OLED Microdisplay - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 133 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00
- Team License (1-7 Users) $5250.00
- Site License $6500.00
- Corporate License $8750.00

Report description:

The OLED Microdisplay Market size is estimated at USD 1.17 billion in 2025, and is expected to reach USD 12.34 billion by 2030, at a CAGR of 60.2% during the forecast period (2025-2030).

Key Highlights
- The OLED microdisplay market has been witnessing significant growth over the years. This is primarily due to the advancement of technologies such as AR/VR and the expansion of end-user industries across various regions. For instance, the transition toward 5G accelerates the demand for advanced near-to-eye devices. Further, TCL announced three of the latest AR/VR products at CES 2023. It includes products such as RayNeo X2, TCL NXTWEAR V, and TCL NXTWARE S.
- Due to contrast, power, size, and color-space advantages, NTE applications are anticipated to offer lucrative opportunities for OLED microdisplay. This relates to electronic viewfinders and personal viewers (PV). OLED microdisplay are finding widespread adoption in fields such as virtual reality (VR), augmented reality (AR), heads-up displays (HUDs), and wearable devices.
- One of the most striking features of OLED microdisplay is its high resolution. With a high pixel density, these displays offer a high level of detail, making them suitable for applications like VR headsets, augmented reality (AR) glasses, and head-mounted displays. The high resolution of OLED microdisplay ensures that users are presented with sharp, clear images, allowing for a truly immersive visual.
- The protection of OLED layers against water vapors and oxygen has been a significant challenge in developing OLED microdisplays, and it has played a role in restraining the market growth.

OLED Microdisplay Market Trends

Consumer Electronics Segment to Hold Major Market Share

- The studied sector is predominantly driven by the increasing demand from the consumer electronics sector and fast-paced technological developments, which pressure OEMs to present unique products continuously in the market. Consumer electronics providers primarily rely on electronic manufacturers that deliver benefits such as cost savings, quality, decreased time-to-market, reduced time-to-volume, and flexibility to provide their products.
- The increasing demand for smartphones is also significantly driving the demand for the market studied. According to Ericsson, smartphone mobile network subscriptions reached nearly 6.4 billion globally in 2022 and are forecasted to exceed 7.7 billion by 2028. China, India, and the United States have the highest smartphone mobile network subscriptions.
- Additionally, the percentage of 5G smartphones is expected to increase by 2023.
- The penetration rate of OLED folding mobile phones will grow as display technology develops. The smartphone penetration rate will increase as brands launch new flagship folding devices regularly, driven by improved specifications and more affordable pricing. A chance exists to breathe new life into a market where inflation has resulted in a downturn in consumer confidence and pushed the adoption of folding mobile phones.
- According to the Consumer Technology Association, in the United States, consumer technology retail revenue is forecast to increase slightly between 2022 and 2024, reaching over USD 500 billion at the end of the period. Hardware is likely to account for most of the revenue, bringing in around USD 345 billion in 2024. The market is also witnessing several OLED microdisplay innovations and manufacturing capacity expansions to cater to consumers' complex and evolving requirements.

Asia Pacific Expected to Witness Significant Growth in the Market

- The region is considerably investing in the market studied. Increasing adoption of applications in VR/AR and wearables and growing investments in consumer electronics across various countries further propelling demand for OLED microdisplay.
- Additionally, countries such as South Korea, China, and Japan are hubs for consumer electronics manufacturing and innovation. These countries are home to significant technology companies that drive advancements in display technologies, including OLED microdisplay. For instance, in August 2023, KIA launched the VR showroom to showcase new vehicle models to customers.
- OLED microdisplay are being increasingly adopted in various applications ranging from cameras, AR and VR glasses/goggles field, entertainment, industrial applications, and sports. The increasing demand for these products across most countries spurs the market's growth.
- Apart from countries like Japan, South Korea, and China, the growth of the electronics sector across countries such as India and Taiwan is favoring the market's growth. The rising disposable income among the middle-class population across these countries also creates new opportunities for the market studied.
- The increasing urbanization and technological advancements in display screens create massive potential for OLED microdisplay in Asia-Pacific. According to the World Bank, in 2022, around a third of the total population in India lived in cities. The trend indicates an increase in urbanization by more than 4% in the last decade. Such an increase in population may further create demand for smart wearables and other advanced instruments like AR/VR headsets, and many others may further propel the growth of the market studied. Further, due to the presence of major players across the region, the growing adoption of advanced technology, capital investments, and rapidly growing economies contribute to the growth of the market studied.
- For instance, in August 2023, Sony Semiconductor Solutions Corp. (SSS) intended to release the ECX344A, a large-size, high-definition 1.3-type OLED Microdisplay with 4K resolution in the coming months, which would contribute to more realistic recreations of spaces. The new OLED Microdisplay mainly targets virtual reality (VR) and augmented reality (AR) head-mounted display applications. It delivers 4K resolution with a 1.3-type large-size display by employing miniaturization processes that SSS has achieved while developing camera electronic viewfinders (EVFs) and their pixel drive circuits.
- The constant innovation in OLED technology, leading to improved power efficiency and response times, has also contributed to

the growing acceptance of OLED microdisplay in various regional sectors. In November 2023, Chinese panel supplier BOE Technology Group announced to build a CNY 63 billion (USD 8.84 billion) production facility to make OLED screens using advanced technology. The factory, planned for Chengdu, will turn out organic light-emitting diode substrates using 8.6-generation technology.

OLED Microdisplay Market Overview

The OLED microdisplay market is fragmented with the presence of major players like Winstar Display Co. Ltd, Microoled SA (Photonis Technologies SAS), Yunnan Olightek Opto-electronic Technology Co. Ltd, Emagin Corporation, and Kopin Corporation. Players in the market are adopting strategies such as acquisitions and partnerships to enhance their product offerings and gain sustainable competitive advantage.

- February 2024 - Kopin Corporation announced the award of a new Small Business Innovation Research (SBIR) contract from the Naval Air Warfare Center. Under the terms of the contract, Kopin would leverage over 30 years of expertise in US-based microdisplay development to deliver advanced microdisplay for lensless computational imaging.
- August 2023 - Sony Semiconductor Solutions (SSS) announced the upcoming ECX344A 4K resolution OLED Microdisplay launch. This new microdisplay is designed for use in virtual reality (VR), augmented reality (AR), and other head-mounted display (HMD) applications. The ECX344A is a large-size OLED Microdisplay with a high-definition (HDR) resolution of 1.3* (1.3-type). It uses miniaturization processes developed by SSS to develop camera electronic field display (CEF) devices and its proprietary pixel drive circuits. This new microdisplay may deliver 4K resolution with high-speed driver circuits, allowing smooth image quality and a greater sense of reality. SSS's original pixel structure also allows wide color gamut (WCG) and high luminance (HV) performance.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

OLED Microdisplay - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 133 pages | Mordor Intelligence

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2025-06-26
		Signature