

Category	Apple Vision Pro	Oppo Air Glass 3	Xiaomi Wireles s AR	Huawei Vision Glass	Meta Quest 3	Magic Leap 2	HoloLens 2	Meta Ray-Ban Glasses	Lenovo ThinkReality A3	VIVE XR Elite
Device Type	MR Headset	AR Glasses	AR Glasses (wireless)	Smart Display Glasses	Mixed Reality Headset	Enterprise AR Headset	Enterprise MR Headset	Smart Glasses	AR Tethered Glasses	XR Headset
Price	\$3,499+	~Estimated \$800	—	~\$430	\$499 (128GB)	\$3,600–\$5,500	~\$3,500	\$299–\$379	\$1,499	\$1,099
Release Year	2024–2025	2024	2023 Prototype	2023	2023	2022	2019	2023	2021	2023
Weight	750–800 g + 353 g battery	~50 g	40–120 g	Lightweight	~515 g	260 g (headset)	566 g	48–50 g	130 g	Modular, lightweight
OS / Platform	visionOS	ColorOS (phone)	Xiaomi AR OS	N/A	Meta OS (Android-based)	Magic Leap OS	Windows Holographic	Meta firmware	Custom Android	Android XR
CPU / Chipset	Apple M5 + R1	Phone-based	Snapdragon XR2	Phone-based	Snapdragon XR2 Gen 2	AMD Zen 2 + RDNA2	Snapdragon 850 + HPU 2.0	Qualcomm mobile SoC	PC/Phone CPU	Snapdragon XR2
GPU	10-core GPU	Phone GPU	Adreno	Phone GPU	Adreno 740	RDNA2	Adreno + HPU	Integrated	PC/phone GPU	Adreno 650
RAM	16GB unified	—	—	—	—	16GB	4GB	—	PC RAM	12GB
Storage	256–1TB	—	—	—	128–512GB	256GB NVMe	64GB	—	PC storage	128GB
Display Type	Micro-OLED	Waveguide	Micro-OLED waveguide	Micro-OLED	LCD + Pancake lenses	Waveguide	Holographic waveguide	None	Micro-OLED	LCD + pancake
Resolution (per eye)	23M pixels total	—	High PPD	1080p	2064×2208	1440×1760	2048×1080	—	1920×1080	1920×10920
Refresh Rate	90/96/100/120 Hz	—	—	N/A	120 Hz	120 Hz	60 Hz	—	60 Hz	90 Hz
Field of View	—	—	—	N/A	—	70°	52°	—	~40°	110°
Brightness	—	1000+ nits	~1200 nits	High	—	20–2000 nits	~500 nits	—	200–400 nits	—

Sensors	14+ sensors: LiDAR, IMUs, eye tracking	Touch, mic	3 cams + IMU	Basic	RGB/IR cams, depth	3 cams + depth + eye	Depth + IR eye tracking	IMU, touch, mics	IMU, tracking cams	Depth + RGB + IMU
Cameras	Stereo 3D + passthrough	—	Tracking cams	—	2 RGB + 4 IR	12.6MP RGB + depth	RGB + depth	12MP	8MP RGB	16MP RGB
Tracking	Hand + eye + head	Basic	Hand + head	None	Inside-out 6DoF	SLAM + eye tracking	6DoF + hand + eye	None	6DoF	Inside-out 6DoF
Hand Tracking	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Eye Tracking	Yes	No	No	No	No	Yes	Yes	No	No	No
Authentication	Optic-ID (iris)	—	—	—	—	Iris ID	—	LED indicator only	—	—
Audio	Spatial Audio	On-ear speakers	Spatial audio	Stereo	3D spatial	Spatial	Spatial	Open-ear speakers	Stereo	Integrated speakers
Battery	2.5 h (external)	Unknown	Concept	None	2–3 h	3.5 h	2–3 h	3–4 h	Tethered	~2 h (swap)
Charging	USB-C	—	—	USB-C	USB-C 3.2	USB-C	Fast charge	Case	USB-C	USB-C
Connectivity	Wi-Fi 6, BT 5.3	BT, Wi-Fi	Wireless low-latency	USB-C	Wi-Fi 6E, BT	Wi-Fi 6, BT	Wi-Fi 5	Bluetooth	USB-C tether	Wi-Fi 6E, BT
Input Methods	Eye/hand/voice	Touch	Hand/voice	Buttons	Controllers + hand	Hand/eye/voice	Hand/eye	Voice/touch	Controller optional	Controllers
IPD Range	51–75 mm	—	—	—	—	—	Auto	—	—	54–73 mm
Use Cases	Full MR apps	Smart overlay	AR apps	Virtual screen	VR/MR gaming	Enterprise AR	Enterprise MR	Camera + audio	Enterprise workflows	XR gaming + MR
Special Features	Spatial video, OpticID	High portability	Wireless AR	Cinema display	Full-color passthrough	Dynamic dimming, SLAM	Holo UI	Social capture	PC-class AR	Hot-swap battery