



# Ranger 35 | 47

Ranger High-fidelity simulated binocular

## PRODUCT SPECIFICATIONS

### Optical

FOV, Circular	35° (RANGER 35)
FOV, Vertical	28° (RANGER 47)
FOV, Horizontal	36° (RANGER 47)
FOV, Binocular (diagonal)	47° (RANGER 47)
Pupil Size	5, Non-Real mm
Eye Relief	13 mm (RANGER 35) 15 mm (RANGER 47)
Geometric Distortion	< +9% (RANGER 35) < +10% (RANGER 47)
Brightness (MAX)	40 fL
Contrast (Min.)	10000:1
Image Defect Criteria	Available Online
Spatial Resolution	2.1 arcmin/pxl (RANGER 35) 1.6 arcmin/pxl (RANGER 47)

### Microdisplay

Display Technology	Organic Light-Emitting Diode (OLED)
Resolution	SXGA 1280 x 1024
Color Depth	24-BIT (8 bits per R,G,B)

### Video

Video Input Format	SXGA 1280 x 1024 @ 60 Hz
Latency	< 0.002 ms

### Power

Power Consumption (TYP)	5 W
Power Source	100-240 VAC, 50-60 Hz, 0.4 A (IEC Type C13 Cord)

### Physical

Size (envelope)	8.1 L X 6.4 W X 3.0 H in
Mass	855 g
Cable Length	5 m

### Compliance

CE Compliance	CE Compliant
RoHS Compliance	RoHS Compliant

The NVIS Ranger Virtual Binocular is a hand-held display designed for professional training and simulation applications. The Ranger features dual SXGA OLED microdisplays with a choice of focus-adjustable eyepieces optimized for either a circular 35 degree field-of-view or a rectangular 47 degree diagonal field-of-view. The Ranger 35 is ideal for training applications derived from real-world scenarios that need to emulate the round aperture in real binoculars. Developers can render a software mask on the Ranger 35 to achieve a the desired effect with a 35 degree round FOV. The Ranger 47 is a versatile stereoscopic binocular display for applications that benefit from the full-screen visuals of the simulator.

Both models include a central hinge for IPD adjustments. Stereopsis is supported via two independent video inputs. The Ranger has an external mounting plate that accommodates industry standard motion trackers. The Ranger provides 4 programmable USB Joystick compatible buttons, plus a z-axis scroll wheel, offering developers and users a wide array of interactivity within their applications.

Includes standard one year warranty.



11495 Sunset Hills Rd., Ste. 106, Reston, VA 20190, USA  
 Voice: +1.571.201.8095 - Fax: +1.571.201.8806 - www.nvisinc.com  
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