	Available Online
Spatial Resolution	1.88 arcmin/pxl

Microdisplay

Display Technology	Organic Light-Emitting Diode (OLED)
Resolution	SXGA 1280 x 1024
Color Depth	24-BIT (8 bits per R,G,B)

Video

Video Input Format	SXGA 1280 x 1024 @ 60 Hz
Video Interface	DVI over HDMI
Latency	< 0.002 ms

Audio

Headphone Response	15-25,000 Hz
Headphone Impedance	60 Ohms
Microphone, Standard	Integrated, Shell-mounted Microphone
Mic Transducer Principle	Electret

Controls

Interpupillary Distance (IPD) Range	53-73 (Independent left and right) mm
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Power

Power Supply	INPUT: 100-240 VAC, 0.3A 50-60 Hz. OUTPUT: +5 V DC, 2 A min.
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Physical

Size (envelope)	14.2 L x 9.0 W x 8.6 H max in
Mass	1050 g

Compliance

CE Compliance	CE Compliant
RoHS Compliance	RoHS Compliant

The nVisor ST50 offers virtual and augmented reality developers and users a high-fidelity head-mounted display with unprecedented visual clarity and acuity for under \$20k.

The nVisor ST50 is built around a high-contrast Organic Light Emitting Diode (OLED) microdisplay. The microdisplay provides 1280x1024 pixels per eye in a low-power, compact design. The patent-pending eyepieces display the image across a 50° diagonal field-of-view with < 2% distortion, making the see-through compatible optics ideal for professional augmented reality applications that require precision alignment between real and virtual environments. The nVisor ST50 works equally well as a see-through or fully immersive display. A removable cover can be quickly applied to allow users the flexibility to develop both virtual and augmented reality applications using the same HMD. And the nVisor ST50 supports standard motion tracking devices from InterSense, Ascension, Polhemus, and others via a tracker platform mounted on the back of the HMD.

NVIS is at the forefront of immersive display technology and development, and the culmination of our experience is evident in the simplicity and performance of this HMD. Unsurpassed visual fidelity is designed into a lightweight, ergonomically friendly device that is both easy to use and comfortable to wear. HDMI cables from the HMD plug directly into the image source with no additional video processing electronics. Stereo headphones, built-in microphone, and programmable buttons compliment the high-resolution visuals to provide the rich, immersive experience required in the most demanding training and simulation applications.

Contact NVIS today to learn more. The nVisor ST50 is available within the US directly from NVIS and worldwide through our authorized resellers.



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