

HMD2A HEAD-MOUNTED DISPLAY—HIGH RES

The HMD2A* offers virtual and augmented reality developers and users a high-fidelity head-mounted display with unprecedented visual clarity and acuity at an affordable price.

The HMD2A is built around a high-contrast Organic Light Emitting Diode (OLED) microdisplay. The microdisplay provides 1280 x 1024 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 HMD2A 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 HMD2A supports standard motion tracking devices from InterSense, Ascension, Polhemus, and others via a tracker platform mounted on the back of the HMD.



The simplicity and performance of this HMD is at the forefront of immersive display technology and development. 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.

HMD2A 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	10000:1
	Image Defect Criteria	available on request
	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
Power	Power Supply	Input: 100-240 VAC, 0.3A 50-60 Hz. Output: +5 V DC, 2 A min
Physical	Size (envelope)	14.2 L x 9.0 W x 8.6 H max in
	Mass	1050 g
	Compliance	CE Compliance
	RoHS Compliance	RoHS Compliant
Mfg Warranty	Included: one year	additional 1-year warranty add-ons available up to 3 years max

*nVIS nVisor ST50

Specifications are subject to change without notice