

ARS.31

- Augmented Reality System –
- 2x 30° FoV –

Binocular optical see-through



1. Technical Characteristics

The ARS.31 binocular optical see-through HMD is a specialized product designed for Augmented Reality (AR) applications. It is an opto-electronic device that projects an image or streams video using near-the-eye micro-displays and beam splitter plates. As two displays are available, one for each eye, a three-dimensional content can be visualized by utilizing the stereoscopic effect in the natural field of view of the user.

2. Device Operating

The HMD can be ordered in two versions, with either HDMI connector: The HMD must be plugged in a video source and USB port for power. or SMD-7: The HMD comes with a mobile control unit. For further information refer to the SMD-7 product sheet.

3. Model variations

Opaque folding down shield blocks any environmental light.

4. Technical Specifications

Micro Displays	2x SXGA LCD 1280 x 1024 pixels, 5:4 aspect ratio
Display Color	24 bit RGB color input
Luminance (RGBW)	180 cd/m ²
Contrast	TBD
Frame Rate	60 Hz
Pixel Response Time	< 8 ms
Optical see-through	70 % image reflection, 30 % image transmittance (*other ratios possible on request)
FOV (diagonal), Overlap	30 degrees, 100 %
Focal Plane	1 m (*can be adapted on order request, e.g. 0.5m, 10m, 150m)
Aspect Ratio	5:4 (12 mm x 9.6 mm active area display)
IPD adjustment	59 – 70 mm adjustable
Eye Relief	30 mm (regular glasses can be worn)
Audio (optional)	Built-in microphone, mono speaker on headband (*customization see accessory)
Camera (adoptable)	5 MP module with autofocus (see camera information sheet)
Operating Temperature	0°C to +60°C (operating temperature display)
Weight	TBD (without headband and hinges)
Dimensions (W/H/D)	115 mm x 90 mm x 56 mm (without headband and hinges)

Subject to technical modifications