

dispelix

The best displays for AR eyewear

We create the world's thinnest full-color displays
for near-eye augmented reality





Create AR eyewear that everyone wants to wear

With our displays, you don't have to sacrifice performance for design.
We make it possible to create AR eyewear that looks like normal glasses
– and still offers an amazing AR experience.



Large field of view



Thin & light display



Excellent color balance



Bright & sharp image



Highly see-through gratings



High-yield manufacturing

The DPX 30° near-eye AR displays

The DPX 30° diffractive waveguide displays deliver a full-color AR experience via a large eye-box and 30-degree diagonal field of view. The DPX 30° display and optical engine allow you to create user-friendly and ultra-compact AR eyewear.



Our technology

Diffractive waveguides

Our displays are based on patented and proprietary diffractive surface relief gratings fabricated on high refractive index glass wafers. For grating fabrication, we use nanoimprinting and other proven mass manufacturing methods.



The DPX 30° specs

DPX 30° WAVEGUIDE DISPLAY: Design specification

Parameter	Typ	Unit	Comment
Field of view	30	deg	diagonal
Aspect ratio	16:9		
Eye relief	20	mm	
Eye box dimension	16 x 12	mm	4 mm pupil
Input pupil diameter	5	mm	circular
Input pupil standoff	0.5	mm	
Image focus distance	infinity		
LED centre wavelengths	R: 620, G: 520, B: 460		

DPX 30° WAVEGUIDE DISPLAY: Design characteristics

Parameter	Value	Unit	Comment
Efficiency	200	nit/lm	waveguide/optical engine
MTF	15	lp/deg	>45 % contrast
Transmittance	82	%	normal incidence
Contrast	1:60	mm	ANSI white checkerboard

DPX 30° WAVEGUIDE DISPLAY: Mechanical properties

Parameter	Value	Unit	Comment
Dimensions		mm	
Thickness	1,3	mm	waveguide 0.8 mm
Weight	10,5	g	
Shape outline			customizable

DPX 30° OPTICAL ENGINE: Design specification

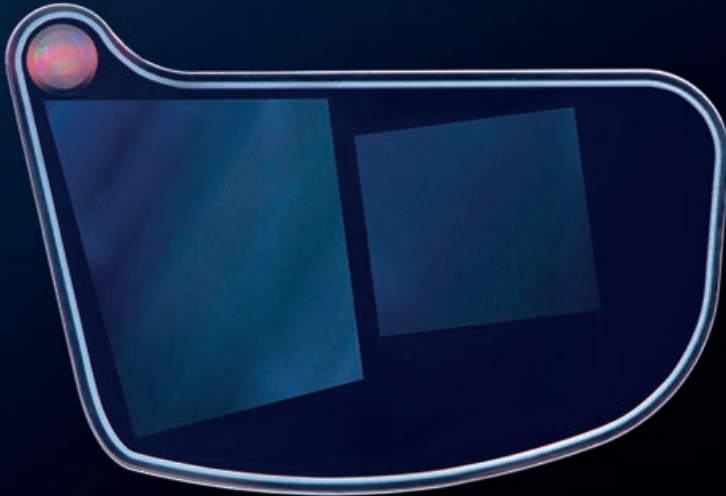
Parameter	Typ		Comment
Projector type	DLP		diagonal
Field of view	30	deg	
Image orientation	landscape		
Display resolution	854 x 480	p	WVGA
Projection type	color sequential		
Flux at the exit pupil	15	lm/W	
Dimensions	42 x 15 x 9	mm	
Weight	9	g	

DPX 30° WAVEGUIDE DISPLAY MODULE: Design specification

Parameter	Typ	Unit	Comment
Field of view	30	deg	diagonal
System resolution	854 x 480	p	WVGA
Eye relief	20	mm	
Efficiency	1500	nit/W	
Input pupil diameter	5	mm	
Refresh	120	Hz	
Interface	HDMI	video	

The specifications contained in this document are for information purposes only and subject to change without notice.

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