

ADVANCED
DISPLAY
TECHNOLOGIES

AMOLED | PMOLED | MINI-LED | TRANSFLECTIVE

AMOLED DISPLAY TECHNOLOGY

High-Performance Self-Emissive Display Solutions

AMOLED (Active Matrix Organic Light Emitting Diode) is a self-emissive display technology

Each pixel has independent control, delivering higher resolution, smoother graphics, and consistent brightness across the entire screen

KEY FEATURES

TRUE BLACK

Pixels turn completely off for perfect black levels and unmatched depth

WIDE VIEWING ANGLE

Maintains brightness and color consistency across nearly 170° viewing angles

INFINITE CONTRAST

Delivers sharper visuals and superior readability in any lighting condition

ULTRA-THIN DESIGN

No backlight required — reducing total display stack thickness to <2 mm

ULTRA-FAST RESPONSE TIME

Microsecond-level pixel switching eliminates motion blur and ghosting

POWER EFFICIENT

Consumes significantly less power when displaying dark interfaces

AMOLED vs PMOLED

Feature	AMOLED	PMOLED
Drive Architecture	Active matrix (TFT per pixel)	Passive matrix scanning
Ideal Use	High-performance systems	Small, basic displays
Resolution Capability	High Resolution Moderate	Moderate
Content Support	Full graphics & video	Text & icons
Scalability	Small to larger formats	Limited

*Both fall under OLED technology, but serve different needs

AMOLED APPLICATIONS

AMOLED technology is widely adopted in applications that require high visual clarity, fast response, and reliable performance across varying environments



AUTOMOTIVE & EV SYSTEMS

Digital instrument clusters, infotainment displays, and EV interface panels benefit from high contrast, wide viewing angles (up to 170°), and reliable operation in extreme temperatures (-40°C environments)



MEDICAL EQUIPMENT

Portable diagnostic devices, monitoring systems, and compact imaging interfaces require precise visual clarity and consistent brightness for critical data display



INDUSTRIAL & HMI

Factory automation panels, handheld instruments, and control interfaces demand durability, extended temperature tolerance, and high readability in varying lighting conditions



CONSUMER & SMART DEVICES

Wearables, embedded systems, and premium electronic products leverage AMOLED for thin design profiles and vibrant, high-resolution visual output



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