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THE DPX 30-50° WAVEGUIDE

The full-color single-layer diffractive waveguide display for AR glasses. The DPX 30–50° is optimized to deliver multiple fields of view. The DPX30-50° waveguides are compatible with various RGB display and projection technologies such as DLP, LCoS, and microLED.



The best waveguide displays for augmented reality eyewear

Parameter	Typical			Unit	Comment
Field of view	30°	40°	50°	degrees	Diagonal, side injected
LED centre wavelengths	R: 620, G: 520, B: 460			nm	
Input pupil diameter	5			mm	Circular, compatible with projector exit pupils 3–5 mm
Image focus distance	Infinity				
Eye Relief	20	16	16	mm	
Eye-box	12.5 x 8	12 x 6	10 x 6	mm	
Monocular	•	•			
Binocular	•	•	•		

Parameter	Value			Unit	Comment
Efficiency	220	110	75	nits/lumen	Waveguide / projector
MTF	20			lp/degree	≥ 35 % contrast
Transmittance	82			%	Normal incidence
Contrast	40:1				

Parameter	Value	Unit	Comment
Dimensions	61 x 46	mm	Tolerance +/-0.15 mm
Thickness	0.8	mm	
Weight	8	g	
Shape outline	3D CAD available		Custom design possible

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Captivating AR user experiences are built on a foundation of world-leading near-eye display design. Dispelix's design expertise and full-color, ultra high-definition, single-layer waveguides are this foundation. Dispelix's waveguides combine beautiful design, exceptional optical performance and volume availability.

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