

INTRODUCING:

Varjo XR-3 & VR-3: The highest resolution professional mixed and virtual reality HMDs.



Varjo XR-3 and VR-3: Highest performance for every workflow.

Varjo's products allow professionals to design and modify 3D models, train in realistic environments, and create limitless research scenarios – all with the pixel-perfect clarity that only Varjo can deliver. Our products feature humaneye resolution, widest field of view, the world's most accurate integrated eye tracking, broad software compatibility, and more.

Technical specifications

| | VARJO XR-3 | VARJO VR-3 |
|----------------------------|---|---|
| Display & Resolution | Full Frame Bionic Display with human-eye resolution. Focus area (27° x 27°) at 70 PPD uOLED, 1920 x 1920 px per eye Peripheral area at over 30 PPD LCD, 2880 x 2720 px per eye Colors: 99% sRGB, 93% DCI-P3 | Full Frame Bionic Display with human-eye resolution. Focus area (27° x 27°) at 70 PPD uOLED, 1920 x 1920 px per eye Peripheral area at over 30 PPD LCD, 2880 x 2720 px per eye Colors: 99% sRGB, 93% DCI-P3 |
| Field of View | Horizontal 115° | Horizontal 115° |
| Refresh rate | 90 Hz | 90 Hz |
| Hand tracking Comfort & | Ultraleap Gemini (v5) | Ultraleap Gemini (v5) |
| Wearability | 3-point precision fit headband Replaceable, easy-to-clean polyurethane face cushions Automatic IPD 59-71mm | 3-point precision fit headband Replaceable, easy-to-clean polyurethane face cushions Automatic IPD 59-71mm |
| Weight | 594 g + headband 386 g | 558g + headband 386 g |
| Connectivity | Two headset adapters in-box Two USB-C cables (5 m) in-box PC Connections: 2 x DisplayPort and 2 x USB-A 3.0+ | Two headset adapters in-box Two USB-C cables (5 m) in-box PC Connections: 2 x DisplayPort and 2 x USB-A 3.0+ |
| Positional Tracking | SteamVR™ 2.0 tracking system Varjo inside-out tracking utilizing RGB video pass-through cameras | SteamVR™ 2.0 tracking system |
| Eye tracking | 200 Hz with sub-degree accuracy; 1-dot calibration for foveated rendering | 200 Hz with sub-degree accuracy; 1-dot calibration for foveated rendering |
| Audio | 3.5mm audio jack with microphone support | 3.5mm audio jack with microphone support |
| Mixed reality | Ultra-low latency, dual 12-megapixel video pass-through at 90 Hz | Not available on VR-3 |
| XR Depth | LiDAR + RGB fusion, 40 cm-5 m operating range | Not available on VR-3 |