

14 inch Essential Display

Secondary 3D display, education, quick demos. 4K/60Hz glasses-free spatial display with FPGA real-time rendering, structured-light eye tracking, and physical 2D/3D switching.

Essential Series

Small size

Static optical grating

FPGA Delicate Driver

4K / 60Hz

Essential

3D content preferred

14"



MODEL

Model	14 inch Essential Display
Series	Essential Series
Recommended role	Secondary 3D display, education, quick demos
Screen size	14 inch
Optical grating	Static optical grating
Active area	309.8 x 174.3 mm
Overall dimensions	335 x 227 x 29.5 mm
Case & color	Metal, black
Weight	Net weight approx. 2.5 kg / gross weight approx. 3.2 kg
Shipping dimensions	Estimated by project logistics
Installation method	100 x 200 mm / 100 x 100 mm M4 VESA

LCD PANEL

Resolution	3840 x 2160 (4K)
Refresh rate	60 Hz
Aspect ratio	16:9
Backlight	LED
Display colors	1.07B colors
Brightness	350 nits
Contrast ratio	1000:1
Response time	18 ms (GTG)
Backlight life	30,000 hrs

3D PARAMETERS

3D rendering method	FPGA real-time rendering
Viewpoints	2
Eye-tracking system	Structured light / 180 Hz
Viewing distance	500 - 1000 mm (optimal 700 - 800 mm)
3D format	Side-by-side format
Color format	RGB888, YUV444
2D / 3D switching mode	Physical switch
Eye-tracking coordinate sharing	Supported
Light field rendering customization	Supported

I/O, POWER & ENVIRONMENT

Video interface	1 x HDMI Type-A
USB interface	3 x USB
Input voltage	100V - 240V (50/60Hz)
Static power consumption	<= 48W
Operating temperature	0 - 50 C (32 - 122 F)
Storage temperature	-20 - 60 C (-4 - 140 F)
Relative humidity	10 - 90% @ 40 C
Working hours	7 x 24 hours operation
Warranty	1-year standard warranty

Accessories

1.5 m standard power cord x 1; 1.8 m HDMI cable x 1.

Weight note

14 inch and 15.6 inch weights are estimated from 27/32 inch size-weight ratios and should be confirmed before final shipment documentation.

Contact

[3dv.io / shop.3dv.io](https://3dv.io/shop.3dv.io) / Request demo and model guidance at 3dv.io/request-demo/