Crystal30

4TH GENERATION

DIGILENS

Lightweight and Consumer Ready

The DigiLens Crystal30 4th generation waveguides are engineered for seamless integration into smartglasses, smart helmets, and other headworn XR devices. Designed to overlay digital data onto the physical world, these waveguides deliver industry-leading performance for consumer, enterprise, and industrial applications.

AVAILABLE NOW
sales@digilens.com

KEY FEATURES

- Exceptional Image Quality: Delivers high-resolution, vivid imagery
- Market-Leading Brightness and Efficiency: Among the brightest and most energy-efficient waveguides available
- Ultra-Low Eye Glow: Achieves the lowest measured eye glow in its class, ensuring user privacy and comfort
- Versatile Integration: Compatible with a wide range of light engines to meet diverse customer requirements
- Scalable Manufacturing: Supported by DigiLens' global licensee network, enabling high-volume, cost-effective production to meet market demand

Input
Output
38mm
61mm

Values are rounded for summary purposes

Specifications

FIELD-OF-VIEW
30° (D); 21° (H) x 21° (V)

1:1 Aspect ratio [4]

EYE BOX
12mm (H) x 10mm (V)

TRANSPARENCY
>90%

EYE RELIEF
17mm

FOCUS DISTANCE
Infinity

THICKNESS
1.2mm

WEIGHT
6g

PUPIL SIZE
2.4MM TO 4.0MM [5]

Waveguide compatible with both unpolarized (µLED/DLP) and polarized (LCoS) projection engines.

	UNPOLARIZED (n/L)	POLARIZED (n/L)
AVG LUM EFF [3]	>900n/L	>1,800n/L
PEAK LUM EFF [3]	>1,500n/L	>3,000n/L

Measurements per Information Display Measurement Std (IDMS)

[1] Average of Field and Eyebox
[2] Compatible with ophthalmic inserts
[3] Alpha grade
[4] Aspect Ratio can be customized to [4:3] 30° DIAG
[5] Input coupler size/position can be optimized to match projector pupil