

Photonics Solutions for CONSUMER ELECTRONICS

AR/VR

Our micro-optical modules, enabled by advanced wafer-level optics and wafer-level stacking technologies, are at the forefront of AR and VR applications, enabling immersive digital experience.

Application Scenarios

- Multi-aperture optical modules in AR-Light Engine
- Micro-optics modules for Vis & NIR solutions addressing mm to infinity performance, multiple FoV options including ultra-wide



Micro-optical modules powered by wafer-level optics and stacking technologies



Key Features

- Tiny footprint of 1x1mm
- Full wafer-scale process for high volume production
- Micro-precision of wafer stacking
- Customization of optical performance available
- Leading thermal performance, ensuring simple thermal design

3D Sensing

Micro-optical components and modules are crucial for 3D sensing technologies, enabling accurate depth perception beyond traditional 2D imaging. Whether utilizing binocular vision, structured light, or time of flight (ToF) principles, these optical elements play a vital role.

Application Scenarios

- Face Recognition, Under-Display Face Recognition
- Multi-Zone 3D sensor solutions, including dToF, Proximity sensor optics
- Micro dot projectors optics
- Other smart home appliances





Wafer-level micro-optical modules



Homogenizers/Diffusers

HEPTAGON

Wafer Level Optics as the Common Technology Base



How WLO Technology Enables Your Applications



WLO solutions are generally customer and application specific, due to specific targets as well as specific semiconductor light source, µ-display and light detector components.



COMPANY INTRODUCTION

Founded in 2007 and headquartered in Xi'an, China, Focuslight Technologies Inc. is a fast-growing public company (Shanghai: 688167) that specializes in developing and manufacturing high-power diode laser components and materials, laser optics, as well as photonics module and system solutions focusing on optical communication, consumer electronics, pan-semiconductor, automotive, and medical and health applications. Focuslight has expanded its global footprint through strategic acquisitions including LIMO GmbH in 2017 and SUSS MicroOptics SA in 2024 (now as Focuslight Switzerland SA). With the acquisition of assets from ams OSRAM in 2024, Focuslight extends its business to be a global photonics foundry by providing global photonics industry process development and manufacturing service under the brand of Heptagon.

Focuslight Technologies Inc.

